

Foreword

The globalisation which accompanies us as we move into the 21st century is generating far-reaching interaction between the areas, economies and peoples of various countries.

CIHEAM is publishing this year its second annual report “*Development and agri-food policies in the Mediterranean region.*”

Part I of the present 1999 edition analyses the prospects which are opening up for the agro-food systems in the Mediterranean basin with a view to creating a Euro-Mediterranean free trade zone by 2010 and to accomplishing transition in the context of a globalised economy.

The information needed for drawing up Part II, and more specifically for the chapter on the agricultural sector in the national economies of CIHEAM member countries, has been drawn from the country reports submitted by a co-operative network of correspondents, which also provide the background for the general design of the report.

This network of correspondents is composed of Mr. Ahmed Mahmoud Abu-Zeid (Egypt), Mr. Najib Akesbi (Morocco), Mr. Slimane Bedrani (Algeria), Mr. Luis Bruno Dimas Fernandez (Portugal), Mr. José Maria Garcia Alvarez-Coque (Spain), Mr. Mouïñ Hamzé (Lebanon), Mr. Mustapha Lasram (Tunisia), Mr. Giulio Malorgio (Italy), Mr. Gérard Miclet (France), Mr. George Mergos (Greece) and Ms. Berna Türkekul (Turkey).

Both the full report and the country reports will also be published in electronic format on the following web site:

www.iamb.it/ciheam/report/indice.html

CIHEAM Mediterranean Agronomic Institutes and the personal contribution of Mr. Mohamed Larbi Firdawcy (Morocco) helped to give substance to Part III on sustainable rural development in the Mediterranean region, a topic which will be the subject of a seminar which CIHEAM is due to organise in Morocco in April 2000.

The present report has been drawn up under the supervision of CIHEAM Secretary General, Mr. Enzo Chioccioli. The editorial team, coordinated by Mr. Antonio Di Giulio (CIHEAM) was composed of Mr. Mahmoud Allaya (CIHEAM – Mediterranean Agronomic Institute in Montpellier), Mr. Najib Akasbi (Hassan II Institute of Agronomy and Veterinary Medicine, Morocco), Mr. José Maria Garcia Alvarez-Coque (University of Valencia, Spain), Mr. Giulio Malorgio (University of Bologna, Italy), Mr. George Mergos (University of Athens, Greece) and Mr. Albert Simantov (Delegate representing Greece on CIHEAM Governing Board).

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ACRONYMS AND INITIALS

AAU	Agricultural area in use
AFI	Agro-food industries
AFTA	Arab Free Trade Area
ALB	Albania
AP	Agricultural Population
APIA	Agricultural Investment Promotion Agency
ARC	Agricultural Research Center
AVFA	Agricultural Extension and Training Agency
AWU	Agricultural Working Unit
CAP	Common Agricultural Policy
CDR	Council for Development and Reconstruction
CEEC	Central and Eastern European Countries
CIHEAM	International Centre for Advanced Mediterranean Agronomic Studies
CMO	Common Market Organisation
CNCA	National Farm Credit Fund
CSE	Consumer Subsidy Equivalent
CSF	Community Support Framework
CTE	Regional Farming Contracts
CUD	Customs Union Decision
DRC	Desert Research Center
DZA	Algeria
EAC	Collective farms
EAGGF	European Agricultural Guidance and Guarantee Fund
EARL	Limited liability farms
EC	European Commission
EGY	Egypt
EMU	European Monetary Union
ERDF	European Regional Development Fund

ESF	European Social Fund
EU	European Union
FDI	Foreign Direct Investments
FIFG	Financial Instrument for Fisheries Guidance
FRA	France
FTA	Free Trade Area
GAEC	Producers' Cooperative
GAP	Gross agricultural product
GDP	Gross Domestic Product
GLASOD	Global Assessment of Soil Degradation
GMO	Genetically Modified Organisms
GNP	Gross National Product
GRC	Greece
GVA	Gross Value Added
ICARDA	International Centre for Agricultural Research in Dry Areas
ITA	Italy
LBN	Lebanon
LEADER	Links between actions for the development of the rural economy
LFA	Less Favoured Areas
LU	Livestock Unit
MAAP	Ministry of Agriculture and Agro-industrial Policies
MALR	Ministry of Agriculture and Land Redevelopment
MC	Mediterranean countries
MFN	Most Favoured Nation
MLT	Malta
MOR	Morocco
MPWWR	Ministry of Public Works and Water Resources
NARI	National Agro-Food Research Institute
NEAP	National Environmental Action Plan
NRC	National Research Center
NWR	National Water Research Center

OAIC	Algerian Inter-professional Cereals Office
OECD	Organisation for Economic Co-operation and Development
PEAA	Population Economically Active in Agriculture
PMPs	Production Methods and Processes
PRT	Portugal
PSE	Producer Subsidy Equivalent
SMAP	Short and medium term priority action programme for the environment
SP	Spain
SPS	Sanitary and Phytosanitary Measures
STE	State trading Enterprises
TBT	Technical Barriers to Trade
TRIPs	Trade-Related Aspects of Intellectual Property Rights
TRQ	Tariff rate Quota
TUN	Tunisia
TUR	Turkey
UPV	Universidad Politecnica de Valencia
UR	Uruguay Round
VA	Value added
VSH	Very small holdings
WTO	World Trade Organisation

Preface

- I. After the publication of the first report on 1998, the second edition, which focuses on 1999, is now being presented on time; CIHEAM is thus honouring its commitment to draw up a periodical document reflecting the general development of the agricultural and agri-food sectors in CIHEAM member countries, which would thus constitute an instrument of knowledge, analysis and reflection on the main problems and events affecting the agricultural and food economy in the region.

Following the publication of our first report we received numerous messages of appreciation and encouragement: members of government, members of parliament, officials of international organisations and national administrations, representatives of scientific institutions and professional organisations, and economic operators all wished to welcome our initiative and, in some cases, also kindly suggested several lines of thought or proposed subjects which should be examined in greater depth in future editions.

We were honoured to present our first report before the Agriculture and Rural Development Committees of the European Parliament as well as the Parliamentary Assembly of the Council of Europe, where our project was also openly supported.

All in all, it seemed to us that we could take all of the comments and encouragement we received as an approach which was generally shared and an invitation to continue our work, whose purpose is to identify and voice a reality too often neglected in international scenarios – the agricultural reality of the countries of the Mediterranean Basin at a turning point in their history, which has

been marked by the phenomenon of globalisation and the current attempt to create a real Euro-Mediterranean partnership with Europe.

The validity of our project was formally confirmed at the meeting of the Ministers of Agriculture of CIHEAM member countries which was held in Rome on 11 May 1999 for the first time in the history of our organisation. At that session the Ministers expressed their satisfaction at the publication of our report, which constituted the reference document for the internal discussions. They considered that the report “helped to strengthen co-operation in the agricultural sector in the Mediterranean region” and saw it as a point of departure from which CIHEAM could “develop its mission of following up on agricultural and agri-food policies so as to become a veritable observatory for these policies in the Mediterranean region”.

A further event which deserves mention in this context is the decision taken by the Orientation and Managing Committee in charge of implementing the regional co-operation programme drawn up and agreed between CIHEAM and the European Commission to include our report in the programme henceforth as an instrument coming under the chapter entitled “Aids to decision-making”. This deliberation means that from now on and throughout the rest of the current programme our report will be financed from the funds allocated to the programme, whereas the first report was financed solely with CIHEAM funds. But quite apart from purely financial issues, which are no doubt of considerable importance, what is highly significant here is the fact that a body on which the officials of the institutions in the partner countries, which are the final beneficiaries, are represented, should have decided to regard our report as a tool necessary to the development of co-operation in the agricultural sector in the Mediterranean region and thus as a particularly appropriate instrument of aid to decision-making.

II. The structure of the present report is based on that of the first edition. Essentially, it can be divided into four parts:

⇒ **Part I**, composed of two chapters, analyses the issues at stake in the multilateral negotiations within the World Trade Organisation for the agricultural sectors of the Mediterranean countries and outlines developments following Agenda 2000, the common agricultural policy and its connections with the countries in the Mediterranean and in Eastern Europe.

Whereas emphasis is laid in Chapter 1 on the agricultural systems of the countries on the Southern and Eastern shores of the Mediterranean and on the questions which arise for the agricultural policies of those countries in the present phase of the negotiations, Chapter 2 deals with the aspects relating to the common agricultural policy of the European Union and its external implications with a view to providing readers, and those in the partner Mediterranean countries in particular, with relevant data and information on the development of a policy with which they are not necessarily familiar.

⇒ **Part II**, which focuses on sectoral and national analyses, outlines the trends in the agricultural economies of CIHEAM member countries. This section is a summary of the contributions submitted by the national correspondents operating in an interactive network under the responsibility of the Editing Committee and demonstrates the advantage of working as a collegiate body, a method well tested in the elaboration of the first report.

⇒ **Part III**, in which the intention is to deal each year with a subject of major interest for the Mediterranean region, broaches the topic of *sustainable rural development* in the present edition. The choice of subject is explained by the importance which all of CIHEAM

member countries attach to *sustainable rural development* policy and by the fact that in the context of the regional co-operation programme which is being co-financed by the European Commission, CIHEAM will be organising a large-scale international seminar on the subject with a view to providing a concrete contribution for political leaders in the region.

After giving the background and presenting the preparations for the seminar, our report comprises original papers from CIHEAM's four Mediterranean Agronomic Institutes - the MAIs in Bari, Chania, Montpellier and Zaragoza - which together evidence the efforts which CIHEAM is making in this strategic field to promote the economies of the member countries in general and to develop co-operation.

⇒ **Part IV** contains series of statistical data which were already included in the first edition and have been duly updated as well as a list of bibliographical references relating to the various chapters of the report.

III. Although the report is to be evaluated as a whole to get a picture of the general trend of the agricultural and agro-food economies of the countries in the region and thus assess the consolidated data which it makes available to political leaders, it is nonetheless clear that the questions raised in Part I of the report constitute the most sensitive political issues for the future of co-operation in Mediterranean agriculture.

Is it in the interests of the countries on the Southern and Eastern shores of the Mediterranean to develop this co-operation in agriculture and to build up the "common approach to the important dates and major international negotiations that lie ahead", which was advocated in the conclusions of the Ministers of Agriculture of the

CIHEAM member countries at their meeting in Rome on 11 May 1999?

And, likewise, are the countries in the south of the European Union prepared to embark on that course?

The fact that all of CIHEAM member countries have agreed to pursue the dialogue opened in Rome and have undertaken to meet again in Morocco in the course of the year 2000 once the preparatory work has been carried out by a working group which is to be convened very shortly is already an encouraging initial response.

Meanwhile, in both Part I and Part III, which focuses on sustainable rural development, we are careful to point to the advantage of devoting some of the financial resources which the European Union places at the disposal of the partner Mediterranean countries to developing co-operation in agriculture and improving agricultural structures and rural development. For we are convinced that the objectives relating to the diversification and complementarity of agricultural commodities which are set out in the Barcelona Declaration of November 1995, which launched the process of Euro-Mediterranean partnership, would be better served if European financial aid were reoriented to benefit the agricultural sector and rural development in the partner Mediterranean countries.

CIHEAM, for its part, is making every effort within the limits of its means, including those which it mobilises in its relations with certain governments of its member states and in particular with the European Commission, to integrate the most advanced technologies which technological progress is making available to society into the new knowledge, bearing in mind that the efforts it makes must help to reduce inequalities in access to strategic information in order to guarantee all of the countries in the region sustainable development.

If the present report is received as favourably as the previous edition we can consider ourselves satisfied. At all events, what could have been termed an ambition when our first report was published is now taking on the dimension of a definite fact: in publishing its report, CIHEAM has the prospect of becoming a veritable observatory of Mediterranean agricultural and agri-food policies and thus of providing political leaders in the region with the arena of reflection and analysis that is so necessary for consolidating co-operation.

Enzo CHIOCCIOLI
CIHEAM Secretary General

PART I

*World trade, EU policy
developments and
Mediterranean agriculture*

1 World trade and Mediterranean agriculture

1.1 - Introduction

Despite the diversification of the Mediterranean economies, agriculture is still an important sector for most of them, a fact which is shown clearly in Part II, Chapter 3 of the present annual report. The rural population still accounts for over 30 percent of inhabitants in several Mediterranean countries (MCs) and for a substantial share of aggregate employment, and agriculture still accounts for a share in total GDP higher than the 10 percent in Algeria, Egypt, Morocco, Syria, Tunisia and Turkey.

The Mediterranean region as a whole is a major global market for agricultural and food products. As a region, it is one of the largest producers and importers of food and feed grains in the world. The region includes Egypt, the largest wheat importer in the world, and France and Turkey, two of the largest wheat producers.

Several Mediterranean countries, especially in the South, are characterised by rapidly growing populations, rising real incomes, and changing diets as consumers reduce their intake of grains and add more livestock products. While the overall population is growing, the region is experiencing a declining agricultural population.

The combination of increasing demand for food and decreasing resources for agriculture (increasing urbanisation has reduced the availability of water) has overwhelmed the region's capacity to meet its consumption needs, especially in the South and East Mediterranean. As a result, food and agricultural imports in many of the MCs continue to grow, led by food and feed grains, oilseeds and oilseed products, and cotton. The Mediterranean region is also a producer and exporter of food and feed grains, fruits, nuts and vegetables, cotton, and tobacco. In terms of exports, agricultural produce is by far the most important in Morocco, where it accounts for 30 percent of total exports.

However, there is a bilateral dimension in agricultural trade, which involves huge asymmetries between the different shores of Mediterranean Sea¹. Non-EU-member Mediterranean countries provide the European Union with a substantial external market, and the EU is the main outlet for exports from many of these countries. The EU trade balance of agricultural products with non-EU-member Mediterranean countries was over 800 million Euro in 1996².

Despite the weaknesses experienced in the past, the EU is optimistic in strengthening the current Mediterranean policy by continuing the Barcelona Process, which should lead to a Euro-Mediterranean Free Trade Area by the year 2010. It is being realised more and more that the problems of the South and East of the Mediterranean are spreading into Europe one way or another: illegal migration, drug traffic, the threat of unrest in some oil-producing countries, the risk of conflict in the Balkan region.

However, *the development of the Barcelona process lacks emphasis on what could be an area of common interest for the Euro-Mediterranean partnership – that of agriculture*. As an example of the problems on hand, the degree of liberalisation of trade in agriculture will be low within the FTA framework, while the main difference with former Mediterranean agreements is now the EU's demand for reciprocity in the manufactured goods trade.

Given the significance of agriculture in Mediterranean countries, *it is remarkable that this area has not attracted more interest in the three Euro-Mediterranean conferences convened to date*. Politically, this could be explained by the strong market competition which exists for some of the products typical of the region. Several Mediterranean countries show a very similar export product composition. This is the case with Cyprus, Algeria, Spain,

¹ Dervis, K., Bocok, P. and Devlin, J. (1998): *Intraregional trade among Arab countries. Building a competitive economic neighborhood*. Middle East Institute 52nd annual conference, Wash. D.C.

² European Commission (1997). The non-EU group includes Malta, Turkey, Morocco, Tunisia, Libya, Egypt, Cyprus, Lebanon, Syria, Israel and Jordan.

Israel, Turkey, the Balkan countries and Morocco, all of which have an agricultural sector orientated to “speciality products”, mainly fresh fruit and nuts, and preparations of those products. Turkey, Israel and Morocco are the main non-EU exporters of these typical Mediterranean products, and the EU was a net importer of these “speciality products” for a long time. The enlargement of the EU to include Greece and later Portugal, but especially Spain, brought a change in the traditional trends. EU imports of horticultural products from the non-EU Mediterranean countries are clearly constrained by the Common Agricultural Policy (CAP).

The status of the agricultural chapter in the current Agenda of negotiations needs to be clarified as far as the Mediterranean countries are concerned, from both the multilateral and the regional point of view. In the following pages, we will first review the status of the Barcelona process and will then refer to the possible impacts on the agricultural and rural economies which could ensue from the ongoing process of reforms which is taking place in Mediterranean countries, with particular reference to the Millennium Round and the Arab Free Trade Area (AFTA). Although some of these reforms do not deal specifically with agriculture but with other areas of economy, they also clearly affect the agricultural sector indirectly. Our assessment of these reforms is bound to tell us something about *the need for special treatment of the agricultural and rural sectors*, not only because of their significant contribution to economic development but also because they play a "multifunctional" role that goes beyond productive aspects. One aspect to which we will devote some of our attention is the environment. Section 1 of the present Chapter concludes by stressing that co-operation in the area of agriculture will bring more advantages than disadvantages for Mediterranean producers in a globalised world.

1.2 - The Status of the Euro-Mediterranean Partnership

1.2.1 - Implementation of the Barcelona Process

The new approach of the Euro-Mediterranean partnership was outlined at the Barcelona Conference in November 1995 and focuses on a Free Trade Area (FTA) between the EU and the Mediterranean countries. The association agreements have aimed to establish a free trade area for each partner country, covering negotiations on free trade of manufactures, extending concessions in agricultural goods and also providing substantial financial aid to assist the necessary adjustments.

By spring 1999, progress had already been made in the implementation of this policy:

- In the Mashraq, Israel signed an Association Agreement with the EU in November 1995, Palestinian Authority followed suit in February 1997, and Jordan in November 1997. Negotiations with Lebanon and Egypt were also well advanced, and Syria initiated formal negotiations in May 1998 ³.
- In the Maghreb, Tunisia and Morocco signed Association Agreements in July 1995 and January 1996, respectively, while negotiations with Algeria were continuing.
- Turkey and the EU took a Customs Union Decision (CUD) in March 1995, which entered into effect on 1 January 1996 and led to zero tariffs for all industrial trade with the EU by 1999; it furthermore made provision for the adoption of all of the preferential agreements concluded by the EU with third countries by the year 2001. As a result of the Helsinki European Council (10 and 11 December 1999) Turkey has become a candidate State due to join the Union on the basis of the same criteria as apply to the other candidate States.

³ EU Council mandate of December 18, 1997.

However, some of the negotiations are facing serious difficulties. Lebanon and Algeria are demanding financial compensation to counteract the loss of import taxes and the social and economic costs associated with the increased competition which their industrial economies will face in a more open trading environment. In addition, Algeria poses the problem of the lack of mobility of Algerian labour to the EU countries. Egypt has faced some sensitive issues⁴, including those related to agricultural trade. The entry into force of several of the agreements is being delayed because they have not been formally ratified by some EU member states, as is the case with the EU - Morocco agreement.

1.2.2 - The Challenges of Euro-Mediterranean Integration

A key implication of the Association Agreements is that, on the one hand, they enable non-EU MCs countries to commit themselves to a process of harmonisation of their domestic laws and standards with international norms - thereby making it easier for domestic producers to penetrate foreign markets. On the other hand, the EU is committed to providing financial assistance for the adjustment costs resulting from the free trade agreements. This is a form of North - South integration which is well justified as a way of promoting the modernisation of developing economies.

However, bilateral agreements constitute several challenges. One of the most important, which is stressed in the literature on regional integration⁵ is the possible "verticalisation" of trade relations and the emergence of a "hub and spokes" system in the Mediterranean region in which the European Union would be the "hub" and the individual Mediterranean countries the "spokes". In the past, a significant part of Foreign Direct

⁴ The "human rights suspensive clause", the provisions on the "readmission" of refugees, and the agricultural contingents.

⁵ Handoussa, H. (1999): *The challenge of the free trade with Europe: A South Med. Perspective*, Valencia Forum, January 1999.

Investment (FDI) in non-member MCs was linked to the unilateral trade preferences that the EU granted to these countries. In an FTA context, European investors may not find it attractive to establish themselves in the South, because the Euro-Mediterranean agreements do not provide sufficient incentives for the desired increase in foreign investment flowing to the non-EU MCs but, paradoxically, draw investments towards the EU.

This "hub and spokes" effect will be stronger unless there is effective regional integration amongst non-EU MCs. There is a risk that the outcome of the Euro-Mediterranean process could contribute to the economic fragmentation of the region and limit the potential for regional co-operation. Each Mediterranean country would act as a market for EU enterprises but this would exclude the creation of a real Mediterranean market.

What is the role of agriculture in the picture drawn? According to De Rosa⁶, although many Middle East and North African countries export substantial amounts of manufactured goods, comparative advantage in a wide range of manufactures appears significant for only Israel in the region. In addition, *some countries are identified as competitive producers of agricultural products*. With the exception of Algeria and Libya in North Africa, most Mediterranean countries exhibit a strong comparative advantage in fruit and vegetables⁷. Individual MCs also exhibit a substantial comparative advantage in selected agricultural categories and products. Jordan and Syria demonstrate international competitiveness in livestock, meats, and dairy products. Turkey has proved to be a competitive exporter of wheat; Jordan, and particularly Egypt, of rice; Cyprus, Syria, Turkey, and Tunisia

⁶ De Rosa, D. (1996): *Agricultural trade and rural development in the Middle East and North Africa. Recent Developments and Prospects*. Working Paper 1732, The World Bank, Washington, D.C.

⁷ Yeats, A. 1996. *Export prospects of Middle Eastern countries: a post-Uruguay Round analysis*. Policy Research Working Paper 1571. International Trade Division. The World Bank, Washington, D.C.

of barley; Cyprus, Lebanon, Turkey and Egypt of sugar; and Syria and Egypt of agricultural raw materials.

We would expect the agricultural sector to attract some investment in Mediterranean countries, helping to counteract the "hub and spoke" effect. However, this will be possible only if there are adequate regulatory, trading and financial conditions for that sector to make use of its comparative advantages. We must consider the various economic, social and political dimensions affecting Mediterranean agriculture. In the following pages, we review a number of policy issues which are shaping investment incentives in the agricultural sector.

1.2.3 - Agricultural Issues in the Euro-Mediterranean Free Trade Area

An important limitation of the benefits of the Association Agreements is the absence of a significant increase in access for agricultural exports not only to the European markets but also to the non-member MCs themselves. These countries already enjoyed non-reciprocal preferential access under the 1976 commercial and co-operation agreements with the European Communities. The Barcelona declaration only stands for a "progressive liberalisation of agricultural trade", taking the traditional trade flows as a reference.

We shall now review the status of the agricultural chapter in the Association Agreements between the EU and Morocco, Tunisia, Turkey, Israel and Egypt. We find that the impact of the agreements on the agricultural sector is not the same in all these economies⁸.

⁸ Comparative assessments of the Euro-Mediterranean Agreements can be found in Togan, S. (1998): *The EU-Turkey, EU-Tunisia and EU-Israel Trade Agreements: A comparative analysis*, Mimeo, July 25, 1998.

Morocco

A study prior to the signed agreement⁹ indicated that unrestricted access for Moroccan fruits and vegetables to the EU would yield additional benefits equivalent to about 0.25 percent of GDP, primarily by allowing higher export prices. According to Guesquiere¹⁰, the benefits resulting from the signed agreement would be more limited than estimated in the study quoted. The agreement actually concluded provides some widening of Morocco's preferential access for agricultural products between 1997 and 2000, when the agreement will be reviewed, but there are still restrictions.

The inability of the EU Commission to significantly expand export opportunities was an important stumbling block for Morocco in reaching agreement with the EU. After lengthy and heated negotiations, Morocco obtained improved access to EU markets for tomatoes, citrus fruit, and cut flowers. For example, an additional 150,676-ton tariff quota was given for tomatoes, of which 5,000 may be shipped in October, and 145,676 from November to March. Preferential treatment ceases in April, when EU produce comes to market. Thus, preferential access in the form of tariff reductions and non-tariff preferences such as seasonal quotas for selected products still impede Moroccan exports, notably in the areas of vegetables and citrus fruit. For certain products, Morocco undertakes not to export more than the agreed tariff quotas. The entry prices faced by Moroccan exports of certain products such as tomatoes and citrus fruit are also reduced during certain periods of the season, but this benefit must be qualified by the fact that entry prices faced by non-preferential exporters will also be reduced at the pace set by the EU under the WTO. The

⁹ Rutherford, T., Rutstrom, E. and Tarr, D. (1993): *Morocco's Free Trade Agreement with the European Community*, Working Paper 1173, The World Bank, Washington, D.C.

¹⁰ Guesquiere, H. (1998): *Impact of European Union Association Agreements on Mediterranean Countries*, Working Paper 98/116 International Monetary Fund, Middle East Department, August, Washington, D.C.

preferential status of Morocco will thus suffer a certain degree of erosion due to multilateral liberalisation within the WTO.

Interestingly, Morocco will maintain the level of border protection of its own agricultural sector. Whereas Morocco used to grant agricultural imports from the EU Most Favoured Nation (MFN) treatment, under the Association Agreement preferential maximum import duties ranging from 2.5 to 215 percent apply to a list of products (mainly edible oils and fats, cereals, and dairy and meat products). In most cases the tariff reductions apply only to specified amounts, essentially consolidating existing access conditions. These tariffs will be lowered if necessary to ensure that quotas are used to the full. In particular, the cereal, meat, dairy, and sugar sectors, which are vulnerable to reduced protection, remain broadly unaffected.

Egypt

The definition of the tariff quota to be applied to some agricultural imports from Egypt has constituted a serious obstacle in the negotiations with the EU. According to the status of the negotiations at the final stage in summer 1999, tariff quotas were foreseen for four products: oranges, rice, potatoes and cut flowers. These are sensitive products for Southern European EU members but the latter are not the only countries which posed problems. The main difficulties came from Germany and France, which objected to the opening of the EU cut-flower and potato markets.

Tunisia

The Association agreement emphasises dual implementation of greater liberalisation of the reciprocal trade in agricultural and fishery products. The FTA foresees progressive and reciprocal liberalisation of trade in agricultural products and extension of previous concessions on a reciprocal basis. According to the Agreement, concessions are to be re-examined in the year 2001. Looking at the 5 commodities with a higher share in Tunisian

agricultural exports, Tunisia has obtained duty-free access to the EU market for fish, crustaceans, molluscs and dates. Consequently, the issues of increased agricultural access appear to have been less pronounced than in Morocco. The exempted quotas for citrus fruit and wine have not been fully met. Olive oil is an exception: in the case of this product, which is Tunisia's major agricultural export item, a customs duty of ECU 7.81/100 kg has been levied on imports into the Community during each marketing year from 1 January 1996 to 31 December 1999, within the limits of a quantity of 46 000 tonnes a year. The parties were to reassess the situation during the second half of 1999 and determine the trade arrangements for olive oil for the period from 1 January 2000.

Turkey

Until 1995, a preferential regime for trading in agricultural products laid down in the Additional Protocol, which is the programme for implementing the Ankara Agreement, worked to Turkey's advantage. A new preferential regime on trade in agricultural products, which was brought into force on 1 January 1998, was laid down by the Turkey-EU Association Council Decision No.1/98. As a result of that Council Decision, 93% of Turkey's agricultural exports to the EU will be covered by concessions. The preferential regime applied by the Community to the imports of agricultural products originating in Turkey has been determined by Decisions No 1/72, 1/80 and 1/98 of the EC-Turkey Association Councils of 1972, 1980 and 1998. According to those Decisions almost all of the agricultural commodities originating in Turkey are imported into the Community free of ad valorem duties and the EU applies no tariff quotas to those imports. Thus, in the case of oranges, Turkey can export the commodity to EU duty-free and the EU imposes no quantitative restrictions on the imports of oranges from Turkey.

According to the Custom Union Decision (CUD) Turkey will have to adjust its agricultural policy in such a way as to adopt the Common

Agricultural Policy measures in order to establish freedom of movement for agricultural products. How can Turkey adopt the CAP measures? Studies have revealed that substantial resources would have to be channelled into Turkish agriculture¹¹. Since Turkey cannot reallocate financial resources to agriculture from its own resources and since the EU would be unwilling to bear the cost, the idea of Turkey adopting the CAP has had to be postponed. Thus it seems that freedom of movement for agricultural products between Turkey and the EU cannot be achieved in the near future.

According to the provisions on processed agricultural products, the EU charges both ad valorem (industrial protection/industrial component) and specific duties (agricultural protection/agricultural component) on the import of these products. Turkey has established a new tariff system similar to the model in the Community. The CUD determines the percentage of the price of a processed agricultural commodity which is "agricultural" as contrasted with the percentage which is "industrial". Since the "industrial" component of processed agricultural products will enter European markets duty-free and since European protection will apply to the "agricultural" component of these commodities, Turkish firms in the food industry will be faced with more competition as the "industrial component" share increases. Similar considerations will apply in the case of European firms in the food industry.

On the other hand, since Turkey has granted additional concessions for certain selected agricultural products, the EU will enjoy preferential treatment of 33% for its agricultural exports to Turkey.

Building on the results of the Helsinki European Council, Turkey, like other candidate States for EU accession, will benefit from a pre-accession strategy for stimulating and supporting its reforms. This will include

¹¹ Togan, S. (1999): *Domestic implications of the Trade Agreements the European Union has concluded with Mediterranean Countries*, Valencia Forum, January 1999.

enhanced political dialogue with emphasis on progress towards fulfilling the political criteria for accession with particular reference to the human rights issue. Turkey will also have the opportunity to participate in Community programmes and agencies and in meetings between candidate States and the Union in the context of the accession process.

Israel

The FTA foresees progressive and reciprocal liberalisation of trade in agricultural products and the extension of previous concessions on a reciprocal basis. According to the Agreement, concessions are to be reviewed in the year 2000. Article 5 of the Agreement relates to processed agricultural products and it is similar to the provisions laid down in the EU-Turkey CUD.

The first 12 commodities with the highest share in Israeli agricultural exports account for 51.8 percent of those exports. For most of these 12 commodities, the EU has granted Israel duty-free access up to the quota limits. None of these quotas were binding for Israel in 1996, when Israel exported 247 thousand tonnes of oranges. Under the new Protocol Israel can export up to 290 thousand tonnes of oranges duty-free.

1.2.4 - Is partial liberalisation sufficient?

As seen in previous paragraphs, in the case of agricultural commodities the Agreements foresee progressive and reciprocal liberalisation and the extension of concessions on a reciprocal basis. Examination of the prevailing concessions in agriculture reveals that Israel, Tunisia and Turkey have obtained relatively satisfactory concessions from the EU¹². All three countries have obtained preferential treatment for most agricultural commodities which account for a relatively high share of their total agricultural exports. On the other hand, Morocco and Egypt have not met

¹² See Togan (1998), op. cit.

their expectations regarding the agricultural quotas granted by the EU. In short, *the agricultural exception is not perceived in the same way in all Mediterranean countries. However, from a political point of view, non-EU Mediterranean countries would need further signals of reciprocity from the EU side in order to justify the measures undertaken to open their industrial markets.* One signal would be greater access for agricultural products to EU markets.

The deferment of substantive negotiations on the liberalisation of trade in agricultural products is largely explained by the political difficulties involved in reforming the EU's CAP and the resistance on the part of European farmers, who are competing with non-EU Mediterranean countries. This situation will be re-evaluated in the year 2000 in the case of Morocco, and in 2001 in the case of Tunisia. By the end of 1999, preliminary talks between the EU and Morocco on a new Agreement on fisheries had been initiated within a political environment which did not favour the adoption of a "positive sum" game strategy. While the EU authorities insisted that there must be no direct link between the fishing industry and the agricultural packages¹³, farmers in some Southern European countries demonstrated against the possibility that the EU might introduce new agricultural trade concessions in exchange for an acceptable agreement for the European fish industry. These problems illustrate (i) the difficulties in dealing with socio-economic concerns, which are normally concentrated on specific territories, and (ii) the need for investing in more significant efforts to seek cooperative solutions for rural development and the structural problems of the countries on either side of the Mediterranean.

Given the importance of agriculture in most parts of the region, excluding agricultural trade from the reciprocal concessions will reduce the opportunities for private investment to take advantage of the Euro-Mediterranean economic area. The limited access offered to the non-EU

¹³ See, for example, statements by Agricultural Commissioner Fischler in *El País*, 6 November 1999.

Mediterranean countries contrasts with the agreements concluded between the EU and the Central and Eastern European countries (see Section 2.1.2).

A view which seems to derive from the Berlin European Council (June 1999) is to *postpone* the regional negotiations and coordinate them with the next Round so that no further substantial concessions will be granted to Mediterranean non-EU members until the Millennium Round has been completed. Bearing in mind that the Millennium Round could close around the year 2005, the EU considers "gaining time" a possible strategy. By then, around the end of the time period scheduled in Agenda 2000, EU agriculture may be in a position to assimilate the Euro-Mediterranean FTA with all its consequences.

However, it would be naive to think that agricultural development in the Mediterranean region depends solely on the creation of a Euro-Mediterranean Free Trade Area. The present report stresses the importance of other dimensions which influence the climate for agricultural development in the Mediterranean area.

1.2.5 - Intra-Mediterranean Integration Stages

One alternative for Mediterranean countries within the "preferential" strategy is to make progress in the forming of a trading bloc amongst themselves. Eighteen Arab states have actually approved an implementation programme establishing the Arab Free Trade Area (AFTA), which came into effect on 1 January 1998. The Arab FTA will lead to the elimination of import duties and other barriers to trade on goods of Arab origin over a 10-year period.

Intra-Arab integration could have advantages for its members¹⁴. There is some indication that the levels of Arab intra-trade are below normal¹⁵.

¹⁴ See Zarrouk, J. E. (1998): *Arab Free Trade Area: Potentialities and Effects*, Paper presented at the Mediterranean Development Forum, Marrakesh, Morocco, September 1998.

¹⁵ See Yeats, A. (1996) op. cit.

Furthermore, intra-Arab integration could effectively create a regional trade pattern, which could contribute to counteracting the "hub and spoke" effect. Agricultural and food products, which currently account for around 20 percent of intra-Arab exports, are some of the products which will benefit from enhanced trade among Arab countries. Food products are also amongst the most dynamic intra-Arab export products, a fact which points to the existing opportunities for these goods to find export niches in the regional market and to help the region to overcome food security problems.

However, some temporal exceptions to the implementation of the FTA are allowed for agricultural products. The implementation programme has allowed agricultural products to be excluded from the tariff reduction scheme during the crop/harvest seasons, which amounts to protection of those products for most of the transition period. According to Zarrouk¹⁶, the decision to allow exceptions even subject to the guideline laid down could lead member countries to take advantage of this loophole, thus reducing the ability of the Arab FTA to realise its full potential for regional trade expansion.

1. 3 - The Multilateral Choice

1.3.1 - MCs and the Millennium Round

Before the Uruguay Round there was virtual anarchy in trade in agricultural goods. The Uruguay Round began to correct some of the most obvious external problems but left countries with ample leeway to maintain domestic distortions in the agricultural sectors. Much of the agenda for the UR was set by the developed countries¹⁷ and was focused on the products where the greater part of international confrontation was

¹⁶ Zarrouk, J. E. (1998), op. cit.

¹⁷ Mkherjee, N. and Rebecca Lee Harris (1999): *Getting Ready for the Millenium Round Trade Negotiations. African Perspective*. International Food Policy Research Institute. 2020 Vision. Focus 1, Brief 4, April 1999.

concentrated, that is to say, "Continental" products such as cereals, oilseeds, dairy products and meats. As a matter of fact, *the interests of Mediterranean regions have had little political impact on the negotiations and have remained tangential to the outcome of the UR.*

As a result of the decisions taken at the end of the UR, the so-called Built-in-Agenda, negotiations in agriculture were already scheduled to start by the end of 1999, but the WTO partners failed to reach agreement on a new round of trade negotiations at the Seattle Ministerial Conference (30 November to 3 December 1999), and there are a number of uncertainties as to when a new round can be launched. The Seattle conference demonstrated that things could not be confined to reducing tariff and non-tariff barriers to trade, but it is not clear how other aspects such as environment and social standards will have to be tackled. The main agricultural issues concerning multilateral negotiations will be underlined below. The main trading partners recognise that a new round of negotiations should be launched as soon as possible¹⁸. Assuming that agricultural talks are resumed, Mediterranean countries still face significant challenges:

a) Continuation of agricultural liberalisation

It is beyond the scope of this report to assess the impact of the Uruguay Round (UR) and full implementation of the WTO agreements on the Mediterranean region in quantitative terms¹⁹. This is a difficult exercise in any event, since many of the commitments cannot be quantified. Many of the WTO rules relate to transparency, to improved enforcement of obligations, and to rules of procedure. The UR began to discipline unfair competition resulting from agricultural subsidies. However, the scope of the UR was limited, and most analysts have reached the conclusion that

¹⁸ See, for example, the US-EU Statement on the WTO (20 December 1999).

¹⁹ See Hoekman, B. (1995): *The WTO, the EU and the Arab World Trade Policy Priorities and Pitfalls*. The World Bank and CEPR, Washington D.C.

many countries have been able to implement the clauses of the Uruguay Round *Agreement on Agriculture* without a great deal of change in their domestic policies. This means that the reduction of protection in agriculture has had to rely largely on unilateral decisions, although UR commitments have indicated a path of liberalisation for the years that lie ahead.

The implementation of the UR agreements has been confronting the Mediterranean countries with greater competition on third markets. Whether or not a WTO member, all countries in the region will be affected by the continuation of the liberalisation of agricultural trade which is anticipated as a result of the Millennium Round.

In spite of the economic reforms undertaken in most MCs in recent years, there is still considerable intervention in agricultural trade in many countries in the region.

A key finding from studies assessing the UR influence on the agricultural sector, is that the impact of the Round has been relatively small and that very much depends on the policy stance that is maintained by governments²⁰. Given the high average rates of protection that continue to exist in many MCs after the Uruguay round, most of the potential gains that can be realised will come from further liberalisation of domestic, rather than foreign, markets.

As examples of the post Uruguay Round evolution, the tariff commitments for Egypt and Tunisia are summarised in Table 1.1 The Table reveals that the differences between bound rates and currently applied rates are not great. In addition, as noted earlier, tariff levels in the region remain high in many countries.

²⁰ IATRC (1997), *Implementation of the Uruguay Round Agreement on Agriculture and Issues for the Next Round of Agricultural Negotiations*, Commissioned Paper No. 12 on Bringing Agriculture into the GATT, Department of Agricultural and Applied Economics, University of Minnesota, St. Paul MN, October.

Table 1.1 - Bound versus Applied Tariff Rates, Agriculture

WTO Member	Post-Uruguay round bound average tariff rates (unweighted)	Currently applied average tariff rates (unweighted)
Egypt	61	52
Tunisia	41	40

Source: Hoekman (1995): *The WTO, the EU and the Arab World Trade Policy Priorities and Pitfalls*. The World Bank and CEPR, Washington D.C. Egyptian data are from Subramanian, Arvind (1995). *Effects of the Uruguay Round on Egypt*, mimeo, IMF, April 10.; Tunisian data are from the WTO Integrated Database.

Agricultural production in most Mediterranean countries is heavily protected by tariff barriers, and liberalisation would require major adjustment in the case of several sensitive products, e.g., in the cereal sector. In Box 1.1, we provide several country cases illustrating their status with respect to the WTO. Two of the countries referred to, Albania and Algeria, are currently negotiating their accession to the WTO. Lebanon has recently been accepted as a new WTO member and Egypt and Turkey are currently in the process of applying WTO commitments. As illustrated in the box, *the WTO commitments still allow the countries a great degree of freedom to apply domestic policies*, sometimes free-market orientated, sometimes of a more protectionist nature. This confirms the hypothesis that the orientation of agricultural policies may be affected by the WTO in the future but is at present framed by unilateral policy-making.

Box 1.1 - Trade policies in selected Mediterranean countries

Most Mediterranean countries are moving towards a freer trading environment, but paths are diverse. *Albania* has undertaken major trade reforms by liberalising input and product markets, eliminating non-tariff barriers and significantly reducing state participation in foreign trade (to less than 5 percent). However, *Albania* ensures border protection through the application of import customs duties. The country presents a level of

10-40% of customs tariffs for the protection of domestic production, and bilateral negotiations with WTO member countries are expected.

Algeria is also preparing the necessary elements for negotiations with the WTO and moving towards a more liberal approach in agricultural market policies. Limited budgetary transfers are still addressed to wheat and dairy producers or targeted to selected structural investments. A certain degree of support is also provided by the Office Algérien Interprofessionnel des Céréales (OAIC), although these funds are obtained from parafiscal duties on imports and domestic production.

In *Egypt*, trade reform is being accomplished through the structural Adjustment Programme. The agricultural reform programme began effectively in 1986. With regard to agricultural foreign trade, most changes have been in terms of encouraging the private sector to play a greater role in the export of agricultural commodities, and the removal of some restrictions on private exports, particularly of oranges; the private sector has been allowed to establish stations for packing and preparing citrus fruit for exports.

Lebanon applied officially to join the World Trade Organisation (WTO) and the WTO board accepted its membership on 14 April 1998. Although WTO membership is seen as a way of opening of new markets and trade exchange possibilities, new import duties were set in April 1999 ranging from 15 to 105 percent, being higher for goods where local production is sufficient to cover local market needs.

As a member of the WTO, *Turkey* has adopted the rules and procedures governing the multilateral trading system. In this respect, public subsidies were adapted to comply with the WTO rules and its international commitments were put into practice as of 01.06.1995. However, transfers to agriculture in Turkey are still significant. According to provisional data, the Producer Subsidy Equivalent (PSE) reached the 37 percent mark in 1997. This result is higher than the level of 25 percent in 1996 and is also higher than the OECD average, which is 34 percent. When the composition of support to agriculture is considered, market price support accounted for over 91 percent in 1997, and consumers paid 85 percent of total transfers.

In addition, the recent literature evaluating alternative explanations for the success of particular countries in attaining and sustaining high rates of economic growth concludes that while openness to the world economy is very important, in itself it is not enough²¹. Equally important are efficient public institutions, domestic competition, a well-functioning service sector (finance, infrastructure, distribution, etc.), investment in human resources (education), high rates of private saving and investment, and a stable macro-economy. None of these factors can be imported through trade liberalisation.

b) Inequalities in support for various agricultural goods.

As seen in the previous paragraphs, the extent of UR commitments in agriculture trade liberalisation has been quite limited in most MCs which are WTO members. The situation is not much different in some of the industrial economies which grant high levels of support to their agricultural sectors.

Around the world, agricultural protection continues to be concentrated in a small number of countries and commodities. Levels of support in OECD countries remain very high, with 280 billion US\$ in total transfers to agriculture in 1997. Export subsidy capacity in the major economies will remain high following implementation of UR reductions in 2000. For example, the United States and the European Union will still be able to subsidise a combined total of nearly 29 million tonnes of wheat and wheat flour. As stated in the 1998 CIHEAM Report, outside the EU, in the

21 See Hoekman, B. (1997): *Free Trade Agreements in the Mediterranean: A Regional Path Towards Liberalization?* The World Bank and the CEPR, Washington, D.C.

Stiglitz, J.E. (1999): *Two Principles for the Next Round or, How to Bring Developing Countries in from the Cold* The WTO/World Bank Conference on "Developing Countries in a Millennium Round" WTO Secretariat, Centre William Rappard, Geneva, 20-21 September 1999.

Mediterranean area only Turkey, Israel and Cyprus are authorised to subsidise exports, although at a much lower percentage than in the EU.

In the agricultural sector, high tariffs, or tariff peaks of over 100 percent are common. However, most of the tariff-peaks affect Continental products, while Mediterranean products are in general less protected than Continental products. This is the case in the EU where there are significant differences in the levels of support among agricultural goods. Table 1.2 shows that the share of Mediterranean products in public support to agriculture is lower than the share of these products in total agricultural Gross Value Added (GVA). Levels of support have been estimated by a study conducted by the University of Valencia (UPV) in terms of Producer Subsidy Equivalents (PSE).

Table 1.2 - Share of agricultural activities in Gross Value Added (GVA), agricultural support and final production, 1995 (figures)

	Percentage share of Mediterranean products in total GVA at market prices	Percentage Share of Mediterranean products in total PSE (1)	Percentage share of most supported prod ucts in final production (2)
Greece	59.2	46.1	23
Italy	52.8	22.8	28
Portugal	48.7	19.3	26
Spain	50.7	22.8	21
EU 12	35.2	10.4	41 ^(*)

(1) Mediterranean products: fruit, vegetables, wine, olive oil, rice, tobacco and cotton

(2) Most supported activities: arable crops, cattle and dairy.

Source: García-Alvarez-Coque et al. (1999): "Los efectos distributivos de la PAC y la cohesión. Un punto de vista mediterráneo", *Revista Asturiana de Economía*, RAE, 14, pp. 27 - 50, Figures are based on OECD estimates and the SPEL database data. The calculations for Mediterranean products were based on the methodology indicated in Nucifora and Sarri (1997): *Levels of protection for the fruit, vegetables, olive oil and wine sectors of the European Union*, Quaderno per Discusione N° 19, Università degli Studi di Siena, Dipartimento di Economia Politica.

This lack of harmonisation of protection levels between products, which is coupled with the heterogeneous national patterns of productive specialisation, determines an unequal pattern of actual levels of CAP support between the different EU members. Table 1.3 shows the national levels of support that the CAP grants to agriculture, estimated in PSE terms.

Table 1.3 - Producer Subsidy Equivalent in EU countries¹ 1995

Country	PSE/AWU ²	PSE/Ha	Percentage PSE (of GVA afc) ³
Austria	11561	498	47
Belgium-Lux.	24867	1434	76
Denmark	26082	812	54
Finland	5022	431	33
France	16799	591	59
Germany	17856	731	66
Greece	4443	511	35
Ireland	11184	560	76
Italy	5982	611	40
Netherlands	17115	1949	45
Portugal	1777	212	36
Spain	6416	204	41
Sweden	15182	432	76
United Kingdom	20226	493	70
EU 15	10279	514	52

(1) The PSE is an indicator of the value of monetary transfers to agriculture resulting from agricultural policies. Two types of transfers are included: consumer transfers (through domestic market prices) and taxpayer transfers (through budget spending). Includes own estimates for Mediterranean products (fruits, vegetables, olive oil, wine, tobacco and cotton), as well as OECD calculations for Continental products.

(2) AWU: Agricultural Working Unit.

(3) The percentage PSE is the value of transfers as a percentage of Agricultural Gross Value Added at factor costs.

Source: García-Alvarez-Coque et al. (1999): "Los efectos distributivos de la PAC y la cohesión. Un punto de vista mediterráneo", *Revista Asturiana de Economía*, RAE, 14, pp. 27 - 50, Figures are based on OECD estimates and the SPEL database data. The calculations for Mediterranean products were based on the methodology indicated in Nucifora and Sarri (1997): *Levels of protection for the fruit, vegetables, olive oil and wine sectors of the European Union*, Quaderno per Discusione N° 19, Università degli Studi di Siena, Dipartimento di Economia Politica.

As seen in Table 1.3, the Northern member states normally show higher levels of agricultural transfers, in terms of PSE per Agricultural Working Unit (AWU). Results are referred to year 1995, which reflects the situation after the MacSharry reform (1992) and before the Agenda 2000 package (1999). In 1995, PSE per AWU was over 20 thousand Ecu per AWU in Belgium, Denmark and the United Kingdom, while the indicator was over 15 thousand Ecu in The Netherlands, Germany, France and Sweden. In Southern European countries, PSE per AWU ranges from the highest level, reached by Spain (6.416 Ecu per AWU), to the lowest level, reached by Portugal (1.777 Ecu per AWU).

National disparities in CAP support are also evident when assistance is measured in terms of PSE as a percentage of total agricultural Gross Value Added (see column 3 in Table 1.3). EU agriculture actually receives a significant level of transfers, which lie around 52 percent of agricultural total Gross Value Added. This percentage is above average in most Northern European states such as Ireland, Belgium, Luxembourg, Germany, France, Austria and Sweden.

The unequal levels of EU support between the different agricultural goods and between nations is a major cause of loss of confidence amongst Southern European farmers not only regarding the advantages of the CAP but also as regards the consolidation of a Euro-Mediterranean Free Trade Area. The way to correct these imbalances probably does not rely on an increase in CAP levels of support for Mediterranean products in order to harmonise them with the existing levels of support for Continental products. However, the EU should look at further CAP reforms in order to address the overall rural objectives more directly. This implies a lower emphasis on "property rights" to past levels of support. The standard schemes have given precedence to support to Northern EU farmers.

Even after Agenda 2000 (refer to Chapter 2.2), the EU continues to link most domestic support to Continental producers through the so-called

"blue box" payments. These are direct payments to cereal and oilseed producers, as well as premiums for cattle, implemented in the 1992 reform. At present they are exempted from the WTO reduction disciplines. However, in terms of economic rationality, these payments cannot be considered totally decoupled from producers' incentives. In addition, they do not represent signals towards a rural development policy geared to competitiveness and the environment.

"Multifunctionality" is a key concept used by the EU in its current strategy facing the Millennium Round. The connection between *blue box* payments and *multifunctionality* is far from direct. We wonder to what extent it might be in the interests of Mediterranean agriculture to defend a multifunctional approach.

c) In search of multifunctionality

References to the *European agricultural model* made by EU institutions are based on the assumption that the role played by agriculture in modern societies is not simply the provision of food and raw materials, but also includes a set of *social functions* related to diverse aspects such as regional development, erosion prevention, and the conservation of biodiversity and landscape quality. The concept of the "*multifunctionality*" of agriculture refers to the analysis of the so-called *non-economic objectives* of agricultural policies. Some claim a certain *exceptionality* of treatment for the agricultural sector in order to achieve those objectives.

Although the term "*multifunctionality*" is still a matter of great debate, the Agriculture Ministers of the OECD area agreed at the March 1998 Summit on the idea that the agricultural sector performs various functions extending beyond its traditional role as a food-producing sector. "*Multifunctionality*" is not an objective in itself but is a "framework for analysis" or a conceptual approach which helps bring order to the complexity of agricultural policy reform. In the area of environmental

protection emphasis has often been placed on the *positive externalities* produced by agricultural activity, particularly on preserving the present rural landscape - which would provide both *aesthetic* benefits and leisure space for city-dwellers - and on the protection of biodiversity.

The WTO neither encourages nor discourages "*multifunctionality*" as a goal, although the concept could be linked to the so-called "*non-trade concerns*" addressed in Article 20 of the *UR Agreement on Agriculture*. In the European Union this term is frequently referred to as an argument that could strengthen Europe's negotiating position in the WTO. Nevertheless, it is not yet clear how the concept of "*multifunctionality*" will be used during the negotiations and translated into operational proposals.

The central issue addressed is the extent to which the agricultural trade regulations adopted at the Uruguay Round, or their foreseeable evolution in the forthcoming negotiations, are compatible with the establishment of the new agricultural policy objectives in the environment, food safety or rural development fields.

It is not clear whether giving indiscriminate support to agricultural production is the most appropriate means of achieving multifunctional goals. A frequently cited example of a *non-conventional objective* of agricultural policies is the promotion of rural development. It is difficult to justify the use of agricultural price support as the best way of maintaining employment in remote rural communities. It seems quite clear that the most efficient solution is not to apply border protection measures to agricultural trade in general but to promote the application of a package of measures targeted at vulnerable areas more directly, and also to support the public services of communications, health care and education, which guarantee the welfare of rural citizens.

In theory, a comprehensive package of measures towards the defence of specific aspects of rural life can be compatible with a freer multilateral trade system, provided that the instruments used are sufficiently

"*decoupled*" from short-term productive decisions. Such instruments can be set up within the *green box* established at the Uruguay Round.

In the introduction to the legislative proposals to Agenda 2000, the Commission suggested that an essential difference between the European agricultural model and that of its competitors was the "*multifunctional nature of Europe's agriculture and the role it plays in the economy and the environment, in society and in preserving the landscape, hence the need to maintain farming throughout Europe and to safeguard farmers' incomes*" (Document COM 153 of 18.3.1998, p. 7).

One possibility, in the European case, would be to understand "*multifunctionality*" as a defence of the "*green box*". As a matter of fact, formal recognition of the *green box* would implicitly contribute to the political acceptance of the rural specificity at the WTO level. The introduction of new, more specific measures such as "*green box*" support implies a more selective approximation to agricultural reality in that public spending is more efficient than it would be if the same amount of money were allocated indiscriminately and has the advantage of not interfering with the price system. The "*green box*" contributes to giving weight to the concept of "*multifunctionality*". According to this concept, agricultural policies can be considered within the wider framework of the *integral rural policy*. This approach refers to measures leading to a comprehensive rural development strategy. On the one hand, farmers play an important role in preserving rural assets and landscape. On the other hand, this approach recognises the need for alternative sources of income as an integral strategy for the rural economies.

However, as we discuss below, many Mediterranean areas present a very fragile environment and economic activity. Reform leading to radical market liberalisation could put these areas under pressure and the risk for further depopulation and land degradation would increase. Given the fragility of many rural areas in Mediterranean countries, *a trade liberalisation*

package should not be adopted without a parallel package addressing multifunctionality. The Millennium Round as well as the possible inclusion of agriculture in the Euro-Mediterranean FTA would expose agricultural systems to increased competition. "Green box" policies could be one of the ways of preparing rural areas for facing the new liberalised scenarios. However, it is not clear that the funds currently allocated to Mediterranean agriculture are sufficient to facilitate the adjustment process. The *green box* has to be filled with measures which cost money, and this can become a problem in developing countries subject to strong fiscal constraints.

1.3.2 - Issues of negotiations

One of the advantages of the Uruguay Round was that it established a point of reference for the continuation of negotiations. The experience of recent years has led to the identification of interests, which makes it relatively simple to make predictions about the reforms that might emerge from the next Round.

Some of the key issues of the future negotiations are set out in Box 1.2

Box 1.2 - Key issues of the negotiations

Method of calculation of domestic support (global reduction or reduction by products)

Stricter criteria for the delimitation of the *green box*

Continuation of the "*blue box*"

Continuation of non-tariff protection measures

Preservation of the Special Safeguard Clause

Gradual elimination or substantial reduction of export subsidies

Disciplines in the area of export credits

Continuation of the peace clause beyond 2004

Redefinition of state trading companies to conform with WTO regulations

Introduction of the multifunctionality of agriculture and biotechnology in the field of trade

In the area of *market access*, new tariff reductions will be negotiated. Josling and Tangermann refer to the existence of the so called "policy water", concerning the excessive and unnecessary protection, which should be abolished by means of a reduction of tariff ceilings²². It would be no surprise if the Round agreed average reduction levels of a similar size to those agreed in the last Round. However, as stated above, tariff dispersion creates a problem leading to very high tariff levels ("tariff peaks") in the case of many products.

One specific aspect to be negotiated, related to Mediterranean interests, is the special tariff system applied by the EU to fruit and vegetable imports. The European Union had to replace the reference price system after 1995 according to the commitments it undertook in the Agreement on Agriculture. The reference price system was considered to be a non-tariff barrier and was consequently subject to tariff-fixing. However, rather than undertaking direct tariff-fixing, the EU modified the old reference price system. There is now an entry price and two different tariffs. For imports respecting the entry price, the lower "normal" tariff is applied (tariffs which were already bound before the Uruguay Round) and for imports coming in at a c.i.f. price lower than the entry price a variable percentage of the equivalent (maximum) tariff is applied. The new entry price system is administered at a shipment-by-shipment level and allows preferential treatment. However, the administration of the system is far from straightforward and transparent and there are therefore bound to be proposals to introduce full tariff-fixing in the entry price system.

Another area of negotiation is that of tariff rate quotas (TRQs). Although TRQs were designed to guarantee market access for imports, their administration by governments has in fact led to controversy. TRQs have in practice become a new channel for discretionary government

²² Josling, T. and Tangermann, S. (1999): *Implementation of the WTO Agreement on Agriculture and Developments for the next Round of Negotiations* Paper prepared for Plenary Session One of the EAAE 9th Congress, Warsaw, August, 1999.

intervention, due to the management of procedures to grant import licences. A further possibility could be to impose stricter regulations on licence-granting procedures or to introduce innovative formulas such as licence auctioning. Another controversial issue will be the Special Safeguard Clause agreed at the Uruguay Round. Some WTO members consider it excessive and propose that it be gradually dismantled or at least that "trigger prices" be decreased.

It is in the area of *export competition* that the European Union may face severe restrictions, since some countries are again supporting the "zero option", i.e. the total elimination of export subsidies. A "fine tuning" of the very definition of export subsidies might be considered: there are some forms of subsidy which have somehow escaped WTO disciplines, such as export credits and other forms of indirect subsidy, like those awarded by the Marketing Boards. Disciplines for all forms of export support will have to be negotiated in the next Round.

In the area of *domestic support*, the next Round will reconsider several issues:

- The reduction of domestic support (the "*amber box*"). This has not proved to be a serious problem for the European Union because the proposed reduction applies to the total (agricultural sector-wide) aggregate support rather than applying to specific products within the agricultural sector. (Aggregate Measure of Support).
- The legitimacy of the "*blue box*", which was originally based on a political agreement between the United States and the European Union. Many countries, among them the United States, following its agricultural legislation of 1996, are in favour of the elimination of the "*blue box*", on the basis that this would help to strengthen the multilateral nature of the WTO.
- A stricter definition of the "*green box*". Support from the "*green box*" has been the paradigm of support exempt from reduction commitments.

One part of this support would not be considered a "subsidy" but the remuneration which society provides for its farmers for the provision of externalities or public services such as the preservation of the environment.

Problems will be posed by the difficulty in identifying what proportion of *green box* support is really decoupled ("*green*") and what proportion might involve a distortion of trade. At the forthcoming round of the WTO, some countries are expected to press for evidence that the pro-environmental policies, using direct payments to farmers as an incentive, have indeed produced tangible benefits – a fact which it is difficult to demonstrate empirically for the moment.

As can be seen, many of the issues in the negotiations were begun at the Uruguay Round. But the next Round will introduce new issues, which have not yet been sufficiently debated. One such issue is that of *state trading enterprises* (STEs). State trade is still a chosen formula in some developing countries and, in particular, in countries which are not yet members of the WTO. A total ban on this type of trade would practically prevent potential members from joining the WTO. Consequently, alternative formulas will probably be discussed, proposing more competition in import markets or at least insisting that state enterprises comply with WTO regulations requiring transparency in agricultural trade.

The importance of the agricultural debate is reflected in the questions posed by the series of *trade disputes* within the WTO Dispute Settlement system. Some of these disputes, like the hormone panel, have touched on issues that are very sensitive for European public opinion, such as consumer health. Following its defeat in the beef hormone dispute, fear is rising in the European Union over its having to open its borders to imports of foods with characteristics which undermine consumer confidence and which may eventually cause a collapse in demand in certain sectors of production.

If agricultural negotiations at the next Round do not run smoothly, it is possible that the Dispute Settlement Body of the World Trade Organisation will (by default) become an increasingly important forum for the development of agricultural trade legislation. The panels of the World Trade Organisation will be asked to make decisions on an increasing number of matters. To prevent this situation, the EU could try to use the overlapping of regional and multilateral negotiations to obtain the support of the Mediterranean countries for the Community's proposal to extend the "peace clause" beyond 2003.

What will be the position of Mediterranean countries with respect to agricultural trade liberalisation? It could be recognised that almost all Mediterranean countries face the choice of "preferential" versus "multilateral" liberalisation, and this could become a difficult decision. Trade theory usually considers preferential trade liberalisation as a second-best option. According to this view, "locking in" policy commitments for domestic market access with the World Trade Organisation (WTO) and the adoption of international standards constitute a better option. Countries derive more benefit from the world markets at large than from preferential trade liberalisation. However, if one examines the learning-by-doing process in export-oriented industries, in the South East Asian countries, those industries generally started by aligning their production standards to one major foreign market (Japan) for access before learning to adapt production to international norms. In this respect, the experience of Southern European countries within the EU could be considered as a successful process of trade reforms through the opening of their markets to other EU countries. There is no reason why the same could not happen for most Mediterranean countries which are negotiating Association Agreements with the EU or amongst themselves in the context of the intra-Arab Free Trade Area.

1. 4 - Globalisation and Environmental concerns

1.4.1 - Sustainable Development in Agriculture

Agriculture is a human activity which makes the widest use of natural resources, chiefly land and water, and, for this reason develops deep interactions with the environment. Sustainable development is a theoretical concept originally linked to the capacity of exploitation of a natural resource without ever exhausting it. In a wider perspective, the Bruntland Commission gave an especially valid definition: "*sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" ²³.

In the long term, world food production will have to increase considerably in order to cope with population growth and meet the enhanced purchasing capacity of the world's population. Some estimates indicate that world cereal production must grow by 40 percent above present levels in order to meet world demand towards the year 2020. In the Mediterranean area, the greater part of this increase in production will come from crop yield growth because, with the exception of specific regions, no significant increase in the total area of cultivated land is envisaged.

Agricultural yields are influenced by the quality and properties of soils, such as their nutrient content, water-holding capacity, salinity, organic content, etc. The loss of soil quality negatively affects agricultural productivity to varying degrees, depending, amongst other factors, on the extent to which the quality of the soil can be complemented or substituted with the use of agricultural inputs. The consequences of productivity loss through soil degradation are far-reaching. Agricultural income and

²³ World Commission on Environment and Development (1987) *Our Common Future*. Oxford University Press.

economic growth are threatened when the loss of soil quality leads to lower output or higher cost of maintaining previous yields.

At present, the effects of soil degradation are evident where irrigation systems have not been effectively employed, in marginal areas, and where production has been intensified in response to population growth. Problems arising from loss of soil quality are registered in many countries, also in the Mediterranean region. It has been calculated²⁴ that around the world, 1.97 billion hectares experienced some degree of degradation between the Second World War and 1990, representing 23% of the world's surface area allocated to agricultural activity, which amounts to approximately 8.7 billion hectares.

Poverty and degradation of the natural properties of the soil can enter a process of negative interaction if farmers with very low incomes are forced into resource overuse whilst also extending their agricultural activity towards more fragile, marginal areas.

Available projections for the future indicate that soil degradation will not have a determining effect on world food supply. However, although the global effect may be of little significance, it could nevertheless accentuate the instability that is already present in many arid regions. The consequences could become serious in certain areas considered to be environmentally fragile or under excessive pressure, and these negative effects can already be observed in certain countries.

Mediterranean countries face three major challenges in their efforts to achieve environmentally sustainable development²⁵: (i) protecting the health of citizens; (ii) preventing further degradation of natural resources; and (iii) integrating environmental concerns into national social and

²⁴ In line with the *Global Assessment of Soil Degradation (GLASOD)*, the first international analysis specifically centred on soil degradation.

²⁵ World Bank (1995): *Towards Sustainable Development: An Environmental Strategy for the Middle East and North Africa*, published in 1995.

economic development programmes in a manner that makes protecting the environment an instrument of growth rather than a restraint on development.

One major problem in many Mediterranean regions is the overuse of water resources²⁶. The population of many arid or semi-arid regions is growing rapidly and the countries continue to overexploit precious water resources at alarming rates. Farmers continue to use increasingly poor quality water for irrigation, causing the continual shrinkage of productive land. As both water and arable land become scarcer, the region's urban centres are growing at an unprecedented rate, exposing more of the poor to inadequate sanitation.

At present, irrigated areas account for more than 16 million hectares in the Mediterranean area., These areas have increased by 3 million hectares in the last 15 years, a fact which, according to Hamdy and Lacirignola²⁷, implies the use of a supplementary capacity of around 2 billion m³ of water per year for agriculture alone. The prospects for increasing water availability are feasible, not by placing the main emphasis on developing new water supplies, but through better management of water. In Egypt, for example, increasing water efficiency by 10 percent (starting from an average of 40 percent or less) would release resources to increase irrigated land by 10 percent. However, this prospect will not prevent short-term shortages, conflicts between alternative uses or the mining of local non-renewable fossil aquifers, particularly if no proper action is taken.

Recent co-operation initiatives have been taken among Mediterranean countries, prompted by the Euro-Mediterranean Conference on Local Water Management, which was held in Marseilles in November 1996. At that Conference, a panel of experts backed by a Ministerial meeting made a

²⁶ See text by Lacirignola, C. and Hamdy, A. (1999): *Mediterranean water resources: major challenges towards the 21st century*, CIHEAM/IAM-B, Bari.

²⁷ Lacirignola, C. and Hamdy, A. (1999), op. cit.

series of recommendations for better management of local water resources (see Box 1.3). The second Euro-Mediterranean Ministerial Conference on Local Water Management took place in Turin (October 1999) with a view to making an in-depth evaluation of the results of the Marseilles Conference and taking a decision on new prospects in the priority sectors of the Partnership.

Box 1.3 - Water Management for Sustainable Agriculture

1. The authorities should base the framework for a sustainable agricultural development on the establishment and implementation of a planning policy and its related legal framework and regulations. Application of modern technologies such as Decision Support Systems (DSS) and Geographic Information Systems (GIS) in planning policy would have to be promoted to support this strategy.
2. There is a direct relationship between the quality of service - including efficient management by Agencies and/or Water Users Associations - and the rate of the fee for water or the price for the service. The cost of the service should be progressively recovered from the users.
3. Environmental protection related to water management in irrigated and drained areas and proper use of non-conventional water resources must be assured by authorities, agencies and users. This requires, amongst other factors, effective monitoring and control of the environmental impacts of water management. With regard to the development of non-conventional water resources, attention should focus on the careful reuse of treated wastewater and the use of low quality water.
4. The opening to the World market and the liberalisation in agriculture will have positive and negative consequences for water management, which should be investigated for the whole Mediterranean region. Adjustment programmes may have to be developed to ensure positive effects on investments, farmers' incomes and water resources development.

Source: Marseilles declaration, facilitated by DG XI, European Commission

1.4.2 - Trade and Environment

Agricultural trade provides a way of partially overcoming the natural limitations of agricultural production to provide the food supply required by a growing population. However, many attempts to increase agricultural productivity are extremely input and water-intensive. As this environmental pressure on farming grows, the concern for the impact of globalisation on the world's ecosystems also increases.

Linkages between trade and environment sometimes produce social costs, and sometimes benefits. Trade tends to stimulate economic growth, which can have direct negative effects on the environment. Yet economic growth could induce technological innovations that favour the protection of natural resources and environmentally friendly techniques. In addition, as trade contributes positively to the growth and improvement of the standard of living of the population, a further indirect link also connects trade to the increased demand for environmental quality, thereby contributing to the conditions which give rise to numerous environmentally friendly policies.

In developing countries such as several in the Mediterranean region, the problem arises when production which appears to be competitive faces narrow export markets and low prices. Low prices are environmentally positive in theory insofar as they reduce yields. However, *excessively low incentives to agricultural production can also discourage the practice of sustainable methods of farming and give rise to emigration to large urban areas, thus increasing pressure on the quality of the environment.*

It is not easy to anticipate how and to what degree trade liberalisation will affect the environment in Mediterranean ecosystems. An increase in trade of products from irrigated areas can immediately have a negative effect as a result of the pressure on water resources, biodiversity and the pollution caused by the increased volume of international transport. A positive effect could also be expected in those areas which currently use

most chemical products and more intensive livestock farming practices and are most likely to decrease yields as a result of trade liberalisation (several regions of the EU, for example). However, in marginal and fragile areas, which extend throughout the Mediterranean basin, a reduction of agricultural activity could also cause negative effects if the abandonment of cultivated areas implies erosion and deterioration of the landscape. In other regions the disappearance of crops will provide an opportunity for the regeneration of the fauna and the development of environmental services which will help to diversify the rural economies.

Consequently, the relationship between liberalisation and the environment is somewhat unclear. In general, some Mediterranean countries, especially those in the EU, have applied measures to deal with the positive and negative environmental effects related to agricultural activity, but their national agricultural policies rarely promote the technological R&D intended to reach specific environmental targets. On the other hand, the majority of the Mediterranean countries have been unable to develop adequate environmental policies, although some steps have been taken in the last few years with the support of international organisations (see Box 1.4).

Box 1.4 - Environmental measures

Some Mediterranean countries are beginning to integrate environmentally sound practices into economic planning and development with the assistance of international financial institutions (especially the World Bank) and the European Commission. In 1998, the Government of Lebanon prepared its Environmental Code, which was approved by the Council of Ministers. Also in 1998, Syria completed its National Environmental Action Plan (NEAP), increasing the number of countries in the region with completed NEAPs or environmental strategies (Egypt,

Jordan, Lebanon, Syria and Tunisia). NEAPs are also being prepared in Algeria and Morocco and are expected to have been completed in 1999.)

A further initiative was taken at the Barcelona Conference in that the European Commission was asked to coordinate a short and medium-term priority action programme for the environment (SMAP). The Programme was adopted at the Ministerial Conference on the environment (Helsinki, 28 November 1997). SMAP meets the need for a regional approach, for increased co-operation and for better coordination of the existing multilateral programmes in the field of the environment. The annual meetings of SMAP Correspondents (the last was held in Brussels on 9 and 10 November 1999) aim to ensure the implementation of the decisions taken in this context, contributing to a coherent integrated approach to environmental protection in the Partner countries in the transitional period and to the sustainable socio-economic development of the region.

The priority fields of action envisaged in the SMAP are as follows:

- integrated water management,
- integrated waste management,
- integrated coastal zone management,
- « critical sites » (« hot spots »), which cover polluted areas but also vulnerable elements of biodiversity,
- measures against desertification.

The SMAP should also contribute to the transfer of Community experience as regards legislation and control of the environment as well as to the integration of the ecological dimension in all policies. Co-operation between the 27 partners should result in proposals/projects incorporating these various objectives into a priority action Programme. The fixing of priorities should not be regarded as an assessment of the value of the various fields but as a means of organising the initiatives and measures in time.

Sources: World Bank and European Commission, DG IB/A. 4, September 1999

1.4.3 - Harmonisation of Standards

The environment, food quality and other consumer concerns linked to agriculture will become increasingly visible elements of Mediterranean integration. The FTA will push for a *deeper* integration process where standards will have to be progressively harmonised, on the basis of consensus.

Various international trade agreements touch on these issues. Here the focus is on three: SPS (Sanitary and Phytosanitary Measures), TBT (Technical Barriers to Trade) and TRIPs (Trade Related Aspects of Intellectual Property Rights), referring in particular to geographical indications and vegetable varieties), and even on issues related to social rights. In all of these areas, the most advanced countries usually have domestic regulations which comply with international conventions in general. Importing countries with stringent *sanitary and phytosanitary standards* often require exporters to certify that animal and agricultural products are free of disease or have been raised in disease-free zones. This requires an infrastructure for plant and animal testing to detect the presence of pests, control of the pests that are found, education for the farmers in the proper use of pesticides and veterinary products and, finally, internal quarantine barriers to maintain pest-free regions within the country²⁸.

Countries which at present apply their own domestic standards have the additional obligation to comply with the internationally sanctioned standards. Less prepared countries usually first need to establish such systems – or to convert domestic systems to the system recognised by international conventions. Effective implementation and compliance involve investment and costs that are not properly recognised in international negotiations²⁹.

²⁸ Finger, J.M. and Schuler, P. (1999): *Implementation of the Uruguay Round commitments. The development challenge*, The WTO/World Bank Conference on “Developing Countries’ in a Millennium Round” WTO Secretariat, Centre William Rappard, Geneva, 20-21 September 1999.

²⁹ Finger, J.M. and Schuler, P. (1999), *op. cit.*

One of the challenges in the coming international negotiations will be that of finding the right balance between unjustified protectionism and legitimate consumer interests. This is a controversial subject, owing to the lack of consensus among the different countries regarding environmental concerns, consumer health and ethical principles. The SPS Agreement does not prevent countries from imposing trade restrictions to protect consumer health. It does, however, impose the condition that the trade restrictions must be based on a risk assessment. But sometimes risk assessment is not sufficiently developed as a scientific activity and assessment methods are far from being universally accepted.

Another agreement, that regarding Technical Barriers to Trade (TBT), controls technical standards and regulations, including packaging, labelling and conformity assessment. Technical standards are legitimate, according to the introduction to the agreement, and they guarantee the quality of exported products, protection of human and animal health, plant conservation, protection of the environment and even "essential interests of security". The Agreement also attempts to ensure that regulations, standards and certification procedures will not create unnecessary obstacles to trade or give domestic production an unfair advantage.

In a way, the TBT Agreement opens the door to a wider field than that of the SPS Agreement by introducing ethical differences and essential interests into the area of international regulations. However, the GATT approach, since before the Uruguay Round, has been to ban members from imposing environmentally or ethically based conditions on Production Methods and Processes (PMPs). This appears to have been confirmed in recent cases by the Dispute Settlement Body. The GATT-1947, in the specific case of the US-Mexico dolphin-tuna panel, also confirmed the idea that trade measures should not be used to apply extra-territorial ethical or environmental criteria. Bilateral negotiations could lead to harmonisation of PMP standards but this relates to an area outside WTO regulations.

Problems appear when governments apply the same measures to both domestic and overseas producers, such as the prohibition of a PMP used for both the domestic and the imported product. On the one hand, if the domestic ban were maintained while liberalising imports, an advantage would be given to the overseas PMP. On the other hand, restrictions on PMPs may become an unjustified protection measure, which could constrain the export potential of countries accepting other countries' standards.

Labelling may be an option which takes the interests of consumers into consideration and respects their freedom of choice, but it often implies high transaction costs. In some areas, such as the trade of genetically modified organisms (GMOs), there is a lack of consensus on labelling regulations between EU member states. In the EU, however, there is a tendency to support the position that consumer confidence must be guaranteed irrespective of the health risk. However, labelling has not become a satisfactory measure in "essential" areas affecting PMPs, as is the case, for example, of animal welfare or the prevention of child labour.

1. 5 - Outlook for co-operation

1.5.1 - A Mediterranean Approach for International Negotiations

In the aftermath of international reforms such as the UR and the Agenda 2000, many MCs complain of their effective non-participation in supranational negotiations and their inability to negotiate more favourable conditions for themselves. From the viewpoint of the non-EU MCs, there would be potential gains if they could gain access to EU markets for their exports. From the point of view of Southern European countries, especially the Mediterranean regions, the weakness of the "*Southern lobby*" and the political environment within the EU do not facilitate the rebalancing of the CAP support in favour of Southern European agriculture.

A joint Mediterranean ("North" and "South") lobby could be beneficial. It could contribute to extending the advantages of the Mediterranean food products from both the cultural and the health point of view to the rest of the world.

For a long time, the trade of Mediterranean products was centred on markets very close to the producers themselves. Even at present, the proportion of production traded internationally is normally less than 10 percent. In essence, the reason for this lies in the technical difficulties regarding product storage, long-distance transport costs and trade barriers. Nevertheless, trade liberalisation has reduced the non-tariff barriers to trade. Furthermore, technological developments in post-harvest handling have also permitted the long-distance transport of perishable goods. Both developed and developing countries alike are increasingly orientating their production towards exports. Countries of the Southern Hemisphere, such as Chile, South Africa and New Zealand, are becoming the international market leaders in the export of horticultural products.

As a result, the globalisation process is leading to the "delocalisation" of the Mediterranean cultures from competitors in their original basin to external competitors. Given this trend it would not be sensible to impose constraints on trade and co-operation between the different shores of the Mediterranean. Assuming the possibility of the reallocation of horticultural production within the Mediterranean regions, this adjustment would probably be less dramatic than international reallocation towards the Southern Hemisphere, for example. Consequently, there is scope for stepping up co-operation amongst MCs in the area of agriculture³⁰.

Co-operation could lead to common strategies for multilateral negotiations. As an example, if a problem raised in the UR was the

³⁰ This is in line with the belief expressed by Ministers and Heads of Delegations of CIHEAM Member States (Rome, 11 May 1999) that the Euro-Mediterranean partnership would require stronger co-operation in the agricultural sector.

dispersion in tariff rates, a possible option to be supported by Southern European producers would be the “Swiss formula”, used for manufactures in the Tokyo Round, whereby the rate of reduction for each item is higher the greater the item’s tariff level. In the EU, this formula would favour the continuation of the current tariff levels of many Mediterranean goods, which are normally lower than the tariffs applied to Continental products. Non-EU MCs would surely support this option, provided that they obtain higher preferential access to the EU markets.

Co-operation should also be extended to the field of labour mobility. In Southern European countries, the immigration of extra-EU workers would constitute a means of breaking the conflict between solidarity and competitiveness. In Spain and other EU countries, farming organisations claim an increase in the rate of immigrant labour to agriculture. It is estimated that in the fruit-picking season there is a labour shortage of around 350.000 workers, which is not covered by domestic labour. Given the strong stability of farm structures in Southern Europe, agriculture in such regions cannot rely on size adjustment as a way of gaining competitiveness. As a result, two complementary developments will follow in the next few years. One will be the delocalisation of activities, not only to Mediterranean countries (but also or mainly to the Southern Hemisphere). The other will be the understanding that a more open EU immigration policy could become a determinant of farm competitiveness even for Southern Europe.

Despite the fact that it could be of mutual interest for Mediterranean countries to undertake a co-operative strategy, there are nevertheless difficulties resulting from conflicting objectives at the country level. Thus, a non-EU Mediterranean country might be in favour of gaining increased access to EU markets but might have doubts with respect to choosing between a preferential and a multilateral strategy. Also, an agricultural trade liberalisation package could involve the removal of export subsidies, which, in addition to the fact that they are not supported by the EU, could

create some problems in Mediterranean importing countries where there is an interest in keeping food prices low. Difficulties could be overcome with a better understanding of the advantages of creating an extended and integrated market for the entire Mediterranean region.

1.5.2 - A Specific Package for Agriculture?

EU financial aid to the non-EU MCs extends a tradition of development assistance. More closely connected to the FTA, financial aid by the EU has been justified as compensation for the fiscal revenue loss and the adjustment costs incurred and as an incentive to encourage governments to implement the structural reforms needed to ensure success. The fiscal loss in several MCs as a result of the FTA has been estimated³¹. For example, the EU represents 71 percent of Tunisian imports, and tariff earnings account for 22 percent of total Tunisian fiscal earnings. Consequently, the FTA would represent a direct fiscal loss of around 15 percent of total fiscal income, that is to say, around 3.2 percent of total GDP. If we were to add the loss of indirect taxes calculated on the import price adjusted by custom duties, we would arrive at a total loss of 25 percent of total fiscal income.

The Stuttgart Conference (April 1999) confirmed the Euro-Mediterranean partnership process initiated in Barcelona in November 1995. The European Commission adopted the MEDA II proposal on 20 October; this is the first step towards reforming and refocusing the implementation of the EU's co-operation with its Mediterranean Partners with a view to establishing a Euro-Mediterranean Free Trade Area by 2010.

³¹ Devarajan, S. and Suthiwart, S. (1997): *Les effets fiscaux de l'Accord Europe-Méditerranée pour les pays du bassin méditerranéen*, paper presented at the Congrès de l'Association Française de Sciences Economiques, Paris, 1997.

Box 1.5 - The MEDA programmes

The MEDA Regulation was adopted in 1996 and the beneficiaries are Algeria, Cyprus, Egypt, Israel, Jordan, Malta, Morocco, Lebanon, Syria, Tunisia, Turkey and the West Bank and Gaza Strip. By 1998 the MEDA Programme had committed 2 325 million euro and disbursed 600 million euro in favour of economic transition, social cohesion and regional co-operation. Morocco, Tunisia, Israel, Jordan and the Palestinian Authority have concluded Association Agreements, and negotiations are in progress with Algeria, Egypt, Lebanon and Syria. Association Agreements already exist with Cyprus, Malta and Turkey providing inter alia for the establishment of Customs Unions, an objective which has already been achieved with Turkey and to a large extent with Cyprus. These three countries are candidates for accession to the EU.

The MEDA II proposal, which takes account of the conclusions of an external evaluation, will introduce two complementary types of change to the existing Council Regulation on the administration of the MEDA programme - reforming the decision-making processes and focusing co-operation on preparation for free trade. These combined changes will have the effect of ensuring that EU co-operation is delivered more efficiently and that it is in step with the overall objectives which the EU and the Mediterranean Partners have set themselves.

Firstly, under the proposal the Commission would no longer present individual project proposals for the opinion of the MED Committee, the committee of experts of Member States, but instead it would present indicative programmes and annual financing plans. This is in line with the rules applicable to PHARE and TACIS and will allow better definition of multi-annual strategies as well as the monitoring of results against the objectives set.

Secondly, as steady progress is being made in concluding Association Agreements with the majority of the Mediterranean Partners with the goal of establishing free trade, the content of co-operation will focus on assistance for the implementation of these Agreements. Thus, MEDA II provides that the "structural adjustment facility", one of the most successful operations financed under MEDA I, will target more specifically the reforms necessary for free trade with the EU.

Source: European Commission. DG 1B.

Non-EU MCs prefer to receive aid for general budget support and invoke the loss of fiscal revenue to that effect. However, financial aid is conditional. Aid disbursements under the Association Agreements are conditional on the implementation of programmes of structural reform agreed between the authorities and the EU in close co-operation with the World Bank. Aids are also conditional upon the implementation of the preferential tariff reductions, less so on the implementation of the deeper integration policies, and not on other complementary measures such as extending liberalisation to the multilateral level.

Nonetheless, the question arises as to whether earmarking a portion of these funds for specific budgetary expenditure for rural development can help ensure the ultimate success of Mediterranean integration. What is the optimal amount and form of outlays for agricultural restructuring, training and natural resource conservation?

It can be argued that further integration of the agricultural chapter in the Euro-Mediterranean partnership should consider renegotiation of the MEDA programmes in terms of a specific accompanying programme for the agricultural sector. After four years of MEDA programmes, agricultural activities are scarcely contemplated due to (i) the bias of policy makers towards non-agricultural objectives, and (ii) the political problems associated with EU financial aid which might help non-EU MCs to increase competitiveness in agro-food activities. In actual fact, the EU's financial aid to its Mediterranean partners does not allocate any specific budget to agriculture and rural development. This is clear in the case of the "regional" MEDA programmes, which only allow the launching of projects covered by a Ministerial Conference. *A specific Euro-Mediterranean conference on agriculture and rural development would be needed*, in spite of the difficult political issues to be included on a possible agenda. Such a conference could help to widen the scope of agricultural co-operation in the Mediterranean region, thus substituting the narrow circle of negotiations

on trade concessions in specific goods with a more comprehensive approach to rural development in the region.

The Mediterranean Development Forum II, celebrated in Marrakesh, in September 1998, emphasised the role of rural development in the Mediterranean Countries. At that meeting, Fahmi Bishay of the United Nation's Food and Agricultural Organization found that 70 percent of poor people are from rural areas. They have very limited access to rudimentary human needs, such as primary education, basic health care, drinkable water and sanitation, and sufficient nutritious food. In the medium to longer term, economic liberalisation should increase farmers' incomes, but in the short term, the adjustment programmes can increase food prices, erode employment opportunities and reduce access to social services. As the Forum revealed, many countries have adopted measures to overcome the social cost of adjustment³², but the adequacy of such measures for the rural poor should be discussed at a Conference level.

Considering the number of the trade liberalisation processes which MCs are going to face in the years that lie ahead, a specific package for Mediterranean rural areas should be undertaken, similar to the long tradition of rural and regional development policies in the European Union. There is no need to secure standard income support for Mediterranean farmers but it is necessary to facilitate structural adjustment in rural areas exposed to increased competition. This policy could be financed through a specific Fund, suggested by several authors³³, to be allocated to lagging Mediterranean areas from the North and from the South of the Mediterranean Basin. Given the intensity of the reallocation of

³² Including mitigating cuts in social spending (Morocco, Egypt and Algeria); establishing social safety nets to assist the vulnerable (Egypt, Morocco, Jordan); and encouraging remittances from migrants (Egypt, Syria).

³³ Regnault, H. (1997): *Les échanges agricoles: une exception dans les relations euro-méditerranéennes, Monde arabe, Maghreb-Machrek*, La Documentation Française, numéro hors série, Paris, décembre 1997. Akesbi, N. (1999): *Échanges agricoles euro-méditerranéens: entre l'asymétrie et la réciprocité, quel avenir?* Mimeo.

resources in the Mediterranean areas, the Fund would be a way of enhancing the credibility of the Euro-Mediterranean area in both the North and the South.

FDI can also do much to stimulate Mediterranean agriculture, but it will only materialise, first, if a regional market consolidates with a deeper integration approach, and second, if the regulatory and institutional environment is conducive to private sector investment. Indeed, in the absence of improvements in the legal and regulatory framework, non-EU MCs would face the "hub and spoke" effect and see how the EU can result in greater competition from imports without much in the way of new investments.

2 *EU policy developments and the Mediterranean*

2.1 - Introduction

EU policies affect both parts of the Mediterranean, the northern part that consists of EU members, as well as the southern and eastern part that consists of non-EU countries. At the turn of the century the EU is facing a number of important challenges and its policies have a vision to create a stronger and wider EU in the new millennium. Among them, Agenda 2000 and the European Monetary Union (EMU) introducing the single currency, the Euro, are the most important. Undoubtedly, Agenda 2000 and the implementation of the EMU with the introduction of the common currency are the two major challenges facing the EU at the turn of the century, since their impact will be felt not only in the Union but also worldwide.

Agenda 2000 is the name adopted to describe the vision for a wider EU; it responds to the challenge of EU enlargement to the east. The process of enlargement was launched in March 1998 with the start of negotiations for the accession of the ten countries of Central and Eastern Europe. Negotiations are currently being held with the first wave of applicants, namely Hungary, Poland, the Czech Republic, Estonia and Slovenia, as well as Cyprus.

Agenda 2000 is a series of reforms of community policies, mainly of the Common Agricultural Policy (CAP) and of the structural funds. Following the adoption of about twenty legislative measures this project is now essentially under way. These reforms are being introduced, first, to prepare the EU to better face a number of important international challenges, such as the negotiations in the new millennium round of the World Trade Organisation (WTO) and, second, to pave the way for enlargement, with particular emphasis on solving the budget issue and developing a new financial framework.

The European Monetary Union (EMU) is founded on the Amsterdam Treaty signed by the Council in June 1997 and came into force in May 1999. The countries that participate in the EMU have to satisfy a number of criteria with respect to inflation, public debt, budget deficit and exchange rate stability. Although the Euro will come into circulation in January 1st 2002, it is already being used as a currency in bank transactions in the eleven countries participating in the EMU and around the world.

This section looks at these new developments in EU policies, in particular Agenda 2000 and the introduction of the EMU, from a Mediterranean perspective. It provides the basic facts about the EU policies, analyses their impact on the basis of available evidence in the literature and presents some comments on their impact on the Mediterranean countries. The section begins with an overview of Agenda 2000 and then continues with an analysis of the agricultural dimension of Agenda 2000 and of the CAP reform. Finally, it briefly discusses the impact of the EMU and the common currency on agriculture and the rural economy on both EU-member and non-member Mediterranean countries.

2.2 - Agenda 2000: an Overview

Agenda 2000, is a series of EU policy reforms conceived at the Madrid European Council in December 1995 to address the issues facing the EU for the period from 2000 to 2006. The European Commission (EC) presented in 16 July 1997 its proposals for the reform of the European policies, including the implementation of EU enlargement, within a consistent financial framework for the 2000 – 2006 period with the name *Agenda 2000*. The EC proposals were discussed and adopted, with modifications, at the Berlin Summit of March 1999. Today, with the adoption of about twenty legislative measures, the Agenda 2000 project is under implementation.

The EC proposals and the Berlin Summit decision covered four major areas:

- Developing internal EU policies in four directions, namely, setting conditions for sustainable, employment-intensive growth, putting knowledge and technology to the forefront, modernising employment systems and improving living conditions.
- Focusing on economic and social cohesion as an objective, more emphatically than in the past, in an enlarged and therefore more diversified EU, which requires the adaptation of the EU policy instruments to the challenge of enlargement.
- Deepening the 1992 reform of the Common Agricultural Policy to include a fully developed Rural Development Policy, in the light of the next WTO Round, the aspiration towards a more environment-friendly and quality-oriented agriculture and the prospect of enlargement.
- Developing a fully operational foreign policy.

The resulting package of legislation covers four main areas, which are closely related: structural policy reform, the reform of the CAP, the pre-accession instruments and the new financial framework. An amendment was also proposed to the financial regulation on trans-European networks. In addition, certain other priority areas, originally included in the Commission's proposals set out above, have been included in the financial perspective. These, however, have not necessitated any legislative measures. This section gives an overview of the Agenda 2000 agreement, with particular emphasis on the new financial framework and the structural funds.

2.2.1 - The new financial framework

The perception that the EU Budget is problematic has been prevalent since at least 1988. Since that year, the EU Budget has been formulated within a pre-specified financial framework for the medium run and is adopted by the Council, the European Parliament and the Commission

(Inter-institutional Agreement). The expenditure available under the Financial Perspective cannot exceed the amount of own resources available for 2000 - 2006. The overall ceiling of own resources has been kept at 1.27% of gross national product (GNP) for the entire 2000 - 2006 period.

The financial framework for the 2000 – 2006 period is set out in Table 2.1. Expenditure figures in the Financial Perspective are well below this overall ceiling. In fact, commitments fall from 92.03 billion Euro in 2000 to 90.66 billion Euro in 2006.

The EC proposals for the 2000 – 2006 Financial Perspective closely follow those in Agenda 2000. As requested by the Luxembourg European Council, the Financial Perspective is presented on a EU-15 basis, leaving sufficient margin to finance enlargement, but with an accompanying table presenting the costs associated with enlargement and their financing under the technical assumptions used by the Commission. The Commission has proposed that the ceiling of own resources be kept at the level of 1.27% of the GNP between 2000 and 2006. The overall ceiling for payment appropriations rises to 104.6 billion Euro in 1999 prices (1.13% of GNP) in 2006. In real terms, the average growth rate of payments is 1.2% of GDP, including pre-accession aid. The expenditure associated with accession and its financing are given in Table 2.2.

Table 2.1 - Financial perspectives for the EU-15

EUR million-1999 prices	2000	2001	2002	2003	2004	2005	2006
Appropriations for commitments							
1. AGRICULTURE	40 920	42 800	43 900	43 770	43 760	41 930	41 660
CAP expenditure excluding Rural Development	36 620	38 480	39 570	39 430	38 410	37 570	37 290
Rural Development and accompanying measures	4 300	4 320	4 330	4 340	4 350	4 360	4 370
2. STRUCTURAL OPERATIONS	32 045	31 455	30 865	30 285	29 595	29 595	29 170
Structural Funds	29 430	28 840	28 250	27 670	27 080	27 080	26 660
Cohesion Fund	2 615	2 615	2 615	2 615	2 515	2 515	2 510
3. INTERNAL POLICIES	5 900	5 950	6 000	6 050	6 100	6 150	6 200
4. EXTERNAL ACTION	4 550	4 560	4 570	4 580	4 590	4 600	4 610
5. ADMINISTRATION	4 560	4 600	4 700	4 800	4 900	5 000	5 100
6. RESERVES	900	900	650	400	400	400	4 000
Monetary reserve	500	500	250	0	0	0	0
Emergency aid reserve	200	200	200	200	200	200	200
Guarantee reserve	200	200	200	200	200	200	200
7. PRE-ACCESSION AID	3 120	3 120	3 120	3 120	3 120	3 120	3 120
Agriculture	520	520	520	520	520	520	520
Pre-accession structural measures	1 040	1 040	1 040	1 040	1 040	1 040	1 040
PHARE	1 560	1 560	1 560	1 560	1 560	1 560	1 560
TOTAL APPROPRIATIONS FOR COMMITMENTS	91 995	93 385	93 805	93 005	91 465	90 795	90 260
TOTAL APPROPRIATIONS FOR PAYMENTS	89 590	91 070	94 130	94 740	91 720	89 910	89 310
Appropriations for payments as % of GNP	1.13%	1.12%	1.13%	1.11%	1.05%	1.00%	0.97%
RESERVE FOR ACCESSION			4 240	6 710	8 890	11 440	14 220
Agriculture			1 600	2 030	2 450	2 930	3 400
Other expenditure			2 540	4 680	6 640	8 510	10 820
CEILING FOR COMMITMENTS	89 590	91 070	98 270	101 450	100 610	101 350	103 530
Ceiling for commitments as percent of GDP	1.13%	1.12%	1.18%	1.19%	1.15%	1.13%	1.13%
Margin as percent of GDP	0.14%	0.15%	0.09%	0.08%	0.12%	0.14%	0.14%
Own resources ceiling	1.27%	1.27%	1.27%	1.27%	1.27%	1.27%	1.27%

Source: Berlin Summit Agreement, March 1999

Table 2.2 - Financial perspectives for the EU-21

EUR million-1999 prices	2000	2001	2002	2003	2004	2005	2006
Appropriations for commitments							
1. AGRICULTURE	40 920	42 800	43 900	43 770	43 760	41 930	41 660
CAP expenditure excluding Rural Development	36 620	38 480	39 570	39 430	38 410	37 570	37 290
Rural Development and accompanying measures	4 300	4 320	4 330	4 340	4 350	4 360	4 370
2. STRUCTURAL OPERATIONS	32 045	31 455	30 865	30 285	29 595	29 595	29 170
Structural Funds	29 430	28 840	28 250	27 670	27 080	27 080	26 660
Cohesion Fund	2 615	2 615	2 615	2 615	2 515	2 515	2 510
3. INTERNAL POLICIES	5 900	5 950	6 000	6 050	6 100	6 150	6 200
4. EXTERNAL ACTION	4 550	4 560	4 570	4 580	4 590	4 600	4 610
5. ADMINISTRATION	4 560	4 600	4 700	4 800	4 900	5 000	5 100
6. RESERVES	900	900	650	400	400	400	4 000
Monetary reserve	500	500	250	0	0	0	0
Emergency aid reserve	200	200	200	200	200	200	200
Guarantee reserve	200	200	200	200	200	200	200
7. PRE-ACCESSION AID	3 120	3 120	3 120	3 120	3 120	3 120	3 120
Agriculture	520	520	520	520	520	520	520
Pre-accession structural measures	1 040	1 040	1 040	1 040	1 040	1 040	1 040
PHARE	1 560	1 560	1 560	1 560	1 560	1 560	1 560
8. ENLARGEMENT			6 450	9 030	11 610	14 200	16 780
Agriculture			1 600	2 030	2 450	2 930	3 400
Structural measures			3 750	5 830	7 920	10 000	12 080
Internal policies			730	760	790	820	850
Administrative expenditure			370	410	450	450	450
TOTAL APPROPRIATIONS FOR COMMITMENTS	91 995	93 385	100 255	102 035	103 075	104 995	107 040
TOTAL APPROPRIATIONS FOR PAYMENTS	89 590	91 070	98 270	101 450	100 610	101 350	103 530
of which for enlargement			4 140	6 710	8 890	11 440	14 210
Appropriations for payments as % of GNP	1.13%	1.12%	1.14%	1.15%	1.11%	1.09%	1.09%
Margin as percent of GDP	0.14%	0.15%	0.13%	0.12%	0.16%	0.18%	0.18%
Own resources ceiling	1.27%	1.27%	1.27%	1.27%	1.27%	1.27%	1.27%

Source: Berlin Summit Agreement, March 1999

2.2.2 - Enlargement and the reform of the CAP

One of the main reasons for the Agenda 2000 reforms was to facilitate EU enlargement to include ten countries of Central and Eastern Europe and Cyprus. In fact, the Agenda 2000 document was the Commission's response to the question posed at the Madrid Council on the impact of enlargement on Community policies.

The reform of the CAP in particular was considered a *sine qua non* for enlargement, given its budgetary implications, but also for preparing the EU position in the WTO negotiations. The CAP reform in Agenda 2000 is a continuation and consolidation of changes introduced by reforms in 1988 and 1992. The reform aims to increase the competitiveness of EU agricultural products on European and world markets, to integrate environmental and structural considerations into the implementation of the CAP, to ensure a fair income to farmers, to simplify agricultural legislation and decentralise its application to improve food safety, to strengthen the EU position in the new round of WTO negotiations and to stabilise agricultural spending in real terms at its 1999 levels.

Two types of measures are used in the Agenda 2000 reform to achieve these objectives. First, new regulations have been adopted amending the CMO for several products. Second, measures of a horizontal nature have been introduced. The Agenda 2000 reform of the CAP is supplemented by a Regulation on Rural Development, which aims to address more general development problems in the rural areas of the EU and will develop into a second pillar of the EU common agricultural policy. A more detailed presentation of the CAP reform is given in the next section.

2.2.3 - Structural funds and cohesion fund

The structural policy of the EU aims to achieve economic cohesion. The concept of economic cohesion was introduced in the Single Act (1986) and since the Amsterdam Treaty (1992) constitutes one of the three pillars of the

EU together with the Single Market and the Economic and Monetary Union (EMU). Cohesion is still a priority today and this is reflected in the budget, where structural policy is the second funded policy after the Common Agricultural Policy.

The reforms of the structural policy in Agenda 2000 aim to: (a) improve the effectiveness of the policy instruments in achieving economic and social cohesion and (b) ensure that structural policy continues to play an important role in the enlargement of the EU. Structural policy measures have been adopted to lessen the regional disparities in development and living standards in the Community. Alongside the structural funds, a Cohesion Fund was set up in 1993 to finance transport and environment infrastructure in member states with per capita GDP less than 90% of the EU average.

The new Community initiatives are assigned a clearly defined role. They are meant to implement measures of common interest in priority fields for the Union as a whole, through co-operation between the regions, the Member States and the various economic and social partners. For simplification, each initiative is financed by a single Structural Fund. These arrangements further concentrate resources and considerably simplify the management of the initiatives.

The new Regulations on the Structural Funds and Cohesion Fund provide the legal framework for obtaining support from these funds in the next planning period 2000 – 2006. The structural policy reform has followed the three principles enunciated in Agenda 2000, namely concentration, simplification and clarification of responsibilities. The legal texts that have been adopted are as follows: (a) a general Regulation including provisions which apply to all of the Funds (this replaces two existing Council Regulations); (b) “vertical” Regulations for each of the four Funds (ERDF, ESF, FIFG and, for EAGGF, the Rural Development Regulation); and (c) a revised Regulation for the Cohesion Fund.

The EU's poorest regions are the top priority of structural policy. The focus here is on improving their infrastructure as well as the educational and skill levels of their workforce. In a new approach, the Structural Funds also cater for all areas undergoing structural difficulties, be they industrial, rural, urban or coastal areas with difficulties in the fishery sector. A clear division of responsibilities is introduced between the Commission and the Member States to improve transparency and accountability and thus to achieve greater cost-effectiveness. Innovative financial instruments are foreseen, such as loan guarantees and risk capital funds to increase the economic leverage of the Structural Funds. The Structural Funds also promote sustainable development and environmental protection. A key task of structural policy is to underpin the reform of labour market policies and practices in line with the overall employment strategy and the annual employment guidelines for Member States.

Priority Objectives

For the sake of simplification, priority objectives are reduced from seven to three. All regions in the EU will be re-assessed as to whether they qualify for Structural Fund support. The new objectives are:

Objective 1: Policy measures under this objective aim to promote development and structural adjustment in regions lagging behind in terms of economic development. These are defined as the regions with a per capita GDP that is less than 75% of the Community average (measured on the basis of figures for the last three available years in terms). Although there has been significant development in the EU's poorer regions, the most impressive case being undoubtedly Ireland where GDP increased from 64% of the EU average in 1983 to almost 90% in 1995, there are still great regional disparities. Some regions are still faced with serious problems of low incomes, unemployment and deficiencies in infrastructure and in the skill levels of their workforce. Even though these gaps have narrowed in fields such as telecommunications, eliminating them entirely will be a long-

term process given the volume of investment required. All four Structural Funds (European Regional Development Fund (ERDF), European Social Fund (ESF), European Agricultural Guidance and Guarantee Fund, Guidance Section (EAGGF), Financial Instrument for Fisheries Guidance (FIFG) will make a joint effort to assist the development of Objective 1 regions.

About two-thirds of the Structural Fund operations fall under Objective 1 and almost 20% of the EU population benefits from such measures. Regions that no longer qualify under the 75% criterion for inclusion in Objective 1 will have their assistance phased out gradually, over a 6-year period. Assistance is extended to 7 years for those regions which fulfil the European criteria for Objective 2.

Objective 2: Policy measures under this objective are intended to contribute to the improvement of the economic and social conditions in regions facing structural difficulties other than those eligible under Objective 1. These also apply to areas experiencing structural difficulties in the wealthier Member States. The rationale of such measures is that many areas in the EU are in need of restructuring because their economic base is not sufficiently diversified. These include areas facing industrial decline, rural areas confronted with serious problems such as depopulation, deprived urban areas, regions undergoing structural change in the services sector and regions heavily dependent on fisheries.

Structural aid under this objective covers the whole fisheries sector in all areas. Densely populated urban areas will also be eligible for funding under Objective 2, to cope with poverty, high crime rates, and low educational levels. About 18% of the European population will benefit from assistance under this objective. Assistance under Objective 2 will be allocated between the various types of areas on the basis of their population. In terms of the total population of the Union, the industrial and service sector areas represent about 10%, the rural areas about 5%, the

urban areas about 2% and those dependent on fishing about 1%. Current Objective 2 and 5b regions that are not eligible under the new Objective 2 will have their assistance phased out gradually, over a 4-year period.

Objective 3 Policy measures under this objective aim at human resource development outside Objective 1 regions previously grouped under Objectives 3 and 4. This objective includes all measures taken under the new title on employment in the Treaty of Amsterdam and under the European employment strategy. The activities of the ESF are re-grouped under Objective 3 and are aimed at supporting the adaptation and modernisation of education, training and employment policies and systems across the EU. The new Objective also serves as a reference framework for the ESF interventions in Objectives 1, 2 and 3, thereby providing a consistent approach between EU and national human resources development strategies on the one hand and regional intervention on the other.

Community initiatives

Furthermore, a radical simplification of community initiatives has taken place. Their number has been reduced from 13 to just four: (a) INTERREG, on trans-national, cross-border and inter-regional co-operation to stimulate regional economic development and encourage balanced regional planning; (b) LEADER, on rural development; (c) EQUAL, an initiative for co-operation to fight discrimination and inequality with regard to access to the labour market; and (d) URBAN, which encourages the economic and social regeneration of towns and cities in crisis.

The Cohesion Fund

This fund has been maintained as part of the EU structural policy and continues to cover transport and environmental infrastructure. Its operation, however, has been simplified and a greater role has been given

to the member states in its financial control. Furthermore, the new provisions for project financing encourage the use of additional private funding and an application of “the polluter pays” principle. In 2003, there will be a mid-term review of the eligibility criterion and in the case of those states which no longer qualify the funds allocated under the Cohesion Fund will be reduced accordingly.

Budget

The total budget for the structural policies for the 2000 – 2006 period is 213 billion Euro in 1999 prices. This represents 0.46% of EU GNP, as was already the case in the 1993-1999 period. The total appropriation for the Structural Funds and the Cohesion Fund is as follows (in million Euro in 1999 prices):

Table 2.3 - Total appropriations for the Structural Funds and the Cohesion Fund (2000 - 2006)

	2000	2001	2002	2003	2004	2005	2006
Structural Funds	29430	28840	28250	27670	27080	27080	26660
Cohesion Fund	2615	2615	2615	2615	2615	2615	2510
Total Structural Measures	32045	31455	30865	30285	29595	29595	29170

Source: Berlin Summit Agreement, March 1999.

2.3 - The reform of the CAP

Since its inception, the Common Agricultural Policy (CAP) has had to adapt continuously in order to meet new challenges. Initially, its objectives were confined to attaining the goals of the Treaty of Rome, securing a fair

standard of living for the farming population and ensuring adequate food supply to the consumer at reasonable prices. Later on, it had to adapt to the new situation developing in the agricultural markets, deal with new challenges arising from the gradual enlargement of the Community and address the problem of surpluses. The CAP reform in the context of Agenda 2000 is the last in a series of reforms and its twin aim is to deepen and widen the 1992 MacSharry reform by gradually decoupling support and to introduce a consistent rural policy.

2.3.1 - Internal and external challenges

Policies need to adapt continuously to economic and social developments. There are a number of new internal and external challenges that have induced the reform of the CAP in order to help European agriculture face these challenges. The growth anticipated in world agricultural markets, the need to pave the way to enlargement, and the necessity to prepare the EU for the new WTO negotiations are some of these new challenges.

Strong growth is predicted in world agricultural markets. The long-term outlook for the main agricultural markets is favourable for exporting countries. Prospects for increased food consumption, mainly in developing countries, combined with a limited capacity for similar growth in domestic production, are expected to boost world trade and sustain world farm prices in the medium-term. Agricultural prices are expected to increase according to leading international forecasting institutes. CAP prices are too high for the EU to be able to take advantage of this expansion in world markets. In addition, there is always the risk that surpluses will reappear, increasing budget costs. Building on the 1992 reform, the new reform aims to help farm production through further shifts from price support to direct payments and the development of a coherent rural policy to accompany the process. Lower prices are expected to improve the competitiveness of EU agriculture in both domestic and external markets, to benefit consumers

and to leave more room for price differentiation in favour of high quality and specialty products.

EU cereals yields continue to improve, although at a lower rate than in the past, resulting in strong output increases. On the other hand, consumption is growing at a slower rate than production, creating surpluses. Given the limited possibilities that exist for subsidised exports, the inevitable result is an increase in stocks, estimated to reach 50 – 60 million tonnes by 2006, despite the set-aside mechanism in force. On the other hand, world demand for cereals is expected to grow and there are good prospects for exporting countries.

In beef, production in the EU will remain stable or will decrease slightly following a long-term cyclical movement of 5 – 6 years. Supply is currently reduced due to measures linked to the BSE crisis. Consumption is also down because of the BSE crisis but is recovering and is expected to return to its long-term trend around 2000. However, the long-term trend is rather stable or decreasing. It is important, however, to note that production is higher than consumption and there is a possibility of growing surpluses while the possibility for subsidised exports is decreasing. The situation in world markets is nevertheless favourable with a significant increase in world demand. Prices are expected to increase but they will remain below current EU levels.

In milk and dairy products, there is a risk for increasing intervention stocks in SMP and butter. Prospects for subsidised exports, in particular for cheese and SMP, will decrease because of WTO constraints. However, there are good prospects for growing world demand and moderate trade expansion, especially in cheese and some fresh products. Prices are also expected to increase but should remain below EU levels, with the exception of some cheeses and fresh dairy products.

In the case of wine, there is an ongoing reduction in vineyard acreage in the EU, but at a much slower rate than in the 1976-1996 period.

Production levels are expected to be stable and output in 2003 is expected to be at the 1993-1997 level not allowing for any variations due to weather conditions. There is a persistent downward trend in wine consumption. Following the implementation of the Uruguay Round Agreement, there is an increase in imports from third countries. Exports are expected to develop slightly. On the world market, a decrease in consumption in producer countries is expected, although there will be some increase in consumption in countries with strong economic growth. However, there will also be increased export potential challenging the EU's place as a leading exporter.

Furthermore, agricultural support has been distributed unequally between regions and between producers and this has significant adverse effects on the European countryside. The decline of agriculture in certain regions has significant socio-economic effects for the entire economic and social fabric of these regions leading, in some cases, to its disintegration. Furthermore, the intensive farm practices followed in those regions favoured by current agricultural support practices are leading to environmental pollution, animal diseases and poor food safety. Making the CAP more acceptable to the average citizen has thus been a key task.

There is also a need for simplification of CAP rules. With successive enlargements, the management of the CAP has become far too complex and bureaucratic, and sometimes almost impossible to grasp. With future enlargement to include the countries of CEE the need for simplifying the CAP rules becomes imperative. A new, more decentralised model needs to be developed which, while granting greater autonomy to the member states, will have sufficient controls to safeguard against violation of competition rules and re-nationalisation of the CAP.

The reform of the Common Agricultural Policy was identified very early as the major stumbling block on the road to EU enlargement. Initial estimates of the cost of extending the CAP to new members in Central and

Eastern Europe were so high that any enlargement would be unfeasible. Thus, the reform of the CAP was also necessary in order to allow accession negotiations to continue without risks.

Finally, and more importantly, the EU must prepare its agricultural sector for international negotiations and define what is acceptable. The negotiations for the millennium round of the WTO necessitated a reform of the CAP that would strengthen the EU position.

Given these considerations, a global agreement on reform of the CAP was reached at the Berlin Summit in March 1999, which was less ambitious than the proposals of the Commission and the proposal which emerged from the Agricultural Council of 11 March 1999.

2.3.2 - The agreement on agricultural reform

The agreement reached by the Berlin Council on the reform of the CAP includes reform in the Common Market Organisations (CMO's) of the major agricultural products but also develops a coherent rural development policy. The new policy is guided by a multi-functional, integrated approach to rural development that recognises both the role of agriculture in maintaining rural heritage and the need for creating alternative sources of income in the rural areas. This is to be achieved by: (a) creating a stronger agricultural and forestry sector; (b) improving the competitiveness of rural areas; and (c) preserving the environment and preserving Europe's unique rural heritage.

The general guidelines that framed the Council decisions for agricultural policy reform in Agenda 2000 were: (a) to improve competitiveness in domestic and international markets by sufficiently large price cuts to increase participation of the EU products in the domestic and world markets, (b) to continue with existing functions of the policy by improving food safety and food quality, ensuring a fair standard of living for the agricultural community, contributing to the stability of farm

incomes and integrating environmental goals into the CAP, (c) to simplify EU policies with a division of functions between the Commission and the member states so that legislation becomes more transparent and easier to access and (d) to establish a rural development policy to form the second pillar of the CAP by supplementing the market management regime with specific measures of a spatial nature or directed at special objectives such as nature conservation, assisting young farmers, etc.

Arable crops

The intervention price for cereals has been cut by 15% in two steps in the years 2000-2001 while direct payments will be increased from 54 to 63 Euro/tonne. Direct payments for oilseeds and non-textile linseed are being reduced in three stages to the same level as that for cereals. Protein crops will receive an additional payment of 6.5 Euro/tonne, bringing the total direct payment for protein crops to 72.5 Euro/tonne. The special scheme for durum wheat, which was modified in 1997, is continued. Compulsory set-aside has been retained and voluntary set-aside is still allowed. Voluntary set-aside, however, has been more effective and should have a more positive impact on the environment. The level of compensation for set-aside, compulsory or voluntary, is maintained at the same level as that for cereals. Silage maize will continue to be eligible for direct payments as its abolition would involve expensive control mechanisms given that the final use of maize or silage may depend on weather conditions which cannot be foreseen when applying for the arable crop payment.

Beef

The reform aims to ease the effects of the 1996 crisis on beef and veal consumption and avoid increasing intervention stocks. The effective market support level is reduced by 20% in three equal steps, starting on 1 July 2000. However, public intervention will be triggered only if prices

drop to 60% of the intervention price level, rather than the 80% previously applicable. This is equivalent to a 44% drop in the point at which public intervention is triggered and may imply an end to the Commission's purchase of surplus stock.

To ensure a fair standard of living for the farmers concerned, direct payments have been increased for male bovine animals and suckler cows. Flexibility and targeting have been improved by entitling member states to allocate part of the increase in direct payments ("national envelope") according to specified priorities. The basic premiums are (2002 level) 210 Euro for bulls, 150 Euro for steers and 200 Euro for suckler cows. The proposed premium for dairy cows was abolished. National envelopes were introduced to top up payments on male and female bovine animals, including dairy cows.

Two national ceilings have been set for the slaughter premium for calves and adult animals, male and female (1995 level). Regional ceilings have been set for the national male premium (1996 level with 5% trigger) as well as national ceilings for the suckler cow. The extensification premium can be applied as follows. 100 Euro / Livestock Unit (LU) if the stocking rate is less than 1.4 LU per hectare while from 2000/01 the premium will be 33 Euro if the stocking rate is between 1.6 LU and 2.0 LU per hectare and 66 Euro if the stocking rate is less than 1.6 LU per hectare. From 2002 onwards, the premiums change to 40 Euro if the stocking rate is between 1.4 and 1.8 LU per hectare and 80 Euro if the stocking rate is less than 1.4 LU per hectare. The key difference from 2000/1 onwards, however, is that all on-farm adult animals will be taken into account for these stocking density calculations, whereas at present animals which receive no premium, such as heifers, are not included. At the request of Portugal, member states are allowed to opt for a single extensification premium of 100 Euro per head from 2000/1 for stocking densities of less than 1.4 LU per hectare (but any member state taking this option will not be allowed to pay a premium for stocking densities of more than 1.4 LU per hectare).

Dairy Regime

Starting in 2003, intervention prices for butter and skimmed milk powder are cut by 15% in three equal steps to improve competitiveness on the internal and external markets. In view of the impact of this reduction on domestic consumption and exports, the total reference quantity is raised by 2% (2.35 tonnes) in four stages from 2001.

The amount of direct support per producer is based on the number of premium units. This number is determined by dividing the individual reference quantity by the average milk yield in the Community of 5,800 litres / cow. Support is targeted to producers rather than to quota holders. The amount of the direct payment per premium unit is to be increased in four stages starting in 2000 from 25 Euro to 100 Euro. Member states may make additional payments to their producers on a yearly basis under a national envelope system. These amounts are for member states to allocate according to national priorities, either as top-up to the quota-based premium or per hectare of permanent pasture.

Milk quotas are maintained until 2008. Again, in order to mitigate the effect of the 15% price reduction on home consumption and exports, the total reference quantity will increase by 2% (2.35 tonnes) in four steps from 2001. This additional quota will be distributed to certain categories of producers who need particular support, i.e. young farmers and producers in mountain and Nordic areas. It was also decided that in cases of non-permanent transfers of quotas (leasing etc) member states may place a certain percentage of that quota in a national reserve for redistribution. Furthermore, member states will be entitled to transfer to this national reserve the quotas of those to whom the quotas revert at the end of a leasing contract but who choose neither to resume production themselves nor to sell their quota.

Table 2.4 - Milk quotas by country

	Total quota from 2007/08 in tonnes	Quota increase in tonnes
Austria	2,790,577	41,200
Belgium	3,360,131	49,700
Denmark	4,522,148	66,800
Finland	2,430,227	35,900
France	24,599,298	363,500
Germany	28,282,816	418,000
Greece	700,513	70,000
Ireland	5,395,764	150,000
Italy	10,530,060	600,000
Luxembourg	273,049	4,000
Netherlands	11,240,792	165,100
Portugal	1,900,561	28,100
Spain	6,116,950	550,000
Sweden	3,352,600	49,600
UK	14,828,648	238,600
Total EU-15	120,290,134	2,831,500

Source: Agra-Focus, April 1999

Wine

A reform proposal has been pending in the Council since 1994. Most developments in the sector have been influenced by the Uruguay Round Agreement. The reform that has been agreed follows the guidelines of the 1995 "Agricultural Strategy Document". It includes a ban on new planting rights until 31/07/2010, but the Commission is to report on the development of production potential by the end of 2003 and at 3-year intervals thereafter, including possible proposals on additional planting

rights. An increase in new planting rights of 2% instead of 1% and the maintenance of the ban on making wine from third country imports has been agreed. The penalty for regularisation has been reduced to 150%. New planting rights are reported in Table 2.5.

Table 2.5 - Wine - New planting rights

Country	Final agreement (ha)	Proposed (ha)
Austria	737	491
France	13,565	9,043
Germany	1,534	1,023
Greece	1,098	732
Italy	12,933	8,622
Luxembourg	18	12
Portugal	3,760	2,506
Spain	17,355	11,570
Reserve	17,000	1000
Total	68,000	35,000

Source: Agra-Focus, April 1999

Mediterranean products

With regard to products primarily produced in Mediterranean regions, the Commission has adopted a proposal on olive oil which follows the recent proposal on tobacco. These sectors were not part of the Agenda 2000 package and are not discussed here. However, Mediterranean perspectives on the reforms of these sectors are given later.

Rural development policy

Rural development includes measures of support for the structural adjustment of the agricultural sector, for farming in less favoured areas, agro-environmental activities, investments in processing and marketing facilities, forestry and measures promoting the adaptation of rural areas. The policy brings together all EAGGF-funded measures relating to the development of the countryside and is to accompany and complement the reforms in market and price policy. The reformulated policy is a radical simplification of the old arrangements and allows for far greater flexibility and subsidiarity.

The Berlin Summit finalised the financial outlay for rural development and accompanying measures (covering early retirement, afforestation, and agro-environmental measures) at 31.37 billion Euro over the 2000-2006 period. The accompanying measures previously financed by the EAGGF have been complemented by aids for less favoured and relatively underdeveloped areas. All of these measures have been applied horizontally and are to be implemented in a decentralised manner. For rural areas eligible under Objective 1, the current system will be maintained. For rural areas under Objective 2, measures are financed under the EAGGF-Guarantee Section. Other rural development measures will also fall under the Guarantee Section of the EAGGF. These will be the accompanying measures and the LFA scheme in all rural areas as well as measures concerning modernisation and diversification covered by Objective 2 programmes and by rural development programmes outside Objective 1 or 2 regions.

Attention should be devoted to including the specific encouragement of non-food production in rural areas and the granting of support for improvements in animal welfare in the final agreement on rural development as well as to the reference to organic farming in the regulation.

Horizontal measures

Cross-compliance is to be made compulsory for receiving direct aid. In order to better integrate the environment into the CAP, member states should apply appropriate environmental measures with respect to particular market support schemes. This implies that member states will have wide discretion in stipulating environmental requirements and the sanctions (if any) to be applied. For reasons of transparency, it is compulsory to lay down the requirements.

On modulation, the agreement includes the option to reduce direct aid by up to 20% depending on the number of labour units. Member States may call for a subsidiarity approach in the distribution of direct payments among farmers for various reasons. Agricultural income, including direct payments, has important employment impacts. Member States can therefore modulate direct payment per farm within certain limits and relative to employment on the farm.

Funds made available from aid reductions, either under cross-compliance and/or under modulation, remain available to respective Member States as additional Community support for agri-environmental measures.

Ceilings on aid payments are set to avoid excessive transfers of public funds to individual farmers, with the introduction of a digressive overall ceiling to direct payments. The ceiling applies only to payments under the support schemes once cross-compliance and modulation have been applied and involves a 20% reduction in payments between ECU 100,000 and ECU 200,000 rising to 25% on amounts above ECU 200,000.

2.3.3 - The agricultural dimension of EU enlargement

The future enlargement of the EU and the integration of the Central and Eastern European Countries (CEECs) into the EU is the greatest

challenge facing Europe at the turn of the century. Agriculture, perhaps unexpectedly, plays a major role in the context of enlargement, being considered a particularly sensitive area because of its size and production potential in the CEECs. Agricultural land in the CEECs is about 44% of that in the EU and total agricultural production about 30% of that of the EU. The CEECs' farming sector contribution will therefore be ten times higher than their GDP contribution and this is bound to have an important impact on agricultural markets and policies. Furthermore, the CEECs' agricultural production, which has declined during transition, is expected to revive as soon as western production techniques and the market economy prevail.

Incorporating CEEC agriculture into the pre-reform CAP would have been extremely difficult. Extending the unreformed CAP to the new members would increase CAP spending by 5 to 10 billion Euro. Also, the EU would find it difficult respect its GATT/WTO commitments. Several scenarios were proposed, such as excluding agriculture from the single market of an enlarged EU, imposing longer transition periods or quotas and set-aside, only to be rejected. Thus, the only available option was to continue the MacSharry reform by reducing support prices to bring them into line with world market prices in order to reduce expenditure on export refunds and to comply with international agreements. This would be accompanied by increasing direct income support. The Agenda 2000 approach followed this last route and led to the reform of the CAP at the Berlin Summit presented above.

Addressing the agricultural issues related to the process of creating a wider, integrated Europe, with particular emphasis on Southern Europe, is important in order to elucidate attitudes and positions, and to understand future trends and changes. The twin objective of transition and integration facing the CEECs requires changes of a massive scale, something that only recently has been realised by future member countries. Several issues are important in this respect: (a) alignment with the internal market is considered as the main element of the pre-accession strategy in candidate

countries and this will strongly affect the entire food chain, starting with agriculture and continuing with food processing and distribution; (b) the institutional changes required in CEEC agriculture in its transition to the market are still partial and much remains to be achieved.

Enlargement strategy

The first decision concerning enlargement was made by the Copenhagen Council (June 1993) which agreed that the associated countries that wished to apply for membership could join the EU and laid down the political and economic conditions which candidate States would have to fulfil before membership. The Essen Council (December 1994) determined the overall strategy of convergence with the CEECs based on the European Agreements, structured dialogue and the PHARE programme. The Maastricht Council (December 1995) confirmed the need for enlargement to be well prepared if there is to be gradual and harmonious integration of the CEECs into the EU.

In July 1997, the EC published a detailed analysis of the political and economic situation in the applicant countries and “Agenda 2000”, providing a feasible strategy for enlargement and specific reforms to be decided on EU policies. The Luxembourg Council (December 1997) adopted the Agenda 2000 enlargement options and stressed that the pre-accession strategy should enable the CEECs to adopt the *acquis communautaire*. While the Association Agreements remained the foundation of the relationship between CEECs and the EU, the convergence strategy was now based on the accession partnership and on pre-accession aid.

Pre-accession aid

The instruments for pre-accession aid included in Agenda 2000 comprise: (a) a coordination Regulation to ensure coherence between the various pre-accession aids provided by the three other pre-accession aid

instruments and avoid any overlapping; (b) an agricultural pre-accession instrument; (c) an instrument for pre-accession structural policies (ISPA), and (d) the existing PHARE Regulation which will continue to provide pre-accession aid. Actions under the three pre-accession aid instruments are integrated into the Accession Partnerships with each of the candidate countries, again to ensure coherence. The overall amount of pre-accession aid totals some 3,000 million Euro a year for the period 2000 – 2006 (more than double the amount available in 1999), as shown in Table 2.1.

The PHARE programme will focus on accession by setting the two priority aims endorsed by the European Council at Luxembourg: reinforcement of administrative and judicial capacity (about 30% of the overall amount) and investments related to the adoption and application of the *acquis communautaire* (about 70%). In the agriculture and rural development sector in particular, pre-accession measures cover support for improving the efficiency of farms (including producer groups), processing and distribution, promotion of quality products, veterinary and phytosanitary control, improving land quality, reparacling and registration, water resource management, vocational training, diversification of economic activities in rural areas, agro-environmental and forestry measures, improvement of rural infrastructure and rural villages, including the maintenance of rural heritage as well as technical assistance. The list can be extended should additional priority needs emerge. The annual resources available to the EAGGF “Guarantee Section” are equivalent to 500 million Euro at constant 1997 prices; this money will be allocated to the applicant countries according to objective criteria. Upon accession to the EU, a country will lose its entitlement under this Regulation.

An Instrument for Structural Policies for Pre-Accession (ISPA), will provide some 1,000 million Euro per year for projects in the environment and transport sectors. ISPA is to be part of a wider, reinforced pre-accession strategy, necessitating close coordination with PHARE and pre-accession

agricultural assistance in order to avoid any overlap. In accordance with the Luxembourg conclusions, the countries eligible for assistance will be 10 countries in Central and Eastern Europe. Given its similar objectives it is proposed that the implementation of ISPA would broadly follow the lines of the Cohesion Fund. As a result, ISPA would also have a project-based approach. Assistance under ISPA would be limited to projects that are of sufficient size to have a significant impact. Experience suggests that they should, in practice, involve a minimum of 5 million Euro.

The three pre-accession aid instruments will be operated in the context of the Accession Partnerships with each of the candidate countries. These partnerships will provide a single framework setting out the priorities to be pursued by each country and the various financial resources available from the Community to support the pre-accession process. Each candidate country has been invited to draw up a national programme for the adoption of the *acquis communautaire* indicating in detail how it will pursue each of the priorities identified in the Accession Partnership. The monitoring of Accession Partnerships and the related national programmes will provide an important input into the Commission's regular reviews of the progress of candidate countries.

The pre-accession aid will be financed from three sources: the PHARE programmes as well as the structural and agricultural instruments. After the accession of the first wave of candidate countries, pre-accession aid will remain at the same level and will be concentrated on the countries that were not part of the first wave.

2.3.4 - A critique of the agreement on the CAP reform

The CAP reform agreed at the Berlin Summit was received with mixed feelings. In some countries there was relief that national co-financing or "re-nationalisation of the CAP" was averted. In several other countries, there was frustration that the CAP reform fell short of expectations and that the

optimism over early proposals was not realised. Those who subscribe to the latter view are convinced that the results achieved by Agenda 2000 in the CAP reform do not pave the way to enlargement and weaken the EU position in the future WTO negotiations for the millennium round. Accordingly, the next round of the CAP reform is now expected to come much sooner than originally anticipated. It is claimed that while the agreement does include elements of genuine reform, notably in the beef sector, it is not wide-ranging enough and that most probably some crises will re-appear in 4 or 5 years' time.

CMO reforms

In arable crops, the cut of the intervention price by 15% aims to increase the competitiveness of EU products on world markets and allow for EU exports without subsidies. However, it is doubtful whether this will be achieved unless a significant increase in world market prices takes place. This is not very likely with the present low level of world prices. The decision to review the market situation in 2002 leaves open the possibility of a price cut in the future to address potential problems should prices in world markets remain low.

In the beef sector, the structural problem is quite serious. There is already an additional problem due to the BSE crisis. Although the crisis is expected to be over in the next few years, and beef and veal consumption is expected to return to normal long-term levels, it should be taken into account that beef consumption is on a declining long-term trend. Thus, the 20% intervention price reduction may not be sufficient to solve the sector's structural problems. Nevertheless, the trigger for public intervention is now at 60% of the intervention price (compared to the previous 80%). This last point, which constitutes a significant element of the reform, may prove crucial in the operation of the market and may imply an end to the Commission's purchases of surplus beef.

In the dairy sector, reform proposals were from the outset much milder than for cereals and beef. The current regime is characterised by high intervention prices, well above world levels, and a quota system to control production. The Agenda 2000 proposals were very mild in their price-cut proposals, but they proposed that those price cuts should start in 2000. However, the Agricultural Council postponed the price cuts to 2003 and the Berlin Summit to 2005. This postponement was presented as a short-term saving in expenditure on compensation for the price cuts.

In the wine sector, the Agreement did not generate much controversy. The increase in new planting rights of 2% instead of 1% and the maintenance of the ban on making wine from third country imports constitute the most significant changes in the Agreement. Regarding market measures, the Commission's proposals to remove the current systems of compulsory distillation of table wines and of preventive distillation were upheld. It should be noted that the current ban on the vinification of musts from non-EU countries could cause problems with the WTO.

CAP expenditure and digressivity

Although policy issues dominated the reform negotiations for Agenda 2000 up to the February 1999 meeting of Agricultural Ministers, the main issue concerning CAP reform during the Berlin Summit was the overall cost of the reforms. This is nothing new, since CAP reform in the past has usually been induced by budgetary crises and the main concern has been to reduce CAP expenditure. The MacSharry Reform of 1992, however, brought a new dimension to the debate for reform by emphasising non-budgetary considerations for reform, such as addressing the surplus problem, concluding the trade negotiations and increasing the competitiveness of EU products in international markets. The surprising result was that the 1992 reform was accompanied by increased budget costs

as a result of increased compensation for making policy reforms acceptable to farmers.

The EC proposal in "Agenda 2000" aimed to decrease intervention prices for cereals to levels close to world markets, to cut the price of beef and also to reduce to some extent the price of SMP and butter so that EU products could be marketed without export subsidies. Following the MacSharry reform approach, increased compensation was proposed in the short run in order to make such price cuts politically viable. In order, however, to rein in future CAP spending, such compensatory payments had to be digressive, i.e. declining with time. Agenda 2000 did not make any proposals on digressivity but mentioned that the EC should in future propose differentiation and ceilings for direct payments and mentioned that renationalisation was excluded.

The broad acceptance of the concept of digressivity by the EC in February 1999 gave the signal that the concept could be incorporated as a means of reducing CAP spending in the future following negotiations on how much direct aids should decrease every year, on whether there should be a different rate applied according to commodity and/or to farm size and on whether or not some of the savings should be channelled into rural development. However, after several rounds of discussions, the digressivity concept was dropped altogether from the agreement package.

As a result, compensations as defined in the Agenda 2000 agreement do not include any element of time-digressivity or modulation. This will increase the budget cost of the new policy. Time-digressivity of direct payments and some elements of modulation would have eased the budget costs, would have facilitated the EU position in the future WTO negotiations of the millenium round and would have introduced correcting elements against the time-regressiveness in spending relating to policy reform. The Berlin Summit, however, diluted the reforms for cereals and beef and postponed the reform for dairy products. The approach taken may

have reduced CAP spending in the short-run but will probably lead to market crises (depending on the price levels in world markets) and will make a new round of CAP reform inevitable much sooner than expected.

Finally, the CAP budget implications of the Berlin Summit agreement are given in the Table 2.6.

Table 2.6 - CAP Budget after the Berlin Summit

	2000	2001	2002	2003	2004	2005	2006	TOTAL
CAP expenditure	36620	38480	39570	39430	38410	37570	37290	267550
Rural development & accompanying measures	4300	4320	4330	4340	4350	4360	4370	30370
Total agriculture	40920	42800	43900	43770	42760	41930	41660	297740

Source: Berlin Summit Agreement, March 1999

The Berlin Summit considered that the agreed reform could be implemented within a financial framework of an average annual level of 40.5 billion Euro plus 14 billion Euro over the 2000-2006 period for rural development, and veterinary and plant health measures. The Summit declaration does fix the spending ceilings and calls the European Commission and the Council to "pursue additional savings" and ensure that total expenditure does not overshoot a stabilised budget. The declaration further requires the EC to submit a report to the Council in 2002 on the development of agricultural expenditure with proposals, if necessary, for corrective measures in line with the objectives of the reform. This may be interpreted to mean that the digressivity concept may be revived again in 3 years' time.

Enlargement

In terms of preparing for the enlargement of the EU with the accession of the five CEECs, the Berlin Agreement on CAP reform does not have a provision for increasing agricultural expenditure because of enlargement beyond the financial guideline. This is due to the very controversial assumption that direct payments will not be extended to new members. This position is founded on the rationale that since farmers in the new member states have not experienced any price cuts they do not qualify for the direct payments that were introduced as compensation in the previous reform.

There are a number of potential objections or questions to this approach which may be difficult to answer. An obvious question is whether such a system of differential direct payments to farmers in the old and new members is compatible with single market legislation or whether it is in accordance with the premises of competition policy. Experience shows, also, that in the previous enlargement (Austria, Finland, Sweden) farmers in the new member countries received the same compensation payments as in the old member states. Similarly, farmers in East Germany are also eligible for direct payments³⁴.

It has been argued by the European Commission that direct payments to farmers in the new CEE members would have a serious adverse impact on those countries and suggested that a better use of assistance funds would be to channel such funds to rural development and agricultural restructuring³⁵. The Commission, however, does not indicate whether the total amount of eligible direct payments or only part of it would be diverted, nor does it indicate whether this solution is politically feasible.

³⁴ Knaster, B. (1999), *"The Final Agenda 2000 Agreement on Agriculture: An Assessment"* Discussion Paper 99-01, Agricultural and Resource Economics, University of Bonn.

³⁵ EC (1997), *"Towards a Common Agricultural and Rural Policy for Europe"*, Report of an Expert Group.

A third question involves the policy response in CEE candidate countries. Given the Berlin Summit Agreement, the signal that is given to the CEECs is that they should expect to join the CAP more or less as it stands. But in this case, pressure would be normally expected to be exerted by farmers in the new CEE members for increasing prices. The budgetary and market implications of such a development, if it takes place, would be significant and negative.

The fourth question relates to the potential extension of the quota system for milk in the new member countries. The delay of the dairy reform till 2005 implies a continuation of the quota system for milk up to 2008. Under such circumstances, it would obviously be expected that the quota system would be extended to the new members if they join as expected before 2008. This creates an incentive for increasing production over the pre-accession period, not to mention the difficulty of administering the system in the highly fragmented dairy systems of the candidate countries, especially Poland.

All in all, it can be concluded that the Agenda 2000 reform of the CAP is likely to be short-lived. The planned review of the market situation and expenditure in 2002 implies that the pressures accumulated by that time will make a new round of reform inevitable. From the point of view of Mediterranean countries, this implies that the delay of the reform in 1999, mainly in the so-called "northern products", such as milk and cereals, may lead to a new, broader and widely-applied reform in 3 to 4 years' time which might cover the Mediterranean products as well. Thus, from the Mediterranean point of view, a more decisive reform would have been preferable.

2.3.5 - Mediterranean perspectives and reactions

Structural Funds and Cohesion Fund

Spain, Portugal and Greece continue to qualify for both the Structural and Cohesion Funds. During 1998, some member states argued that, having reached the Maastricht criteria, Spain should no longer belong to the cohesion group (Greece, Ireland, Portugal and Spain). However, Spain defended its position among the cohesion countries with the argument that the Maastricht criteria concerned the “nominal economy” (interest rates, inflation, public indebtedness, etc.), while the Cohesion Fund was designed to solve “real economy” problems (lower GDP per capita). On the other hand, most regions of Spain will continue to be eligible as Objective 1 fund recipients during the 2000-06 programming period, thereby ensuring the channelling of structural funds to these regions. However, given the need to meet the cost of EU expansion, enlargement will necessarily affect the interests of the present major beneficiaries of the Structural Funds, namely the Union's Mediterranean members.

Defending their position as net receivers of EU funds, the Mediterranean countries have tried to maintain the financial status quo of the CAP, particularly in what concerns direct payments. Proposals that emerged in the course of 1998 among the main contributors of EU funds (particularly Germany) with the aim of controlling / reducing CAP expenditure were seen as a serious threat to Mediterranean interests. This can be said of both the co-financing of all CAP direct payments proposed by Germany and the “digressivity” of direct payments proposed by France. In the event, these proposals were turned down. The feeling persists, however, that sooner or later CAP expenditure will have to be substantially cut.

Agricultural reform

Some technical adjustments agreed in the Agenda 2000 negotiations (i.e. increases in cereal average yields, milk quota and the number of premiums for bovine animals) for Spain constitute a step towards reducing the anti-Mediterranean bias of the CAP. However, farmer organisations in Spain do not consider such adjustments sufficient to reduce the bias of the CAP. One of their arguments is that Mediterranean countries are still being allocated insufficient national milk quotas having to depend on imports to meet domestic demand of dairy products.

The new Regulation for the wine sector is much better than the proposal presented by the Commission in 1994, which clearly underestimated the productive potential of vineyards. The present Regulation emphasises the structural improvement of vineyards in order to raise the quality of wines and encourages varietal restructuring rather than indiscriminate grubbing-up. The major objective of the Regulation is to adapt wine supply to demand in domestic and international markets. In this sense, the wine sector should remain competitive based on a combination of medium-high quality and attractive prices. By contrast, the new Regulation is not strict enough as regards wine-making methods, in particular regarding the addition of sucrose to increase alcoholic content and the possibility of mixing musts imported from third countries.

Finally, the national debate on modulation has not yet begun in earnest in the Mediterranean countries. Some see modulation as an opportunity to introduce controls on the CAP payments received by large farms. However, other sectors of society are of the opinion that only large holdings will be competitive in the future. Modulation is a delicate issue touching on some major structural problems of EU agriculture, i.e. the pronounced dualism in farm sizes and a relatively high percentage of non-agrarian landowners.

Agricultural sectors not reformed by Agenda 2000

The reform of the olive oil aid regime was finally adopted in June 1998 following two years of arduous negotiations. The olive oil sector had become a priority for all Mediterranean countries, which strongly defended payments per tonne of production against payments per olive tree, as proposed in the Commission's first document. Payments per tree would have resulted in the maintenance of marginally productive trees, with a negative impact on olive oil quality. The new Regulation establishes national maximum guaranteed quantities based on the average production of the past 3 farming years. The public intervention regime and the aid to olive oil consumption have now finally been eliminated. There are now concerns that price instability will increase with prices tending to be much higher in dry years.

The CMO of the tobacco sector was also reformed in 1998. This sector faces a complex situation: on the one hand, Europeans are becoming increasingly health-conscious and are consequently tending to cut down on smoking. On the other hand, tobacco is usually raised in under-developed regions of the EU with few possibilities for crop diversification. The Commission's strategy aims to improve tobacco quality and to promote restructuring in order to produce high-demand varieties. At the same time, the new Regulation, by facilitating transfers of production quotas from farmers who want to leave the sector, ensures the maintenance of the activity in these highly sensitive regions. Mindful of this aspect, Spanish tobacco producers' organisations have warned of the potentially destructive effect this reform could have on socio-economic conditions in tobacco-producing regions. They have also asked for closer co-operation amongst all agents involved in this sector (producers of raw material, processing plants and industries), given that the international tobacco market is dominated by a handful of multinational firms.

The CMO of fruit and vegetables was adopted in 1996 and entered into force the following year. Since then, the sector has encountered several major problems: (1) in general, the proportion of farmers integrated into Producer Organisations in all Mediterranean countries is lower than in other member states, where agrarian associations are more consolidated; (2) by virtue of the “financial neutrality” principle, the Regulation imposed restrictions on the maximum aid an organisation may receive. This constitutes a penalty for the more dynamic and profitable of these organisations; (3) the volume of citrus fruit intended for processing in Spain has exceeded the maximum threshold in every farming year, leading to severe penalties in the form of reduced aids; and last but not least, (4) fruit and vegetable producers denounce the political discrimination built into the CAP, whereby North-European producers (e.g. of cereals, beef meat and dairy products) are clearly favoured in terms of financial support and border protection. The fruit and vegetable sector accounts for 15,7% of the EU’s final agricultural output, but receives only 4,7% of EAFGG-Guarantee Section total expenditure³⁶. Besides, fruit and vegetables are in general more exposed to external competition. In this sense, fruit and vegetable producers, particularly in Mediterranean regions, feel that the CAP principle of “community preference” is being constantly ignored in several bilateral agreements signed by the EU, especially with developing countries. Producers in the EU’s Mediterranean regions are not against offering wider trade opportunities to developing countries but they are nevertheless unwilling to become the main victims of the EU’s economic co-operation policy.

2.4 - The impact of EMU on agriculture and the rural economy

The launch of the European Monetary Union (EMU) and the introduction of the Euro are rightly seen as the most important

³⁶ Data from the 1997 annual report on the “*Situation of agriculture in the EU*”. DG VI, European Commission.

developments in the international monetary system, since the collapse of the Bretton Woods system almost thirty years ago. The introduction of the common currency in the EMU area is expected to have powerful implications since it should lead to a fully integrated, dynamic economy of more than 300 million people.

The Euro area consists of the eleven EU countries which currently participate in the EMU. However, the Euro will influence economic and monetary conditions in many more countries outside the Euro area, depending on the economic and financial links between these groups of countries. All countries and regions are potentially affected by EMU, given the vast size of the market created by the new currency. A distinction could be made between the following groups as parts of the larger Euro monetary system: a) the four EU members still outside the Euro area (UK, Sweden, Denmark, and Greece), b) the EFTA countries, c) the countries of Central and Eastern Europe which have association agreements with the EU and are candidates for accession, d) the twelve Mediterranean countries participating in the Euro-Mediterranean Partnership, and e) the countries of the French franc zone. These groups of countries, together with the eleven countries of the Euro area, comprise the Euro system, because the Euro will play a central role in their economic and monetary systems.

The level of economic activity in the countries of the Euro system, especially those with stronger trade and financial links with the EU, will be significantly affected by the level of economic activity and financial conditions in the Euro area. In particular, changes in real GDP in the EMU countries will significantly affect the level of economic activity in the countries of the Euro system. Also, there will be a substantial impact on the countries of the Euro system from shifts in Euro interest rates, because part of their variable rate debt will be denominated in Euros. The Euro will remove exchange rate instability in the European Union and in the near future will become the nominal anchor in the countries of the Euro area. The Euro is bound to become the international currency in Europe and the

second most important international currency in a global context and will increase the European Union's negotiating power in international monetary matters vis-à-vis the United States.

There are several questions that need answering with regard to the impact of the introduction of the Euro on the Mediterranean countries. Chief among them are its impact on agriculture and food and the rural economy, its effect on the competitiveness of Mediterranean agriculture and the Mediterranean food industry and whether or not there will be any asymmetrical effects for EU members and non-members in the Mediterranean.

For many years the CAP had its “green” money. The “green” money was used in the CAP to mitigate the impact of exchange rate changes and help maintain common agricultural prices. However, the Monetary Compensatory Amounts (MCAs) had an asymmetrical effect in the various countries with respect to competitiveness. The abolition of green money in 1992 was exaggerated and the green rates survived for a long time. With the introduction of the Euro, cross-border trade within the Euro area will be using the new domestic currency and this may have important implications for trade and development in agricultural regions.

The introduction of the common currency will necessarily affect the determination of agricultural prices and incomes since conversion rates to national currencies are now locked-in. Several questions emerge, such as what has happened to agricultural prices in the Euro area since the launch of the common currency, whether Euro-denominated prices converge in the 11 countries compared to purchasing power parity prices, what problems are expected from the introduction of the common currency in the less developed regions of Southern Europe etc. Also, how will the introduction of the Euro affect the development of agriculture in those countries of the Mediterranean that are outside the Euro zone, what is the impact of the introduction of the common currency on EU trade with the

Southern part of the Mediterranean, how is intra-EU trade affected and how is this in turn affecting EU-South Med trade and the potential for direct investment in South Mediterranean countries? Brief answers to such questions are attempted next.

2.4.1 - Macro-economic effects and rural development

There will be various macro-economic effects on all EU countries, on those within the EMU but also on those that will remain outside. These aspects have been discussed extensively elsewhere. The present discussion is confined to the impact of EMU on the agricultural and rural economy with particular emphasis on the Mediterranean region.

A very important outcome of the adoption of the common currency will be a larger and more unified market. The common currency will facilitate intra-EU trade and will extend and consolidate the effects of the single market introduced in 1993. However, it should be noted that a single market in agricultural products has already been in force in the EU for some time. Trade will be facilitated because of lower transaction cost, price transparency, elimination of exchange rate uncertainty and lower trade-related risks. The market will be wider and this will promote firm specialisation and growth and eventually reduce production costs. Capital markets will operate more efficiently and this will lead to lower interest rates.

Economic policies will be harmonised across EMU area. The implementation of the EMU requires fulfilment of certain criteria (inflation rate, government deficit, debt ratio, exchange rate stability), which depend on the macro-economic policies followed.

In addition, there will be pressure for harmonisation of taxation and social policies to avoid violation of competition rules. The negative impact on the capacity of participating countries to shape their own monetary policies should not be underestimated. Participating countries voluntarily

surrender part of their competence to formulate economic policies, especially monetary policy. This can be catastrophic in periods of recession unless alternative mechanisms are available for inducing economic recovery. The implementation of the stability pact also reduces the capacity of the EU member-States to use fiscal policy mechanisms. Consequently, the inter-regional transfer mechanisms may also be designed to address such issues and problems.

The introduction of the common currency may have adverse effects on Europe's peripheral regions and the rural areas. The EMU will foster concentration, specialisation and competition and this will favour areas where economic activity is already strong. Peripheral and remote regions, such as those of the Mediterranean, will most probably experience adverse effects because of high transportation and other distance-related costs. The problem is aggravated in the case of regions with a relatively undiversified economy which depends to a large extent on a single or a very limited number of commodities (e.g. olive oil, cotton, tobacco, timber, etc). The member states' leeway for fiscal policy is limited because of the binding stability pact. Under such circumstances transfer policies and inter-regional stabilisation mechanisms should be adopted at the community level. In particular, transfer mechanisms such as the structural funds are more important under a common currency regime than before. Such funds should, however, be supplemented with flexibility of redeployment in order to address regional disparities in the efforts to pull out of recession.

2.4.2 - Effects on agriculture and the food sector

With the introduction of the common currency, enterprises will find themselves under growing competitive pressures. Agricultural producers or agricultural sector-related entrepreneurs will be no exception to this rule. There will be stronger competition in input and service sectors, in particular across member states. Up to now, country borders coinciding with currency borders have prevented strong competition across countries

in Europe. With the adoption of the common currency, price stability and price transparency, producers and traders will enter a more stable but more competitive environment. The impact of competition will be stronger in services such as the banking sector, bringing down costs and borrowing rates with important financial cost savings.

Food processing and trade will also be significantly effected although the impact will obviously vary from one sector to another. Small firms may also be affected by the trend for larger, more competitive enterprises and by inter-country competition. Marketing channels and distribution strategies will have to be redesigned and new alliances will be formed in the food trade area. Peripheral regions, such as the remoter parts of the Mediterranean, will very probably be slow to follow these trends. However, they will need to adjust sooner or later, because they will be forced to compete in the larger, unified market.

The adoption of the common currency makes the agro-monetary system completely redundant. Although the agricultural market has been a common market from the very beginning, the introduction of the green rates to translate common prices into national currency prices has been criticised as distorting competition and affecting countries differently, depending on their macro-economic and monetary performance.

The abolition of the green rates and the alignment of the green ECU to the value of the Euro have led to cuts in guaranteed agricultural prices. The adoption of the Euro is leading to considerable simplification of the EU agricultural budget. This has important implications for the overall EU budget, since agricultural spending accounts for almost half of it. Furthermore, the abolition of the green rates and the adoption of market rates will result in a slight decrease in the agricultural budget. The Commission has calculated these savings at 600 million Euro per year, beginning in 2000.

2.4.3 - The impact on agricultural trade

The adoption of the common currency is affecting intra-EU trade directly and indirectly. Changes in prices affect trade flows directly. However, since the adoption of the Euro will not significantly influence relative agricultural prices, it is expected that it will only have a small impact on agricultural trade flows. Because present agricultural price disparities reflect different market situations and different production and distribution costs, only small changes are expected in agricultural trade flows as a result of the direct impact of relative price changes. Furthermore, changes in trade flows from competitive devaluation will cease because of the locking-in of the currency conversion rates. Intra-EU trade will be also affected indirectly through the effects of the Euro on firm behaviour, relative costs, trade and distribution strategies, etc. This impact may be substantial but will take many years to be fully realised.

The introduction of the Euro, however, will have an important impact on international trade. The EU accounts for about 20 percent of world trade (for the eleven EMU countries). The great majority of trade transactions are in US dollars. Although the displacement of the US dollar with the Euro will be a slow process, some countries with strong trading ties with the EU, such as the countries of Central and Eastern Europe and the countries of the Southern and Eastern Mediterranean are likely to use the Euro in their trade. Furthermore, the Central and Eastern European countries that aspire to accession to the EU will have an added incentive to use the Euro in their trade, to peg their currencies to the Euro, to finance any external deficits in Euro and to adopt the Euro as a reserve currency. This, in turn, will affect the dollar/euro rate.

The issue of the dollar/euro exchange rate is crucial for agro-food trade. This rate will determine the competitiveness of European agro-food exports in international markets and ultimately European agricultural prices and incomes. Today, the dollar/euro rate remains highly uncertain.

What is certain, though is that the value of the euro will fluctuate strongly against the dollar and the yen and this will have important implications for world agricultural prices and agricultural trade.

2.4.4 - Implications for the countries of Central and Eastern Europe

Today, the Central and Eastern European countries have signed association agreements with the EU and aspire to full membership. Five of these countries have already started accession negotiations and are expected to join some time between 2002 and 2004. The remaining five have not yet started accession negotiations. The association agreements of all these countries do not stipulate that they must adopt the Euro, although the EU Monetary Committee holds regular consultations with them.

The accession of the first group of the associated countries to the EU will not necessarily mean adoption of the Euro on their part. In fact, if these countries do not fulfill the Maastricht criteria they may join ERM 2, as is the case with Denmark, Greece, Sweden and the UK at the moment. Candidate countries may also conduct their own monetary policies independently within the constraints imposed on government deficits. Alternatively, if the new members satisfy the criteria, they can join the Euro area. At present, it is simply too soon to draw definite conclusions on these issues.

Despite this uncertainty about the monetary relations of future member countries with the EMU of the EU, the growing trade and financial relations of these countries with the Euro area will induce them to peg their currencies to its currency and use it as their major reserve and trading currency. This does not necessarily mean that these countries will abandon their monetary policy and the possibility of exchange rate fluctuations in the medium term but only that there will be a tendency towards the direction of pegging the currency and conduct most of their trade in Euros. In any case, to the extent that the future member countries will aim for

EMU participation, they will have to pursue policies which will help them meet the convergence criteria set as a precondition for joining.

There will be difficulties, however, if the new members cannot become part of ERM 2. In this case, new agro-monetary arrangements will have to be devised to make enlargement feasible. This issue has not yet been studied in sufficient detail and has many important complications. The adoption of transitional arrangements, such as those used for the accession of Spain and Portugal, may not be feasible.

2.4.5 - Implications for the non-EU Mediterranean countries

The importance of the EMU for the South and East Mediterranean countries is highlighted by their strong trading links with the EU. Averaging 40-50 percent of exports and imports, the figure rises to 60-70 percent in the case of the Maghreb countries. Furthermore, a large part of the debt of these countries is denominated in EU currencies. These links directly affect production and trade in the Mediterranean countries. They also have a long-term impact because they influence foreign and domestic investment flows.

Some EU countries produce Mediterranean agricultural products which compete directly with similar products of the South and East Mediterranean. The implementation of the EMU will influence trade flows between non-EU Mediterranean countries and the EMU area. Lower currency-related transaction costs in the Euro area and the elimination of the currency risk will increase the competitiveness of Euro area exporters relative to non-EU Mediterranean country suppliers. This shift in comparative advantage will have a negative impact on the exports of non-EU Mediterranean countries and a similar negative impact on foreign direct investment in those countries, because it will reduce the attractiveness of moving production there. These negative effects will, however, be at least partially offset by an increase in the demand for the

products of non-EU Mediterranean countries as the result of increasing incomes and lower trading costs in the Euro area. These income and substitution effects are expected to vary widely between the countries of the region, depending on the nature of each individual country's relations with the Euro area. Countries that are highly dependent on exports to the Euro area are likely to be more adversely affected by the decline in their relative competitiveness. On the other hand, they will also benefit from any expansion of demand as a result of the EMU. Also, the magnitude of the substitution effect facing non-EU Mediterranean exporters will depend to some extent on their present competitiveness as well as the nature of their exports. The final outcome will also depend on the nature of any preferential trading agreements, mainly the Association Agreements between non-EU Mediterranean countries and Euro area countries. Finally, a possible, rather long-term, implication of the EMU on the Euro area's trade with non-EU Mediterranean countries is the potential impact on the external environment of reforms in the social and economic policies in the Euro area which will affect trade competitiveness.

PART II

Sector and country analyses

3 *Agriculture and the economy*

3.1 - Development of national economies in 1998

On the whole, the course followed by the national economies in 1998 was still marked by the “Asian crisis” of the previous year. Financial market instability even worsened, and the fear of a “contagion effect” became serious when Russia suffered veritable financial collapse and external pressure destabilising the Latin American economies continued to increase.

Although these fears eventually proved to be unwarranted, it must be stated that in this sort of climate, which has been confirmed by converging “facts and acts” (uncertainty on financial markets, stagnation on staple commodity markets, restrictive policies to prevent the situation from getting out of hand or to restore a balance), 1998 was in the final analysis a year when economic activities taken globally on the world scale slowed down. Whereas international trade slackened considerably³⁷, world production grew at only half of the rate of the previous year (i.e. 2% as against the previous 4%).

Judging by the general results obtained, it can no doubt be considered that in this fairly depressed context the brand new “Euro zone” was rather an exception. Although industrial activity was particularly affected by the reduction of outlets (notably those in emerging countries affected by the crisis), growth managed to remain steady, due essentially to the fact that domestic demand was able to take over from exports and stimulate that

³⁷ Expressed in US dollars, world trade in commodities even dropped by 2%, which was the biggest drop registered since 1982. The volume of world exports increased by 3.5% in 1998 after a 10.5% growth in 1997 (and an average growth rate of 6% in the period from 1990 to 1995). World imports, on the other hand, increased in volume by 4% and dropped by 1% in value, after a 9.5% increase in volume and a 3% increase in value in 1997. Cf. Report of the WTO Secretariat on the development of international trade in 1998, Geneva, 16 April 1999.

growth. Households were able to take advantage of a particularly favourable economic trend (a rise in purchasing power generated by the reductions in energy and agricultural commodity prices, the recovery in the job creation field, and less need to save as a precaution) and increase their expenditure on consumer goods, thus boosting a domestic demand which the good investment level also helped to sustain. All in all, whereas unemployment dropped by one point (from 12.5% to 11.5%), the GDP of the zone registered an increase of 3%³⁸. As is underlined in the OECD 1999 Annual Report (p.11), taken as a whole, the European Monetary Union came into being in reasonably favourable conditions: the lowest inflation rate for the past 40 years, a decrease in unemployment and improvement of public finance in most of the countries of the Euro zone.

Of course, it is scarcely possible in a general assessment to reflect the diversity of the situations in the various countries, even if the fundamental trends are to a large extent common to all. But it must nevertheless be pointed out that the results obtained in the zone could certainly have been even better if several large countries such as Germany and Italy (which account nonetheless for 47% of the GDP of the zone) had not had difficulty in firmly restoring a positive growth rate.

If we look more specifically at *Mediterranean Europe*, Italy presents a rather peculiar situation. GDP in Italy grew by only 1.3% as against 5% in 1997, which reflects both the slowdown and the low growth rate in the Italian economy³⁹. Yet value added, which rose by 3.5%, was based mainly on a certain degree of dynamism in the services sector (which accounted for 64% of value added and increased by 4%), and to a lesser extent on agriculture, which virtually stagnated (0.4%), or industry, which grew by only 2.7%. It must be stated that activity in Italy suffered not only from the

³⁸ Unless otherwise indicated, the growth rates quoted in the present section concern aggregates expressed in constant terms.

³⁹ The decline in growth rate is seen even more clearly as an annual downturn, since the rate in question dropped from 2.8% in 1997 to 0.7% in 1998.

drop in external demand but also from the impact of the restrictive policies which had become necessary in order to meet the criteria for membership in the European Monetary Union. With the result that, although domestic consumption – and household consumption in particular - increased by 4.1% (due primarily to a certain increase in redistributive expenditure and a decline in the propensity to save), this did not suffice to compensate the deficits registered in exports, which, impeded by the deterioration of the international market and the greater competitiveness of the Asian countries, contributed in turn to a large extent to the restriction of the dynamism of domestic activity. Developing at a slower pace than imports (2.8% as against 4.7%), exports also allowed Italy's traditional trade surplus to drop by almost 10%.

Where *Italy* presented an exception with its low growth rate, the other member states of the European Union on the Northern shores of the Mediterranean registered trends which were decidedly more favourable. Yet all of those countries had had to contend with the difficulties in the international economic cycle. It would seem, however, that it was those countries which were able to draw on the reserve of domestic demand to compensate for the falloff in exports that managed nevertheless to continue to steer a course of sustained growth.

The *French* economy, for example, registered a high growth rate in 1998 reminiscent of the “glorious thirties” with a 3.2% increase in GDP as against 2.2% in 1997. Furthermore, this recovery was accompanied by virtual price stability (with an inflation rate of less than 1%) and a significant decrease in unemployment rate (which dropped from 11.9% at the beginning of the year to 11.4% one year later). It was in fact domestic consumption which was the main driving force behind the rise in growth rate, increasing by 3.3% (compared to 0.7% in 1997). This increase in consumption, which reflected the confidence regained by the population as well as a favourable response to the recovery in employment and the reduction of interest rates, provided a means of compensating for the

decline in export dynamism in the wake of the Asian crisis. French industrial exports still rose by 7.2% (as against 11.5% in 1997), a fact which, combined with the buoyancy of domestic demand, provided a basis for the growth of the sector concerned and thus of a major share of the country's activities. The trend was different in food consumption, which, although marked by a higher growth rate than in the past (0.9% in 1997 and in 1998), still accounts for too small a share of household expenditure on consumer goods to have any real impact on the course of the economy as a whole. Since there was a marked slowdown in food export growth, production in the agri-food industries stagnated in the final analysis, but the fact remains that the latter exports continue to deserve their title of France's "green oil", and the surpluses they generate still account for almost half of the country's total trade surplus.

The growth rate registered in Spain was even higher than the French rate: 3.8% in 1998 compared to 3.5% in 1997 and 2.4% in 1996. This continuing growth was furthermore accompanied by a relatively low inflation rate, which dropped by half in 2 years (1.8% in 1998 as against 3.6% in 1996). Growth seemed to be based largely on the current consumer expenditure and housing investments of households. Is this type of stimulus to growth sufficient at the present time to generate the number of jobs needed to bring unemployment level down? It is difficult to reply in the affirmative, at least as far as the unemployment rate in Spain is concerned, which is still around 20% of the working population. The fact remains that, taken as a whole, the Spanish economy is broaching the third stage of the European Monetary Union in a relatively favourable economic context and is suffering less than other Community countries, which are more exposed to the instability coming from the East.

The 3.5% growth rate registered in *Portugal* was higher than the average EU rate. This growth was due largely to a strong investment dynamic (gross fixed asset formation having increased by 9.7%) and an improvement in expenditure on consumer goods, prompted by the

slowdown in inflation, which had dropped to 2.8%, and a slight rise in employment of 2.6%. However, due to the inadequate local supply capacity, this substantial increase in domestic demand gave rise to an even higher rise in imports of 13.7%. Since the export growth rate was “only” 7.9%, the deficit in the balance of trade worsened, with the risk of new macroeconomic imbalances in the medium term. By joining the EMU, Portugal has lost the freedom to take action through the traditional levers of monetary and exchange rate policy. At all events, the impact of the process of accession to the Euro zone on the Portuguese agricultural economy has been positive on the whole, even if the initial effects were negative. At the beginning of the 1990s, Portugal actually departed from the exchange rate policy it had been pursuing in the 1980s: until then, permanent major devaluations had been effected, the main objective being to offset the differences between the inflation rate in Portugal and the rates in its various trading partners. In 1991 and 1992 there were slight revaluations of the Portuguese currency, after which it remained relatively stable. This modification did not bring any amortisation of the drop in agricultural prices when Portugal joined the CAP mechanisms (Portugal went through a transition phase in its accession to the EC, which ended in 1990, allowing higher prices until the end of that transition period). The favourable effects of the Euro were felt as of the mid 1990s with the drop in interest rates (in view of the burden of interest on farmers’ incomes in particular), and in inflation, which remained moderate and thus limited the erosion of farmers’ purchasing power.

The near past, situation in *Greece* was unfavourable in many respects: low growth rate, high inflation, high public and current deficits, unemployment, indebtedness. Far from meeting the EMU eligibility criteria, the country had to pursue a restrictive monetary and financial policy, but one which was accompanied by a voluntarist public investment policy, which proved decisive in the development of capital formation and thus of production. The results obtained in 1998 showed that a certain

amount of success had been achieved through the course that had been chosen. GDP grew by 3.7%, a level considerably higher than the Euro zone average, and all sectors contributed to those results. Investments continued to develop at a steady pace (9.8% in 1998 and 9.6% in 1997). Inflation decreased further to 4.8% (5.5% in 1997, 8.2% in 1996). There was also a slight drop in unemployment level from 10.3% to 10.1%, a level which at all events was not amongst the worst in the Euro zone. Exports rose, albeit moderately (3.6%) but more rapidly than imports; this was not enough to resorb the trade deficit, but it nevertheless contained it within 2.7% of GDP. And the budget deficit, which had been 10.6% in 1995, decreased steadily to 2.4% in 1998, which was finally below the 3% of GDP mark required by the EMU criteria.

Undeniable progress was made, but there were still major weak points in comparison: in particular, the country was still excessively indebted (in relation of GDP, the debt still amounted to 106.1%, even if that indicator was lower than the 109.4% registered the previous year), and interest rates - just over 10% - were still high compared to the rate applying in the Euro zone, a fact which probably justifies in part the relative sluggishness of private investments. However, the results obtained to date were nonetheless sufficiently encouraging to justify the continuation of a policy geared mainly to meeting the criteria which would allow the country to join the European Monetary Union.

With only a few exceptions (Turkey, Israel), the *Southern and Eastern Mediterranean countries (SEMCs)* were not greatly affected by the Asian and Russian crises which marked 1998. For since they benefited only marginally from the capital flows directed to developing countries since the beginning of the 1990s, they were not affected by the sudden falloff, with the result that they were able to steer clear of the financial turmoil which had been shaking the emerging countries since 1997.

So for the SEMCs 1998 was more a year when quite appreciable growth levels were achieved and were accompanied with considerable efforts to control internal and external balances more efficiently. Contrasting trends emerge of course occasionally when one examines the respective situations in the different countries, but apart from the country-specific features which are to be found here and there it is quite clear that where the countries of the Euro zone have their own “common policy”, the SEMCs also have “theirs” to a certain extent, meaning of course the “structural adjustment policies” which most of these countries are continuing to pursue. For under the pressure of external debt constraints and the imperatives of trade liberalisation the majority of the countries concerned are pursuing policies - whether official or not - which are also geared to restoring the major macroeconomic balances and to achieving more extensive integration into the on-going globalisation process at the world level. But that integration is having to take place in the context of more fragile economies, which are more susceptible with regard to hazards - hazards which are external of course, but also often climatic - in view of the importance of the agricultural sector in those economies.

Thus in *Morocco*, for example, economic development continues to be dictated by the weather hazards which essentially determine the results of the farming years, which in turn determine the growth rate of the economy as a whole to a large extent. Since 1998 was a fairly good farming year (contrary to the previous year), the growth in the agricultural sector was able to pull GDP up. There was thus a 6.3% increase in GDP, whereas the growth rate in the rest of the economy barely exceeded 3.4%. At all events, as was the case on the Northern shores of the Mediterranean, that growth - the highest rate in the region - was promoted by domestic demand in general and was disadvantaged by external demand.

Household consumption was stimulated by farm incomes and rose by 7.6%, a fact which can partly explain a new rise in inflation (the cost-of-living index rose from 1% in 1997 to 2.7% in 1998). Gross fixed asset

formation shot up by 13.7%, but this investment effort was still inadequate (21.6% of GDP), creating few jobs since the unemployment rate – recorded only in urban areas – tended to rise further from 16.9% to 19% of the working population.

As regards external demand, exports only rose by 4.1%, which was only half of the rate of increase in imports. As a result, the balance of trade deficit deteriorated by 9.2% and the export-import ratio dropped from 61% to 59%. This disappointing trade performance was mitigated at balance of payments level as the result of the transfers of Moroccan residents living abroad, revenue from tourism and more active management of the external debt. The balance of payments deficit was thus contained within 1% of GDP and exchange reserves amounted to almost 6 months of imports. The budget deficit was also contained within the 3% of GDP “tolerated” by the international financial bodies. But the fact remains that the debt burden (52% of GDP in the case of the external debt and 38% in the case of the internal debt – annual servicing which accounts for one-third of state expenditure) continues to weigh dangerously on the course of the economy and in the final analysis to weaken the balances achieved.

Algeria continues to depend excessively on oil price trends, and the slump in those rates – from almost 20 dollars a barrel in 1997 to 13 dollars in 1998 – affected the performance of the Algerian economy measured in terms of its principal aggregates to such an extent that GDP increased by 4.7% in volume, whereas its value seems to have even dropped by 3.5%. This shows just to what extent the “external factor” is still the overriding factor here. Since it acts mainly through prices in this particular case, exports (95% of which are still oil exports) slumped by 25% as the result of the restraint on external demand while imports continued to grow, thus considerably reducing the country’s trade surplus (the “self-sufficiency rate” plummeted from 150% to 106%). In view of external debt servicing in particular (already absorbing more than one-fifth of export revenue), the surplus registered in the balance of payments the previous year was

replaced by a deficit of almost 1.7 billion dollars, and foreign exchange reserves were reduced to the equivalent of 7 months of imports as against 9 months in 1997.

This deterioration in Algeria's external accounts contrasts with a certain degree of improvement in internal balances following a structural adjustment programme which was brought to a conclusion that very year. The rise in prices in particular was reduced to 5%, whereas a rate of 30% was registered in 1995, and the balance of the state budget developed from the deficit registered that year to a surplus estimated at 3% of GDP. A programme of that nature entails high "social costs", it is true, as is witnessed by the unemployment rate, which reached the 28.6% mark in 1998, but it has to be stated that the levers of internal demand were activated more in order to mitigate the effect of the setbacks of external origin. Investments rose by 3.3%, the consumption of public administration bodies increased by 6.5%, and household consumption rose by 5.7%. As was the case in Morocco, household consumption was probably also stimulated by the effects of a good farming year, which furthermore resulted in an 11.4% increase in agricultural production. However, the latter accounts for barely one-tenth of GDP in Algeria (the lowest proportion in the region), whereas the share of the hydrocarbon sector is three times as high. With the result that the growth rate, with the exception of agriculture, amounted to 4% in volume and, in view of the oil price slump – even dropped by 4.6% in value.

Tunisia seems to be less dependent as regards both the agricultural and the oil sector. Despite a rather mediocre farming year and the oil price slump, the Tunisian economy managed to rely on the dynamism of both the industrial and the services sector to continue to grow at a remarkable pace, even if the rate was slightly lower than that of the previous year (5% and 5.4% in 1997). For although agricultural production actually dropped by 1%, the growth rate of the other sectors was 6.5%. It must be stated that, with an average of approximately 15%, the share of agriculture in GDP was

lower than in other countries of the Maghreb such as Morocco. At all events, this performance is all the more appreciable since it is accompanied by relative price stability, consumer price increases having been contained between 3% and 4% for several years.

Yet the slackening of external demand, which extended to tourist activities in Tunisia, was definitely felt at different levels of the economy and of the country's internal and external balances, particularly in a context where, again, the pressure of external debt servicing is still strong, draining resources equivalent to one-fifth of export revenue. In fact the mainspring of growth in Tunisia at the present time seems to be an investment effort which enabled growth to increase by almost 11% compared to the previous year. Investments rose even slightly more rapidly in the agricultural sector and the fishing industry (12%), contributing considerably to overall investment (14.5%). This accumulative effort was made in the context of a strategy for stimulating the economy accompanied by ambitious programmes, which were launched in industry and then extended to various agricultural and fishing activities and which are likely to be extended even further with a view to the free trade zone on which the decision was taken in the last Agreements signed with the European Union in 1994.

Egypt consolidated and even accelerated a growth process which has been continuing since the beginning of the decade. After developing at an average rate of 4.3% in the period from 1992 to 1997, GDP in Egypt grew further by 6.2% in 1998-99. It must be stated that since Egyptian agriculture is essentially irrigated the country is not subject to weather hazards to the same extent as the other North African countries. Yet although the agricultural sector accounts for almost 17% of GDP it is developing at a slower pace than the other sectors of the economy (3.1% on average in the 1992-1997 period and 3.7% in 1998). Like many other developing countries in the region, Egypt has had to submit to the rigours of the structural adjustment programmes conducted with the close collaboration of the International Monetary Fund and World Bank. Although this policy has

barely enabled the country to ease the constraint of indebtedness to any significant extent, it has helped to reduce inflation rate considerably (bringing the rise in prices down to less than 4% as against 10% in the 1992-1993 period and to stabilise the exchange rate of the national currency. But the fact remains that these successes could prove fragile in view of the country's strong dependence on the import of foreign goods, services and capital. 1998 was revealing in that respect, since just when exports covered imports at a rate of just over 29% the country also suffered a decrease in the flow of capital from the Gulf countries.

Almost a decade after the civil war, the *Lebanese* economy has not yet regained its former vigour. Yet at the beginning of the 1990s many thought that the investment effort necessitated by reconstruction needs and financed by foreign capital inflow would trigger an effective dynamic of rapid and sustainable growth. Today the fact is that, although the Lebanese economy is not stagnating, the growth rate is limited and the real recovery in which hopes were set is long in coming.

At all events, GDP grew by only 2% in 1998, a performance which is lower than that of the previous year, when a rate of 3.5% was achieved. Inflation returned with a rise in prices estimated at 1.6% or even 2.9% in dollar equivalents, whereas prices had in fact dropped by almost 1% in 1997. Furthermore, certain indicators seem to have deteriorated or to be announcing prospects which are not exactly reassuring. The budget deficit, for example, was almost 14% of GDP, and the national debt increased by 3 billion dollars in one year, reaching a level of 17.1 billion dollars in 1998, which was equivalent to 109% of GDP. As for Lebanon's external accounts, despite a decrease in imports and a rise in exports (-5.3% and +11% respectively), the export-import ratio rose only very slightly from 8.6% in 1997 to 10% in 1998. What is more, there was even a drop in the capital which customarily flowed in from abroad: 5.9 billion dollars (compared to 7.2 billion one year previously). Contrary to past years, this proved to be

insufficient to avoid a balance of payments deficit estimated at 3.1% of GDP.

Turkey is a large country which is peculiar, or indeed atypical, in many respects. It is atypical as regards the extent of its territory, the size of its population and the diversity of its agro-climatic regions, but it is also atypical with regard to the singularity of its economic policy. Having opted resolutely for a voluntarist strategy, which deliberately sacrifices “classical balances”, placing them in the service of development requirements, the “Turkish model” fiercely resists the remedies of the structural adjustment programmes, even when it has to adopt them in order to better “adapt” them to its logic and objectives. The model in question plans budget deficits, for example, in order to enable the state to play its role in the development process more satisfactorily, and at the same time it accepts the consequences by taking on a very high inflation rate and the permanent adjustments of the exchange rate of the national currency which it entails. As the result of this policy the Turkish economy has been enjoying dynamism for the past few years which has rarely failed as well as growth rates which, in spite of everything, are the highest in the region, a relatively low unemployment rate, improvement in the standard of living of the population and, lastly, an economy more open to the regional and the world economy, which brings advantages.

The origin of the fragility of a model of this nature is often precisely more external than internal, and 1998 will have been significant for Turkey in this respect. For, having been one of the rare countries in the region to have siphoned volatile capital to its financial market and having developed trade with Russia, Turkey was understandably the main emerging Mediterranean country to have been considerably affected by the Asian crisis and even more by the crisis which hit the Russian economy. The impact was felt at least two levels: that of capital flow through a movement of capital withdrawal during the summer with notable consequences on the Istanbul stock exchange, the level of interest rates, the risk premiums on the

foreign debt, the exchange reserves, and, on the other hand, at the level of trade through the decline and even the loss of important export markets. Furthermore, this crisis coincided with the launching of a new 18-month stabilisation and structural adjustment programme designed again to endeavour to control macroeconomic balances to a certain extent and to reduce the public sector burden.

As the result of all of these developments, the Turkish economy had to resign itself to a certain slowdown in its growth rate, although it did not actually lose its dynamism. GDP, which had progressed from 7.5% in 1997, had to “make do” with a growth rate of 4.5%. Agricultural production progressed at the same pace in an economy where agriculture accounts for 15% of GDP. This falloff in growth does not seem to have affected the employment situation, since unemployment rate remained stable at 6.4% of the working population. The galloping pace of hyperinflation slackened somewhat with a consumer price index which dropped from 99.1% to 76.6% between the end of 1997 and the end of 1998. The Turkish lira immediately depreciated by 52% against the US dollar and by 39% against the deutsche mark. In addition to their internal effects, these parity adjustments probably helped to mitigate the impact of the downswing on external markets. So that, while there appeared to be a marked slackening, the growth in exports continued at a pace of 4.8%, whereas imports only increased by 1.9%. The result was that although the trade deficit was slightly reduced, the export-import ratio still remained around 56%.

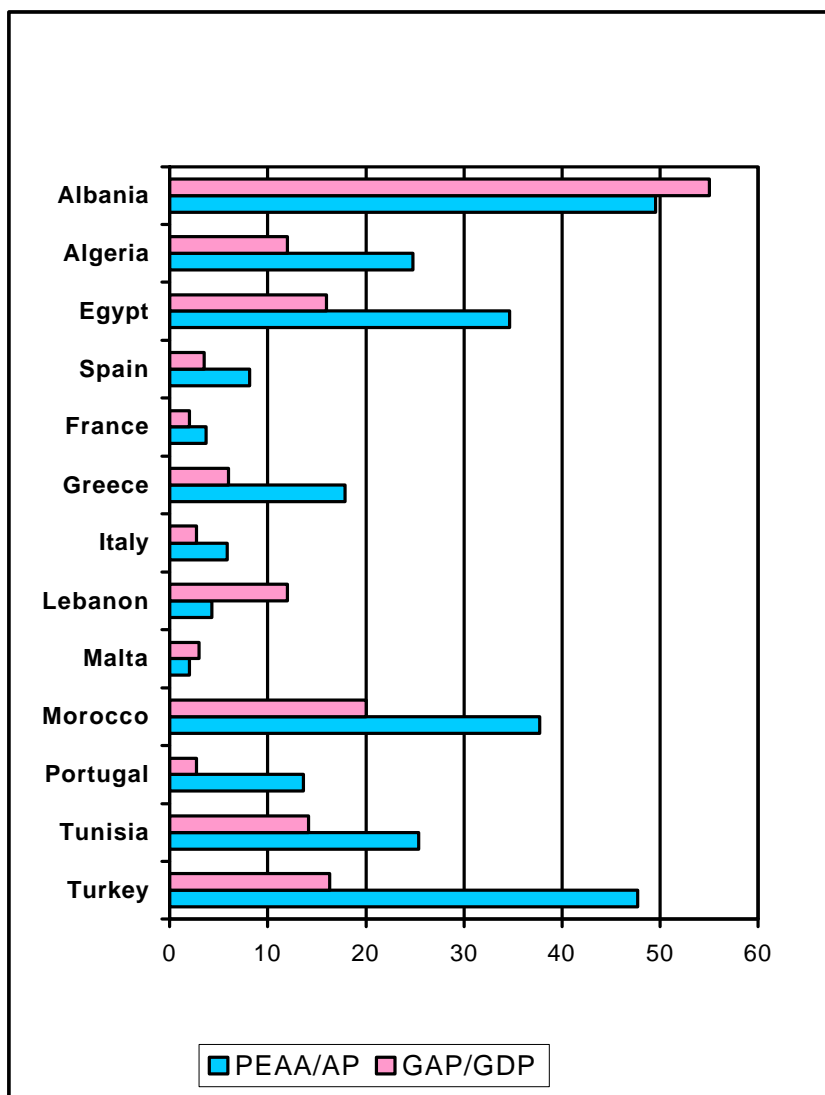
Due to its level of development, the instability in the pace of growth, and the share of agricultural production in total production (almost 50%), *Albania* presents a profile more similar to the countries in the Southern Mediterranean than to those in the North. At all events, after the crisis which seriously shook the country in 1997 resulting in a 7% drop in GDP, 1998 marked a return to growth with a quite appreciable rate of 8%. It must be stated that Albania had concluded a new agreement with the

International Monetary Fund combined with new resources and a new structural adjustment programme.

3.2 - Development of agricultural aggregates in the national economies

The importance of agriculture in the economies around the Mediterranean differs considerably from one country to another. The indicator of that importance, which is expressed by the ratio of the gross agricultural product to the gross domestic product as a whole (GAP/GDP) ranges from 2% in France to 59% in Albania. The same applies to the other indicator, which relates the working farm population to the total working population: this ranges from 1.8 in Malta to 67% in Albania.

In countries where agriculture's contribution to GDP is low, the development of agriculture and of the agri-food industry, which is marked more by quantitative than by qualitative determinants, is accompanied by growth in consumption combined with diversified production. On the other hand, in countries where agriculture makes a major contribution to the economy action intended to increase agricultural production is maintained and even stepped up through efforts to improve the productivity of the resources used thereby taking account of the frequent constraints in the region such as the more limited area of arable land available or water scarcity.



Source: MEDAGRI 2000 – CIHEAM/IAM Montpellier, based on FAO figures

Chart 3.1 - Share of agriculture in GDP and in the working population

On the whole, the agricultural economy in most Mediterranean countries – with the exception of Portugal – registered favourable development in 1998 with general growth in GAP value. In the majority of the countries on the Southern shores, the main feature was still in fact the marked variability in GAP growth rate from one year to the next, whereas development was more regular on the Northern shores. All of the relevant indicators show that performance in the agricultural sector in the former group of countries remained largely dependent on climatic conditions, despite the efforts made precisely in order to gain a certain degree of autonomy with respect to that hazard.

Table 3.1 - GAP growth rate*

	1997	1998
Albania	1.0	5.0
Algeria	-24.0	11.4
Egypt	3.4	n.a.
France	1.3	1.5
Italy	0.9	1.2
Morocco	-25.6	24.2
Portugal	-5.2	-17.2
Spain	-1.3	4.0
Tunisia	0.4	0.1
Turkey	-2.3	4.5

*Constant prices

Source: National statistics (cf. Country Reports, CIHEAM, 1999)

In the Northern Mediterranean countries, the GAP growth rate at constant prices seems to be both lower and more stable in France and Italy (around 1%), and somewhat less regular in Spain, Portugal and Greece. It must be pointed out that it was primarily domestic consumption and, to a

lesser extent, the drop in interest rates which stimulated growth in most of the countries in question.

The quantitative increase in production was the main factor determining the increase in GAP, since commodity prices actually dropped slightly. The one exception is Portugal, however, where successive decreases in output volume were registered due to the poor climatic conditions, which affected production – and in fact essentially plant production, animal production having actually developed favourably.

Examination of the situation in several countries, particularly in those typical of the Southern shores of the Mediterranean, illustrates the above phenomena more clearly. In *Morocco*, for example, although GDP excluding agriculture developed at virtually the same rate of 3.4% in the course of the previous 3 years, there were very marked variations in GAP from one year to the next: + 78.2% in 1996, -25.6% in 1997 and +24.2% in 1998. Total GDP reflected more the turmoil in the development of agricultural production than that of the rest of the economy, since it registered an increase of 12.1%, then a decrease of 2% followed by an increase of 6.3%. GDP is likely to drop again in 1999, since initial estimates predict a 42% decrease in agricultural production. The share of agricultural production in GDP is still relatively large but obviously also varies depending on the results achieved in each farming year. This contribution of agriculture in GDP thus dropped from 18.4% in 1996 to 13.9% in 1997 and then rose again to 16.3% in 1998, which was a level close to the average of the past 5 years (15.9%). The fact remains, however, that apart from this proportion, which in the final analysis is limited, the impact of agriculture on the course of the Moroccan economy is understood more clearly in terms of the spill-over effects felt in other sectors and more generally in the economic and social fabric of the country. The share of agricultural exports in total Moroccan exports in 1998 achieved the same level as in the previous year – around 18%, a proportion approximately the same as the share of agricultural imports in total imports.

The share of agriculture in the gross domestic product in *Algeria* increased in 1998 compared to 1997 due to better weather conditions. But this share remained around 10% with a very marked swing in growth rate, which rose from -24% in 1997 to +11% in 1998. As regards foreign trade, agriculture and food accounted for 13% of trade in 1998, which was a slight increase compared to 1997. In fact, agri-food trade was virtually reduced to imports in view of the extremely low level of exports (0.3% of the total).

The performance of the agricultural sector also varied widely from one year to the next in *Tunisia* because of weather conditions (-29.5% in 1996 to +1% in 1998). Similarly, the share of agriculture in overall economic growth increased by 50% in 1996 and by 8% compared to the respective previous years, whereas it dropped by 3% in 1998 compared to 1997. The share of agriculture in overall economic growth ranged from -3% (1998) to 50% (1996). The contribution of agricultural and agri-food exports to total exports was around 10% as against 12% the previous year, this decrease being due essentially to the falloff in olive oil exports.

The share of agriculture in GDP in *Turkey* reached a level of 15% in the period under review, but this level provides no information on the continuing marked variability of GAP growth rate: from -4% in 1997 to +4% in 1998, the latter performance being due primarily to better weather conditions. Agri-food trade contributed considerably to the development of Turkey's foreign trade, as is evidenced by the fact agricultural exports alone accounted for almost 20% of the country's total exports.

Agriculture in *Albania* seems to be recovering slightly, with a positive growth rate in constant terms: +5% in 1998. This brought slight recovery in the Albanian economy as a whole – to the extent that the share of agriculture in that economy dropped from 62% to 59%.

The importance of agriculture in *Malta* – 2.7% of GDP – also remained low and comparable to that of the previous year. Although the higher growth rate in the other sectors of the economy such as industry and

tourism makes the modest growth in the agricultural sector negligible in relative terms, there were incidences of remarkable development at the sub-sectoral level. This was the case with glasshouse crops and animal production, which contributed quite considerably to the increase in farm value added. The working farm population accounts for less than 2% of the total working population, but it must be pointed out that a special feature of this island is the fact that one-tenth of the working population actually work on farms but only on a part-time basis.

4 Agri-food production, consumption and foreign trade

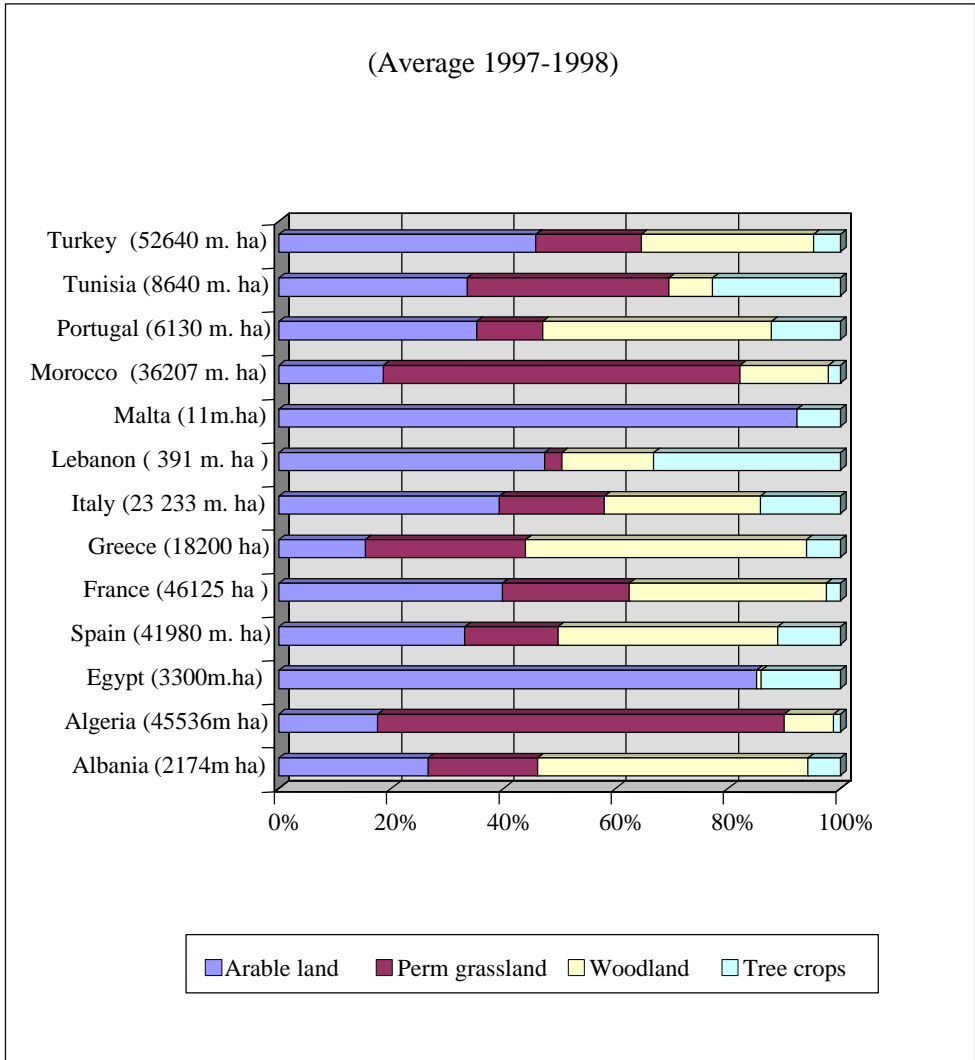
4.1 - Introduction

The role of agriculture in the national economy gives a fundamental indication of the importance of agricultural production in a country and, depending on the prevailing level and structure of consumption, also provides information on the volume and nature of the agri-food trade which develops with the outside world. These are the various aspects which we shall now examine more closely in the present section. But before doing so, in order to be able to assess these various issues, beginning with production, more satisfactorily, one must first obtain an idea, if only an outline, of the state and development of agrarian structures, particularly when they have been updated through recent surveys or censuses.

4.2 - Land use and agricultural structures

As regards the utilisation of farmland, *Italy, France, Lebanon* and *Turkey* have a relatively large proportion of arable land compared to the other countries. In *Algeria, Morocco, Tunisia* and *Egypt*, on the other hand, permanent grassland predominates, it being understood that this category comprises rangelands, which cover from 40% to 70% of the areas in question in those countries. There is also a large proportion of pastureland in Greece, but it is actually of marginal quality and situated in mountainous or semi-mountainous regions.

In *Tunisia* and *Lebanon*, there is a fairly large area of tree cropland, particularly olive groves, and in *Albania, Spain, Portugal* the agri-forestry area is relatively predominant.



Source: Our calculations based on FAO figures

Chart 41 - Agricultural land use

The downward trend in the number of farms is general throughout the Mediterranean, but the situation varies with regard to the size of holdings, the legal status of the land and the way in which the land is worked, a fact which actually influences the conditions for utilising resources to some extent and, ultimately, production performance.

In the Mediterranean countries of the EU the latest survey on structures in the agricultural sector was conducted in 1997. The results obtained show that there are large farms in *France* and *Spain* with an average size of 42 ha and 20 ha of AAU respectively. Average farm size in *Italy*, *Portugal* and *Greece*, on the other hand, is only 10 ha. There is a dual trend common to all of these countries: an increase in AAU, except in the case of Portugal, where a very slight decrease in AAU was registered in the period from 1995 to 1997, and a decrease in the number of holdings (compared to the results of the previous survey in 1995). This phenomenon is to be explained to a large extent by the impact of the institutional measures taken: the reduction of the compulsory set-aside rate during that period and the support system in force within the framework of the CAP.

Table 4.1 - Farms and Agricultural Area in Use in 1997

	Farms N.	AAU ha	average AAU ha
Albania	396,700	702,000	1.8
Egypt	2,910,279	7,849,173	2.7
France	680,000	28,560,000	42.0
Greece	784,500	3,593,600	4.6
Italy	2,315,233	14,833,900	6.4
Morocco	1,496,349	8,732,223	5.8
Portugal	381,794	3,700,161	9.7
Spain	1,277,000	25,230,000	19.8
Tunisia	471,000	5,295,000	11.2
Turkey	3,966,000	23,451,000	5.9

Source: Country Reports, CIHEAM, 1999

In *Italy*, there were some 2,315,233 farm holdings in 1997 as against a total area of 20,067,000 hectares and 14,833,900 hectares of agricultural area in use. Compared to the situation in 1995, the census registered a decrease in the number of holdings of 229,000 (-9.2%), whereas the total farm acreage had decreased by 414,000 hectares (-2.0%) and the agricultural area in use had increased by 129,000 hectares (+0.9%). Average farm size in Italy was 6.4 hectares of AAU. There were 690,000 animal farms – a decrease of 139,000 units compared to 1995 (-16.8%). The survey also confirmed the predominance of family-run farms in Italy, such farms accounting for 96.5% of the total number of holdings and 76.9% of the total acreage. As regards land tenure, ownership is by far the most widespread form (1,919,000 farm holdings and 13,596,000 hectares, i.e. 85.2% and 67.8% of the corresponding totals respectively). Leaseholding is not widely used, concerning only 6.2% of the total acreage and scarcely 3.6% of the number of farms.

One of the most remarkable findings revealed by the 1997 survey raises the problem of succession on farms: 94% of Italian farmers have no heirs. This is to be explained by the fact that 78% of farmers have no members of the family working full-time on the farm and that 16% of them have scarcely any heirs at all. However, when one takes account of the area in use it transpires that 35% of that land is “without heirs” and that on 45% of that land there is no permanent family labour. Furthermore, only 17% of the Agricultural Area in Use is sure of having an heir under 45 years of age, and 4% is sure of having an heir aged between 45 and 55.

In *France*, 57,000 farms ceased to exist in the period from 1995 to 1997, a rate of decrease equivalent to that of the previous years. The average acreage of the remaining 680,000 holdings (42 ha) reveals major structural disparities, since 12% of them hold 43% of the agricultural area in use, whereas 47%, the smallest holdings, only farm 7% of that area. Farms of over 100 ha now cover almost half (44%) of the total agricultural area. It must be pointed out that the 1992 CAP reform contributed to the

acceleration of this rate of change by instituting an early retirement scheme (from age 55), of which some 5000 farmers took advantage in 1998, but also by encouraging farms, and in particular those specialising in large crops, to increase their acreage due to the introduction of compulsory set-aside on a percentage of crop acreage which is fixed annually on the basis of the market situation.

The increase of the area in use was approximately 100,000 ha in 2 years, i.e. +0.3%, whereas the trend had been more towards successive decreases. The main phenomenon was the increase in cereal crop acreage, which increased from 8.2 to 9.2 million hectares in the period from 1995 to 1997.

The development of corporate farms is a remarkable factor, 109,000 farms – i.e. 15% of the total number - having adopted that legal form. Apart from a limited number of commercial companies, which are involved in producing special commodities such as quality wine, there are two types of company which are particularly suited to farming and to the family structure which it has retained in France: producer's associations (Groupements Agricoles d'Exploitation en Commun - GAEC), which are companies formed by several persons, through which either several holdings can be grouped together or the members of a family can form an association. In particular, father-son GAECs provide a means of ensuring transition from one generation to the next. The number of such associations is remaining constant, whereas the number of limited liability farms (Entreprises Agricoles à Responsabilité Limitée – EARL) is growing rapidly. With this model, family assets can be separated from farm assets and financial difficulties can thus be contended with without entailing insurmountable difficulties for the farmer's family. All of these company farms are larger than the others on average and generally involve younger farmers.

Although the great majority of French farms are still family-run, a specific feature of agriculture in France has recently become more marked –

that of widespread tenant farming. Two-thirds of the area farmed in France does not belong to the farmer, and share-tenancy is dying out due in particular to legislation which discourages the practice. Tenant farming is the main form of tenure, though there are major differences from one region to another or from one commodity to another. The recent increase is to be explained to a large extent by the fact that the new landlords are often recently retired farmers.

Spain has 1.2 million farm holdings and 25.2 million ha of AAU. The acreage under irrigation accounts for 7.5% of the agricultural area. Land structures have tended to become more concentrated in the past few years with a significant reduction in the number of holdings (4% per year) and a decrease in the labour force employed in the sector, the profitability of the units in question having improved in parallel (in terms of total gross margin). Furthermore, there are marked regional disparities in Spain regarding the average size of holdings, the reasons being historical, agronomic and economic. Very small holdings predominate in the Cantabria region, the Balearic Islands and the Community of Valencia, whereas structures are more balanced in Catalonia, Aragon and Castilla-León.

There has also been a decrease in the number of farm holdings in Greece and an increase in AAU, although the average area, 4.6 ha of AAU, is still the smallest of the Mediterranean countries of the EU. This meagreness is further intensified by the extent of land fragmentation, each farm being divided into six plots on average. In addition, whereas only 56% of arable land is situated in the plains, the remainder is in mountainous or semi-mountainous areas. Lastly, one-third of the arable land is irrigated, the remainder being subject to a certain extent to climatic hazards.

The results of the census in Morocco show that the number of farm holdings has decreased since 1974 – when the last census was conducted – from over 1.9 million units to almost 1.5 million, i.e. a decrease of 22% in 22

years (see Box 4.1). Whereas the number of holdings dropped by an average of 1% per year, the agricultural area in use increased on the other hand by almost 1% per year, progressing from 7.2 to 8.7 million hectares (+21%).

The increase in AAU accompanied by the decrease in the number of holdings (even if a large proportion of the farms which ceased to exist had no arable land) has resulted in a slight increase in average farm size, which progressed from 4.9 ha to 6.1 ha in 22 years. Land fragmentation has continued at the same time, since the number of plots per farm has increased further from 6 to 6.7 on average.

Approximately 3 in 4 farms are animal farms, and that proportion is decreasing compared to the past (73% as against 85% in 1974).

Box 4.1- The initial results of the agricultural census in Morocco

The initial results of the General Agricultural Census in Morocco, which was conducted over the 1996-1997 period, 22 years after the previous census (conducted in 1974), began to be made available in September 1998. Analysis of the figures and facts revealed by the census shows that the decrease in the number of holdings took place essentially at the expense of units with no Agricultural Area in Use (AAU) or which only had less than one hectare of land (the number of such holdings having dropped from 890,000 to approx. 380,000), whereas the additional AAU was “gained” mainly on rangelands and more or less marginal land. The latter trend was corroborated by the rather surprising increase in the AAU of common land, which generally has the “status” of rangeland. For in terms of the legal status of land, whereas a decline was expected, common land actually gained importance – in both absolute and relative terms: it now accounts for over 1.5 million hectares and almost 18% of AAU (as against almost 1 million hectares and 14% of AAU in 1974). The status of “melk” (private property), on the other hand, remains fairly

stable in proportion, covering just under a further 1 million hectares and still accounting for approximately three-quarters of total AAU. Apart from this land, the areas concerned by the many other “residual” statuses (Guich, Habous, state land) diminished by 25% to 40%, although they still continue to account for some 570,000 hectares, or 6.5% of AAU.

The number of farms which can practice irrigation seems to be fairly large, since they account for 44% of the total number, but the proportion of farms which are really in a position to do so has dropped to 38%, covering an area of 1.2 million hectares. Although the latter area constitutes only 14% of AAU, this is nevertheless an increase of 72% compared to 1974. The fact remains that the significant indicators of farm modernisation and the intensification of production show little sign of progress regarding any such dynamic in Moroccan agriculture. Tilling and harvesting are mechanised in 47% and 31% of holdings respectively. There are still only 43,226 tractors in the country, which gives an average of 1 tractor per 202 hectares. (Half of this stock is in fact concentrated on farms with more than 20 hectares.) Less than half of the farms use fertilisers. Selected seeds and pest control products are even less widespread, since they are only used on 16% and 33% of farms respectively. However, what is probably the most worrying indicator in this respect (while also explaining to a large extent these various factors) is the level of education and training of the farmers themselves: for the census revealed that 81% of farmers have no education whatever (and farm 76% of AAU), 9.5% have attended “Koran school” and 6.1% have attended primary school, less than 2% have attended secondary school, and 0.7% have attended an institute of higher education.

Source: N. Akesbi, Country Report – Morocco, CIHEAM, 1999

According to a survey on farm structures conducted by the Tunisian Ministry of Agriculture and published in 1996, the number of farm holdings in *Tunisia* increased from 326,000 units in 1961-1962 to 471,000 in 1994-1995 (the 2 years in which a census was carried out). The number of holdings thus increased by 44% in 33 years. There was very little increase in the total area, on the other hand (+1.7%), so that the average acreage per farm decreased from 16 to 11 hectares in that period, and the agricultural area available per capita decreased from 1.2 to 0.6 ha.

Farms with an acreage of less than 5 ha account for 53% of the total number of holdings and 9% of the total area. Farms with less than 10 ha account for 73% of the total number and 21% of the total area. Farms with 10 to 50 ha account for 24% of the total number and 42% of the area. And farms larger than 50 ha account for 3% of the total number and 37% of the total area.

It must be stressed that there have been major changes in these farm structures since the 1961-1962 survey. The number of holdings with less than 5 ha has increased by 98%, for instance, whereas the number of holdings with more than 100 ha has dropped by 20%. These changes are due essentially to the division of land whenever it is inherited. And lastly, it should be pointed out that these farms are often highly fragmented, only 48% of them consisting of one single plot, whereas 26% are composed of 2 plots, 12% of 3 plots and 14% of 4 plots.

Most farms are privately owned. The land under direct state management (state estates, farms belonging to research and training establishments, etc.) amounts to a total acreage of 200,000 ha, thus accounting for approx. 4% of the total agricultural area. 91% of farms are owner-operated, whereas tenancy only accounts for 2.5% and share-tenancy and other forms of tenure 6.5%.

According to the agricultural census conducted in 1997, there are 2,910,000 farm holdings in *Egypt* covering an area of 3,689,000 ha. Almost

all farms are individual and family enterprises (almost 99% of farms, covering 91% of the total area). The scant remainder comprises companies (5%) and co-operatives (approx. 2%).

It was estimated that there were approximately 1,968,000 owner-operated farms established on an area of 22.4 million ha, i.e. 65% of the agriculturally area in use. The number of leaseholds was estimated at almost 387,000 units (13%) with an acreage of 348,000 ha (9%). Share-tenancy accounts for only 1.5% of the number of holdings, covering only 2.8% of the agricultural area in use.

The water of the Nile is the principal source of irrigation for some 86% of the land owned. Land served with drainage ditches with sub-main plot drains account for approx. 30% and 40% of the total land owned respectively. There are 143,000 farms which use groundwater, with a total acreage of approx. 288,000 ha. As regards drainage water, there were 28,000 farms concerned covering an area of 63,000 ha. The number of farms relying on rainwater was estimated at 21,000 units with a total area of approx. 123,000 ha. And lastly, there were 3000 farms covering an area of 2.8 million ha which use mixed sources.

In *Albania*, common land has been privatised on a huge scale. All co-operative and state farms have been liquidated. Privatisation has given rise to farmland fragmentation. In 1997, the average farm in Albania had 3.4 plots with a total acreage of barely 1.1 ha. Small holdings are predominant in the north of the country in particular. Consequently, the traditional agricultural sector in the country consists of subsistence farming, where a meagre livelihood is earned more through animal than through plant production. Taken as a whole, the number of holdings has decreased by more than 10%, dropping from 443,000 units in 1996 to 397,000 in 1997. This phenomenon is generally attributed to the widespread emigration, which has accelerated over the past few years.

Table 4.2 - Distribution of farmland in Albania

	1998
Total area of farmland	702.005
of which: former co-operatives	547.922
former state farms	154.083
Private property	562.671
State farmland	17.884
of which: state institutions (research, etc.)	3.173
Partnership associations	2.010
Other	12.701
Refused land	121.450

Sources: Ministry of Agriculture and Food
and the 1998 *Statistical Yearbook*, Tirana, Albania

In the 9 different agricultural regions of *Turkey* several types and varieties of commodities are produced on the 4.5 million holdings of varying size situated in those regions. Yet *Turkey* has a typical heterogeneous agricultural structure and its own form of farm organisation.

Farmland and wooded areas constitute almost 61% of the total area and 69% of that land is used for grain production. About one-fifth of cereal acreage is fallow land, and orchards, olive groves and horticultural crops have followed the rate of cereal acreage.

The distribution of farms according to size and type of farming is another crucial problem of Turkish agriculture. Most holdings are actually small, and about 85% of all farms operate on less than 10 hectares.

In *Malta*, slightly over one-third of the total area is cultivated (13,000 ha); 6% of the arable land is irrigated with the drip irrigation system. There are some 11,400 farm holdings with 2900 full-time farmers and approximately 21,500 persons working part-time in agriculture. The average size of plot is fairly small (1.04 ha). Almost 70% of farms have less than 1 ha of land and only 27 have more than 10 ha.

One of the major constraints which Maltese agriculture has to cope with is water shortage. With an average annual rainfall of approx. 500 mm, most regions can be considered to be semi-arid. Half of the farmland is used for growing horticultural crops (including potatoes) and fruit. The other half is reserved for cereals and fodder crops.

4.3 - Agricultural production

Plant and animal production will be examined successively in this section.

4.3.1 - Crop production

In most Mediterranean countries the 1997/1998 farm year was moderately favourable with a positive development of production on the whole. On the Southern shores of the Mediterranean this result was due primarily to good rainfall as well as to the increase in the areas planted. On the Northern shores, there was a downward trend in the areas under crop, but the climatic conditions, combined with better intensification conditions, contributed to the growth in output.

The favourable development in the agricultural year is seen first of all in grain production, which is by far the main crop in the region. We shall therefore begin by examining grain production before proceeding to the other commodities.

4.3.2 - Grain production

In all of the countries of the European Union, the exceptional harvest in 1998 – yielding 208 million tonnes – was due entirely to yield progression (+4.2%), since there was little change in the fallow land situation and the area under crop decreased by almost 2%. This gain in output caused a sharp drop in market prices, particularly in the case of bread wheat, which had benefited from a favourable situation on both domestic and

international markets in 1997. However, in 1998 the downward trend also affected world markets, which were abundantly supplied by two successive good harvests with demand suffering from the Asian crisis and consequently considerably affected. In these circumstances there was understandably a marked increase in intervention stocks in response to the increase in Community supply and the decrease in demand from third countries; these stocks reached the 16 million tonne mark at the beginning of December 1998 – a level similar to that of the early 1990s.

In *Italy*, grain-sown areas decreased by 3.2% in 1998 to a little over 4 million ha, after increasing steadily in the 1990s. This, however, did not prevent an increase in output of 2.8% due essentially to better yields. The trend was downward in maize and rice production, on the other hand, due, in the case of maize, to the drop in prices the previous year, which had discouraged many contractors from investing in that commodity. The weak performance regarding rice was related to commercial factors and in particular to insufficient competitiveness in a situation of competition from foreign products and a falloff in demand. The situation in this context improved in 1998, however, mainly as the result of action by the producers' organisations, which planned the varieties to be grown in order to satisfy market demand.

There was also a decrease in wheat-sown areas – both those reserved for durum wheat (-3.7%) and those reserved for common wheat, although to a lesser extent. However, these reductions were offset by higher yields, which resulted nevertheless in an increase in output - 14% in the case of common wheat and 24% in the case of durum wheat. The fact remains that output was still insufficient to satisfy national needs, in the case of both common wheat, almost half of this commodity being purchased abroad, and certain barley varieties used in the manufacturing of livestock feed.

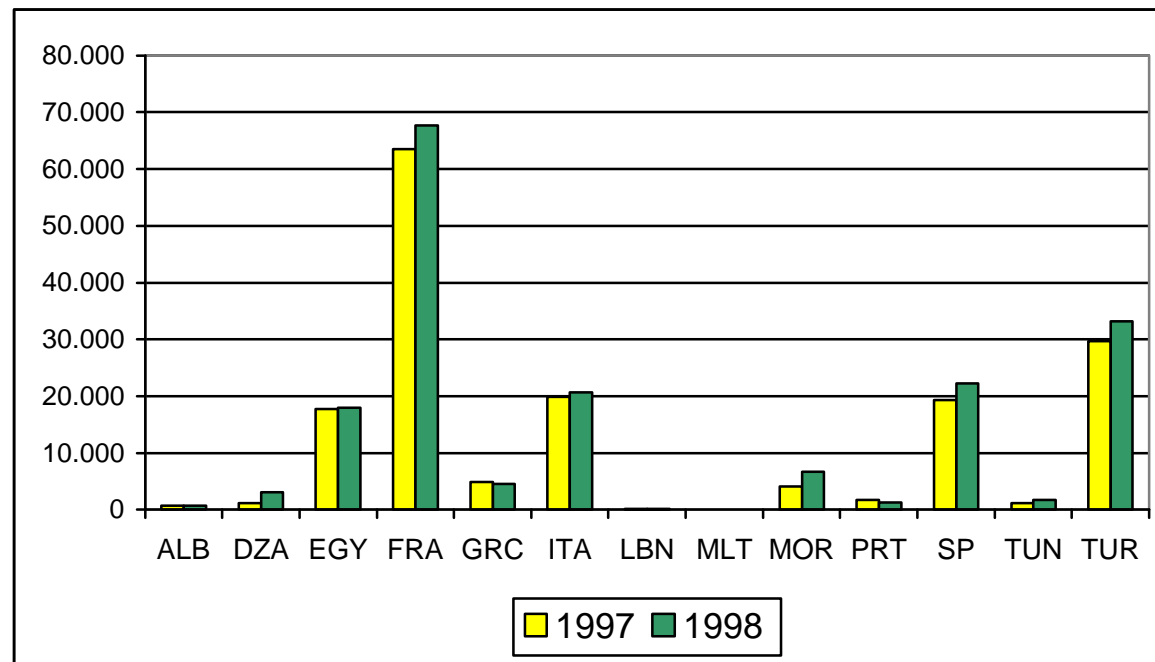
The grain harvest in *France* was described as historic because with a 7% leap output rose to 68 million tonnes, exceeding the 1997 output, which

was already record-breaking, by 4.5 million tonnes. Yet the grain-sown areas had remained stable compared to 1997, so that it is essentially the progress made in yields that explains that performance. It would seem difficult to exceed new thresholds, however, in output progression, if alone because of the increase from 5% to 10% in the rate of compulsory set-aside of crop area from 1999 onwards.

Grain production performance in *France* is primarily that of common wheat, where yields progressed in 1998 by no less than 10 quintals per hectare. Since crop area also increased (by 111,000 ha), the 1998 harvest exceeded 38 million tonnes and was thus 17% higher than the 1997 harvest and 26% higher than the average harvests from 1992 to 1996. There was a moderate increase in the barley harvest, whereas the maize harvest was 13% lower than the 1997 figure. Even if the 1997 harvest was fairly exceptional, the fact remains that the drop in maize output was due both to the drop in yields and to the reduction of crop area (-96,000 ha).

Grain output in *Spain* increased by approx. 16%, reaching the 21.5 million tonne mark in 1998. This good result was mainly the result of the progress registered in yields, since there was in fact a decrease in crop area from 6.8 million ha in 1997 to 6.4 million ha in 1998. This growth in output was due largely to wheat and barley, particularly since barley alone accounts for almost 45% of grain production in Spain.

In *Greece*, grain crops cover a large proportion of crop area – 1.3 million ha. Total grain output was 4 million tonnes in 1998, a slightly lower level than that achieved in 1997. Durum wheat has replaced common wheat to a large extent in the past few years; durum wheat output was 1.3 million tonnes in 1998, which accounts for about one-third of total grain output. Rice production also benefited from the considerable extension of the area reserved for the crop, despite the limits inherent in irrigation needs, which are considerable in the case of this particular crop.



Source: MEDAGRI 2000 – CIHEAM/IAM Montpellier, based on FAO figures

Chart 4.2 - Grain output in 1000 tonnes

The agricultural year got off to a good start in *Morocco* with the sowing of almost 6 million hectares of cereals, i.e. almost two-thirds of the agricultural area in use and virtually the maximum of what can be reserved for this production category. This grain-sown area was 20% larger than in the previous farming year, the main crops still being barley and common wheat, which accounted for 41% and 33% of the acreage respectively. Together with durum wheat (19%), these 3 crops covered 93% of the grain-sown area in the country. Maize continued to be marginal, covering barely 5% of the area and thus practically belonging to the group of minor cereals.

The extension of grain-sown area was mainly at the expense of fallow land, which was reduced by 37% compared to the previous year and covered less than 19% of the total area. Autumn-grown cereal output (wheat and barley) was 6.35 million tonnes, amounting to 97% of total grain output and marking a 75% increase in comparison with the output of the 1996/97 farm year and of 18% in comparison with average output in the period from 1993 to 1997. It was common wheat output which marked the major increase (44%), followed by durum wheat (+18%), whereas barley output actually decreased (by 6%). This counter-performance in barley production is to be explained by the fact that the regions where it is most grown were affected by weather conditions which became unfavourable during the spring period. Yield was seriously affected, scarcely exceeding 0.8 tonnes per hectare (t/ha), which was a 17% decrease compared to the average of the previous 5 years. Compared to the same reference period, common and durum wheat yields progressed by only 12% to 14%, which shows that the increase in output registered was due more to the increase in grain-sown area than to improved productivity. All in all, the yields of these 3 main cereals virtually stagnated around 1.15t/ha.

The cereal year in *Algeria* was also relatively good, with a harvest of almost 3 million tonnes in 1998 following an increase in overall output of 248% compared to the previous year. This increase was due primarily to

wheat production, which increased by 270%, accounting for 77% of total grain output. The fact remains that production in Algeria continues to suffer from a chronic yield deficit. Despite efforts by the government to give new impetus to its policy of boosting grain production, it has to be stated that results have failed to achieve the levels hoped for over the past few years. One of the factors to which these meagre results are attributed concerns the incentives proposed for increasing yield, which explains why the departments of the Ministry of Agriculture changed the system by implementing the technique of premiums for increasing yield and using fertilisers.

The grain-sown area in *Tunisia* increased slightly in the north of the country compared to 1997 (+2%), whereas it doubled in the centre and south of the country. There were thus 871,000 ha of grain-sown land in the north and 575,000 ha in the centre and south, giving a total of 1.466 million ha as against 1.126 million ha the previous year. The increase in area was registered mainly in the case of durum wheat (+22%) and barley (+54%). The harvested grain-sown area amounted to a total of 1.055 million hectares (i.e. 73% of the total grain-sown area), with 819,000 ha in the north (94% of the grain-sown area in that zone) and 236,000 ha in the centre and south (41% of the grain-sown area). The total grain harvest amounted to 1.7 million tonnes as against 1 million tonnes the previous year and 2.6 million tonnes in 1996.

In *Egypt*, the government encouraged a significant expansion of cropland with a view to achieving a considerable increase in output. The grain-sown area increased by about 3% from 1997 to 1998, an increase which concerned mainly maize and wheat, where output developed favourably, amounting to 6.1 million tonnes for each of these 2 crops. Rice output, on the other hand, decreased from 5.1 million tonnes in 1997 to 4.4 million tonnes in 1998, although practically the same area was sown, the decrease thus being due essentially to the drop in yield.

In *Turkey*, cereals, food legumes and other field crops cover the major part of plant production. The grain-sown area remained stable around 11 million hectares, which amounts to almost 60% of the total grain-sown area, whereas output progressed by about 2% as the result of an increase in yield, amounting to 28.1 million tonnes in 1998.

In *Albania*, the output of the 4 main crops increased from 1997 to 1998. Grain output amounted to 618,000 tonnes in 1998, registering a 2.7% increase compared to 1997, due primarily to yield improvement. Wheat output was estimated at 403,000 tonnes, i.e. 65% of total grain products. The high inflation rate caused a steep rise in wheat, flour and bread prices in the course of the year, actually bringing them up to world price levels.

4.3.3 - Production of other crops

Contrasts were revealed in the developments registered in the production of other crops in the various countries.

In *Italy*, the reduction of grain-sown area allowed an increase in oilseed acreage in 1998, thus causing a surplus above the ceiling fixed by the European Union and leading to a reduction of EU aid of 34% of the total.

Development was satisfactory in the fruit and vegetable sector, on the other hand, due solely to increase in yields, since the area concerned actually remained stable. Overall fruit output amounted to 8.9 million tonnes in 1998, which was a 5% increase compared to the previous year, even though there has been a steady decrease in crop area over the past few years. Citrus output was at all events limited to 3.1 million tonnes – a decrease of 3%. The citrus market is going through a difficult period because of the combined effects of the drop in demand on certain foreign markets such as the Russian market and the strong competitive pressure from certain countries such as Spain. In order to cope with this situation an intervention programme was drawn up with the participation of the

representative organisations and public bodies concerned with a view to implementing a plan for restructuring and expanding the sector.

Horticultural crop output remained stable at 13 million tonnes, with which Italy remains the main producer in the region. Improvement in product quality and a policy of responding to distribution needs, however, enabled the sector to develop favourably, particularly as regards prices. With regard to tomatoes in particular, it must be pointed out that the acreage reserved for tomato-growing increased by approx. 5% and the ensuing output by 2.4% compared to the previous year. This development is related to better integration with the agro-allied industry and thus better synergism within the industry.

Wine output increased by 12% despite a slight reduction of crop acreage (-1.2%). Yield improved considerably, particularly in certain regions such as Emilia-Romagna, Venetia and Tuscany. This performance makes Italy the no. 1 European wine producer, with some 57 million hectolitres.

In the olive oil sector, the 1998/99 agricultural year was marked by low output – 472,845 tonnes – a decrease of 33% compared to the previous year, when the high output combined with several quality problems and the massive import of low-cost products in 1998 caused prices to slump and brought market disposal difficulties. The situation was such that the EU authorities had to intervene, and the ensuing Regulation 1638/98 of 20 July 1998 laid down the basis for re-organising the olive oil market within the European Union. That Regulation created favourable conditions for re-organising the olive sector in Italy. The definition of the “National Guaranteed Quantity” of 543,000 tonnes for Italy plus the possibility of carrying over to the following agricultural year provides a means of avoiding critical situations and using a more stable financial situation to better advantage for the next 3 years (see Box 4.2). At all events, the initial

results of the 1999/2000 farm year forecast a remarkable output of over 650,000 tonnes – which, it is true, is also liable to bring a drop in prices.

In *Spain*, production is widely diversified due to the diversity of weather and soil conditions in the various regions. Crops range from those typical of temperate zones to tropical species (bananas) and include of course the entire range of Mediterranean crops (vine, olive, citrus, horticultural crops, etc.). Fruit and vegetable output accounts for almost half of Spain's agricultural output. Considerable increases in output were registered in the case of horticultural crops, such as tomatoes, for example, where output rose by 21% to 3.5 million tonnes in 1998. The decrease in fruit output, on the other hand, was virtually general. Orange output in particular dropped by 12% to only 2.4 million tonnes, mandarine output by 10% (1.7 million tonnes) and apple output by 24% (719,000 tonnes in 1998). Wine grapes and olives are also very important crops in Spain, but their output dropped – by 12% and 31% respectively. The prospects for the next few years are no cause for any great optimism, since in view of the limitation of the guaranteed quantity (to 760,000 tonnes) established with the latest reform in the EU a certain degree of price instability is forecast as well as penalisation of production through the reduction of aids (see Box 4.2).

**Box 4.2 - Olive oil in EU member states:
Towards a new regulation?**

The reform of the organisation of the olive oil market was approved in 1998. As of the 1999-2000 agricultural year and for the next 3 years, production aid will be granted on the basis of national quotas: 760,027 tonnes for Spain, 543,164 tonnes for Italy, 419,529 tonnes for Greece, 51,244 tonnes for Portugal, 3297 tonnes for France. If a country's output in a given year is below the quota for which aid is guaranteed, the remaining 20% will be redistributed amongst the other countries. Unit assistance has been reduced by 5% to 135 Euro per quintal.

Consumer aid and support for small producers (with an output of less than 500 kg) have been abolished.

According to the preliminary debates and the initial measures taken by the European Union, the final reform will understandably concern two aspects: the form which aid will take and a series of new mechanisms which have always been kept on the fringe of the WTO, such as the new parameters concerning oil quality, classification and designation, etc.

Certain decisions would seem inevitable: the end of the public intervention system, the abolition of consumer aid and support for small producers. A concern consistent with the latter measures is the possibility of better price stability.

The method of allocating aid remains a problem, for the dilemma is still the same: should aid remain proportionate to output, or will it be possible to introduce a system of flat-rate aid based on the number of trees or hectares? Italian, Spanish and Greek producers seem to agree that the system of aid proportionate to output should be maintained.

In *Greece*, cotton plays an important role as regards output. It covers a significant proportion of the total arable land in the country and, in particular, of the land under irrigation (almost one-third of irrigated land), and uses a very large share of Greek agricultural resources. Cotton cropland expanded from 150,000 ha at the beginning of the decade to over 400,000 ha, and unginmed cotton output increased from 350,000 tonnes to 1,250,000 tonnes. Almost 95% of cropland is irrigated, and harvesting is 95% mechanised.

The importance of olive-growing in the rural life of the country, particularly in the southern regions, is evidenced by the fact that there are some 130 million olive trees covering 75% of the orchard area and accounting for 60% of the total number of all types of crop trees. Furthermore, it is the only source of income of many communities in the

marginal zones of the mountainous areas, the south and the islands. The major part of the olive oil produced is of very good quality; much of it is marketed traditionally, whereas only 180,000 tonnes of olive oil are classed according to recognised standards.

There has been a dual trend in the wine-growing sector in Greece. First, a certain decrease has been registered in vineyard acreage and in output, taken as a whole, over the past few decades. The quality of the wine, on the other hand, which is generally produced by a large number of small winegrowers, has improved considerably. Quality wine will gradually replace the traditional varieties (*retsina*) and wholesaling.

Horticultural crops and fruit crops cover about 25% of the cropland in Greece and almost one-third of the land under irrigation. These figures reveal the importance of these commodities for agriculture in the country, where soil and weather conditions are suitable for this type of production. Fruit and horticultural crops are fairly widespread, and many varieties are grown. A total of almost 4 million tonnes of horticultural commodities and 3.8 million tonnes of fruit are produced, the main commodities being potatoes, tomatoes, watermelons, oranges, peaches, apples and fresh grapes. There are a number of problems in the sector, however: lack of early or late varieties, lack of use of certified seeds, low yields, limited glasshouse distribution. Yet the major problems are still those related to the lack of a strict institutional marketing context on the national market, through which the conditions for selling on foreign markets could be significantly improved. Furthermore, a large proportion of fruit and vegetable output is used for processing.

In *Morocco*, the reduction of fallow land has brought the extension of other commodities: this is more or less the case with legumes, certain industrial crops (including sugar cane and sunflowers) and fodder crops, even if the area in question is still relatively limited, amounting to less than 8% of the total.

The area under horticultural crops, on the other hand, has decreased slightly, mainly due to the drop in potato production and, to a lesser extent, in onion production (covering 58,600 and 26,300 ha respectively). Tomato cropland has increased, on the other hand, from 18,000 ha to almost 20,000 ha. Since the yields of the various farms have improved on the whole, overall production has nevertheless increased by 5%. Of the some 4.6 million tonnes produced there were 1.1 million tonnes of potatoes and 960,000 tonnes of tomatoes, the remainder being made up of a wide variety of vegetables. It must be noted furthermore that 855,000 tonnes of the same global horticultural output concerned early fruit and vegetables (540,000 tonnes of tomatoes and 135,000 tonnes of potatoes). There was also a slight increase in fruit plantations (which gained just under 5000 ha, or 0.7%), assigned essentially to olive-growing.

Olive output in Morocco exceeded 700,000 tonnes, which was an increase of 37% compared to the previous year, but it must be added that this improvement was due less to cropland extension than to the phenomenon of biennial bearing which this tree crop presents and to the weather conditions, which, in this particular case, were favourable. For roughly the same reasons, citrus output also increased by one-third – amounting to almost 1.6 million tonnes. Output decreased, on the other hand, in the case of almonds, dates and even several “other fruits” (apples, pears, plums, etc.) for various reasons: uprooting of several varieties, ageing of orchards, lack of care, weather damage.

And lastly, although horticultural and fruit crops covered less than 1 million ha, in terms of output value, they amounted to 1.37 billion dollars, i.e. almost 40% of crop output.

In *Algeria*, there was only a slight increase in horticultural output, although potato output increased by 16% compared to the previous year. Fruit output also grew slightly on the whole, although several commodities marked a falloff: olives for canning (-26%), fresh grapes (-19%) and wine (-33%).

Fruit-growing in *Tunisia* covers some 2 million hectares (41% of cropland), 1.4 million of which are olive groves. Olive output amounted to 90,000 tonnes as against 310,000 tonnes the previous year, clearly demonstrating the alternating harvests of this crop in Tunisian conditions. Citrus output increased by 8.5% compared to the 1996-1997 farm year amounting to 229,000 tonnes as against 211,000 tonnes the previous year. This growth is due to Malta oranges (+20%) and lemons (+33%), whereas there was a drop in output of other varieties. Date output amounted to 100,000 tonnes as against 95,000 tonnes in 1997 – an increase of 8%. Output was equal or higher in the case of all other fruits, except in the case of wine grapes, where production dropped by 6.5%, with a total of 310,000 hl of wine as against 372,000 hl the previous year.

Horticultural cropland in Tunisia in the 1997-1998 agricultural year was practically the same as in the previous year (139,000 ha), whereas overall output progressed by approx. 6% (1.9 million tonnes) as the result of improvement in yields. Tomato output in particular increased by 22% (a 12% increase in acreage), whereas melon and watermelon output dropped by almost 10%, amounting to 285,000 tonnes, the lowest level registered to date. Potato and onion output maintained the level achieved the previous year with 295,000 tonnes and 245,000 tonnes respectively. Grain legume area increased by 32%, expanding from 58,000 ha in 1996-1997 to 75,000 ha the following year. Total output increased by 47% from 36,000 tonnes to 53,000 tonnes (40,000 tonnes of winter legumes and 13,000 tonnes of spring legumes: chick peas).

In the industrial crop sector there was a marked decrease in sugar beet acreage compared to the previous year – from 6000 ha to 3100 ha (-48%). Production followed the same downward trend, decreasing by 50%. The area planted with rapeseed, a crop which has been developed recently, amounted to 1200 ha – mainly in the north of the country.

Cropland area in *Egypt* increased in the period from 1993 to 1997 in the case of most crops, the most important instances of extension concerning potatoes and sugar beet, where rates of increase of 90% and 170% were registered respectively. However, there was also a considerable increase in other crops: horticultural cropland as a whole increased by 17%, pulse cropland by 23%, and onion cropland by 10%. Other cropland was massively reduced, on the other hand, as was the case with lentils and soya. Taken as a whole, production followed the same trend during the same period under review, but to varying degrees. Potato output increased by 81%, for example (amounting to almost 2 million tonnes in 1998), and sugar beet by 44% (1.9 million tonnes). Sugar cane output, by far the most important of the sugar crops, increased by 12%, amounting to 14.3 million tonnes in 1998, and vegetable output progressed by 23%, increasing to 12.4 million tonnes. Lentil and soya output decreased, on the other hand, by 57% and 30%, which is not surprising.

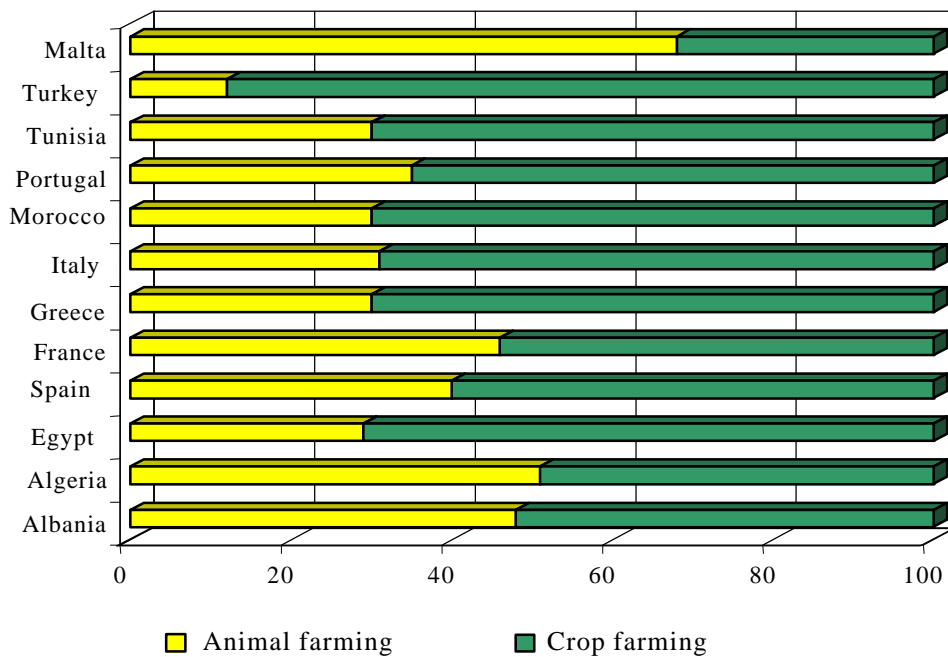
In *Turkey*, there was an overall increase in both legume and fruit and vegetable output in 1998 compared to the level achieved in 1997. The increases registered in fruit and vegetable output, for example, were 8.8% and 5.9% respectively, with absolute figures of 12.9 million tonnes and 14 million tonnes. Dried bean production, on the other hand, developed by just under 1.8% to an output level in the region of 1.7 million tonnes. Output in other field commodities actually decreased by 4.3%, totalling 33.2 million tonnes.

Most crops other than grain developed favourably in *Albania*. Following the privatisation of the agricultural sector, production gradually shifted from grain production, the traditional crop in the country and farmers' traditional source of income, to other more diversified crop systems, special emphasis thereby being placed on those used as animal production inputs. During the 1997/1998 farm year, the areas planted with oilseed, vegetable and fodder crops increased in variable proportions,

whereas those planted with fruit trees, and in particular vine and citrus, doubled compared to the previous year.

4.3.4 - Animal production

The share of animal production in overall agricultural production differs between the Northern and the Southern Mediterranean. It is in fact smaller in the countries on the Southern shores, where it remains in the 20% to 30% band, whereas in the countries on the Northern shores the proportion is between 40% and 50%. In Malta, animal production even accounts for 70% of total agricultural production, while Algeria presents rather an exception in the South, since the proportion there is closer to 50%.



Source: our calculation based on FAO figures

Chart 4.3 - Composition of agricultural production, 1998

In the Mediterranean countries of the EU, animal production remained stable as a whole compared to the previous year. Milk production decreased in Spain and France but increased in Italy and Greece. The situation is practically the opposite in the meat production field, since meat production increased in Spain and France and decreased in Greece and Italy. France presents an exception to this “rule of symmetry”, since pigmeat output also decreased in that country.

Beef and veal output reached its peak in 1996 followed by a downward trend, which continued in 1998 in the various countries of the EU. It must be stated that the emergency measures taken in October 1996 in response to the BSE crisis meant that the decrease could be limited to just over 4%. At all events, cattle livestock is decreasing with the continued drop in the number of dairy cows and a slight drop in the number of foster cows.

In *Italy*, difficulties in the cattle-farming sector concerning both beef and dairy cattle persisted in 1998, and the national production network was weakened as a result. The sector is still suffering from the effects of a crisis of both economic and structural dimension. Weather hazards, the uncertainties connected with the negotiating process concerning the new Common Market Organisation and the application of milk quotas, the excess supply in relation to the continuing decline in demand, and marketing problems have together aggravated the crisis in the sector in general and in the cheese subsector in particular.

Beef and veal output dropped by 4.2% compared to the previous year, amounting to 1.1 million tonnes. This reduction was due to the sharp decline in the headage slaughtered and the reduction in the average weight of the animals. However, the decrease in value was less marked (-1.5%) since a relatively advantageous price level was maintained.

Animal production in *Spain* represents in value 39% of the agricultural production in value. Pigmeat was the most important commodity with over 30% of the overall value. Output increased by 7.6% in 1998, whereas

prices actually dropped by 15%. Animal farming in Spain is influenced primarily by two factors. First, the insufficient and irregular rainfall, which limits the area suitable for pasturing and thus the development of extensive production, particularly cattle farming. It must be stated, however, that sheep and goats adapt better to the arid conditions of the Spanish hinterland. Demand, on the other hand, was so strong – boosted by the improvement in living standards of the past few years – that it greatly stimulated intensive (off-land) animal farming, which developed rapidly as a result, particularly in the case of pigs and poultry, although this expansion of intensive livestock farming has in fact slackened over the past few years due to health problems and certain adverse effects on the environment.

In *Greece*, meat output dropped at the level of its various components, a trend which merely emphasised the country's traditional position as importer of animal products. There was a marked decrease in poultry farming in particular, which, at 30%, is the principal component of overall meat production, output dropping from 172,000 tonnes in 1997 to 147,000 tonnes in 1998.

The problems encountered in the sector in *Greece* are different: the main problem in the case of intensive animal farming is connected with the high cost of credit. Extensive livestock farming, on the other hand, is often faced with the difficult problem of the use of communal rangelands and with the reluctance of young people to take up this occupation.

The initial official estimates in *Morocco* indicate progression in red meat of the order of 9% in 1998, output amounting to 150,000 tonnes in the case of beef and veal and 140,000 tonnes in the case of sheepmeat. White meat production apparently continued to stagnate, on the other hand, with an output of scarcely over 230,000 tonnes, this stagnation having been registered for several years.

The progression registered in milk production over the last few years continued, output slightly exceeding 1 billion litres, thus apparently increasing by 16% in 1998.

The growth trend in animal production in *Algeria* was fairly average on the whole, although the situation differs according to the various output components. Thus, for example, whereas red meat output stagnated around 299,000 tonnes, white meat output soared by 52%, reaching a level of 160,000 tonnes in 1998. As for fishing, the trend in output has been downward over the past few years, dropping from 135,000 tonnes in 1994 to 92,000 tonnes in 1998 with potential fish stocks estimated at 160,000 tonnes and an estimated fish-farming potential of 20,000 tonnes. This is due in part to the fact that the fisheries subsector is the least endowed as regards public investments and state aid.

Animal production in Tunisia increased by 8.5% in 1998 due mainly to the performances achieved in the production of milk, meat and eggs, which registered an overall increase of 10% compared to the previous year. The highest growth rate – 15% - was achieved in the poultrymeat sector.

Milk output increased by 13%, amounting to 740,000 tonnes, which meant that the country was self-sufficient in milk with a surplus in relation to consumer needs during the high lactation period (March to August). This was the first time that a surplus necessitated the stockholding of fresh milk in order to satisfy demand in the low lactation period, when traditionally in previous years the country had to resort to importing dried milk. The results obtained in the milk production sector were the fruit of several measures taken within the framework of the strategy elaborated for the sector, including in particular: the granting of subsidised credit for dairy cattle production, the institution of an intervention price and of a premium paid for milk collected, the organisation of collection and the creation of a large number of centres close to production units, the introduction of high-yield breeds, the improvement of production

techniques and better health coverage. Efforts are currently geared to improving milk quality.

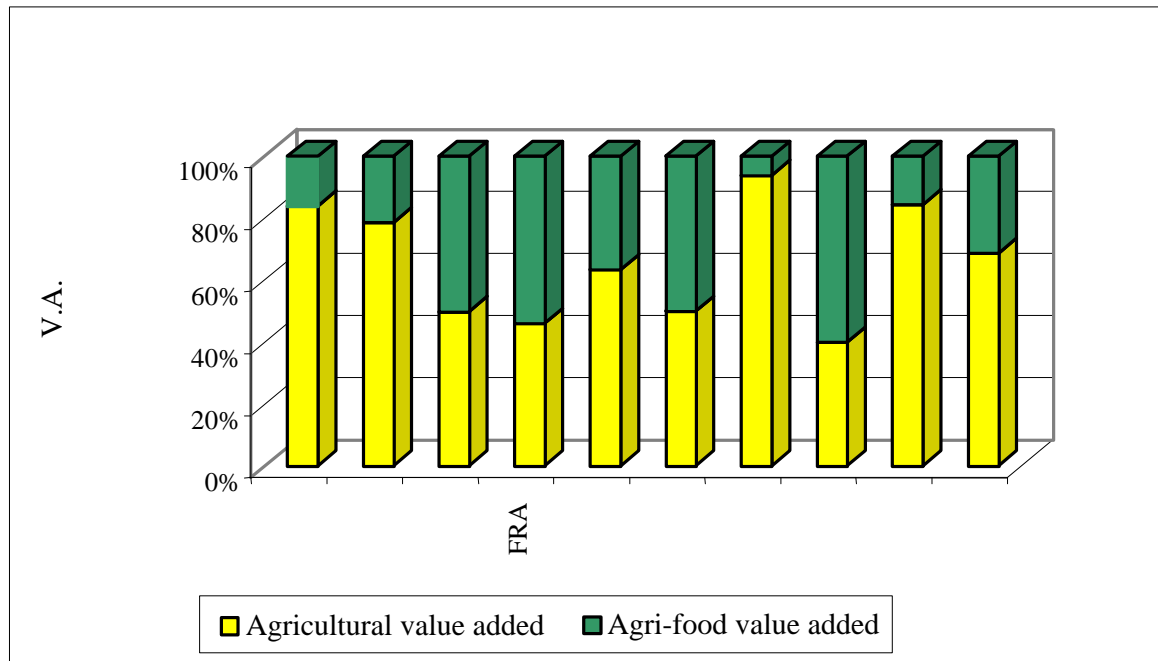
The weak performance in the livestock sector in *Turkey* is due largely to weak yields. The average carcass weight is just 160-170kg, whereas it is 250 kg in developed countries. The same discrepancy is found in milk production: a yield of 1400 to 1500 kg in Turkey as against levels ranging from 5000 to 6000 kg in the countries of the EU, for example. However, there is an upward trend in milk output, with 585,000 tonnes in 1998, whereas the trend in red meat output has been downward in the past few years. Taken as a whole, animal production grew by only 1% in 1998.

The downward trend registered in livestock numbers in the past few years seems to have been curbed. The livestock headage of cattle farms decreased from 806,000 in 1996 to 771,000 in 1997, whereas the number of goats and sheep farmed was reduced by 1 million animals after the loss of a headage of almost 260,000. Only pig headage increased from 95,000 in 1996 to 97,000 the following year. The same livestock numbers seem to have been retained in 1998.

The animal husbandry sector plays an important role in *Malta*, where it is an integral part of agriculture. The milk subsector, with a headage of 8500 cows, has managed to ensure the country's self-sufficiency in fresh milk. Poultrymeat and pigmeat production increased rapidly from the early 1980s. Traditional sheep and goat farming was introduced recently. The major part of dairy cow headage is farmed on relatively large holdings with more than 40 cows recognised by the government. Pigmeat and poultrymeat production is also concentrated on relatively large production units. Sheep and goats, on the other hand, and service bulls are generally farmed by small operators.

4.4 - Agro-industrial production

Assessment of the level of development of the agri-food system in Mediterranean countries, on the basis of the national statistics available can be broached by examining the ratio between farm value added and the value added by the agri-food industry. Experience over the years has shown that an increase in incomes generates major changes in the production system: a decrease in the relative importance of agriculture in the structure of employment and of the national product, expansion of industry and the services. In the context of the agri-food system, the development process and the changes it entails in the organisation of society and in consumption patterns presupposes an increase in activities involving the processing of agricultural commodities (which are coming to be regarded more and more simply as raw materials), which, before arriving at the consumption stage, require a process that is enriched in terms of quality and content of the service supplied. The result is further integration of value added throughout the agri-food chain and evident strengthening of its post-farm components.



Source: Our elaboration based on national figures

Chart 4.4 - Composition of value added in the agri-food sector, 1997

Around the Mediterranean, it is observed that in the more advanced countries in the North the share of value added generated by the agri-food industry equalled and then exceeded the share created by agriculture per se. In the less advanced countries in the South, but also in Greece and Turkey, the contribution of the agricultural and food industries to the formation of overall value added remains modest due to the low level of development of food-processing and distribution structures, the price system, income levels, consumption patterns and eating habits.

As regards the situation in the individual countries, we observe that in *Italy* production level in the agricultural and food industries was satisfactory in 1998. With a figure of almost 78 billion US dollars, production in the branches concerned progressed by 2.3% compared to the previous year, while production in the manufacturing industry as a whole increased by 1.9% over the same period. This development was sustained essentially by the favourable – albeit limited - conditions regarding demand on the domestic market and sales on foreign markets. The latter sales showed more marked dynamism compared to imports, thus enabling the sector to reduce the trade deficit. Food consumption increased by 1.5% in current terms, i.e. 0.8% at constant prices. The moderate rise in prices, furthered by more cautious producer behaviour and by the growing role of modern forms of distribution in the organisation of the agri-food chain, is certainly one of the major factors helping to sustain demand in the sector.

The value added by the agricultural and food industries (including beverages) accounted for 9.7% of that of the manufacturing industry as a whole, a proportion which confirms the downward trend observed for quite some time. Amongst the various agro-industrial branches the milk and cheese industry is in the lead, accounting for almost 18% of total production; it is followed by confectionery products with a share of 10%, meat processing and canning (excluding poultry) with almost 9%, the livestock feed industry with 6% and the industry producing macaroni,

spaghetti and similar products plus the milling industry with 4%. The average growth in output registered in 1998 conceals several diverging trends in the subsectors. The good performance achieved in branches such as those in the fish processing and preserving industry contrasts, for example, with the poor performance registered in other branches such as the fruit and vegetable canning industry (-2.1%) or the milling industry (-0.3%).

The production structure of the agri-food industry in Italy is marked by a high degree of fragmentation. The results of the last census (conducted in 1996) showed that businesses employing less than 10 persons accounted for 89% of enterprises and 36.4% of the total workforce employed. Conversely, firms employing more than 100 persons accounted for 0.6% of enterprises and 30% of jobs. The firms in the meat-processing and fruit and vegetable-processing industry are relatively large enterprises with an average of 15 employees per production unit, whereas those operating in the production of oil and bread and its derivatives are smaller, with an average of 3 employees per unit. As regards the legal forms of the firms, it transpired that almost 55% of the firms operating in the agri-food sector were independent businesses. The remainder were companies, whereas the number of co-operatives, which were formerly typical of the agri-food system in Italy, had been reduced by half, accounting for only 4% of the total. This can be attributed to the difficulties co-operatives have had to contend with in the context of the restructuring of the agri-food sector in the course of the 1990s, thin capitalisation problems and various structural constraints.

After a year of high growth levels in 1997, the agricultural and food industries in *France* registered a further year of progression in 1998 in terms of both turnover and value added. However, the conditions were very different in those 2 years. In 1997, it was mainly exports which were the driving force behind that growth, with a growth rate of 11.5% in value. Exports then levelled off in 1998, due primarily to the fall of the dollar and

the Asian crisis. Domestic consumption took over to some extent, so that the result was positive on the whole but can be a cause of concern for the years that lie ahead, since the opportunities for growth in that domestic consumption are limited and the prospects on international markets are particularly uncertain.

Apart from these overall figures, analysis of the situation in the agricultural commodity processing sector requires that its marked structural diversity be taken into account and that the complexity of the statistical definitions concerning the sector also be borne in mind. That is to say, the official statistics relate to “industrial” enterprises, i.e. those employing more than 10 workers, which excludes “very small enterprises” – yet the latter employ some 150,000 workers (i.e. one-fourth of the total number of jobs) and account for one-tenth of the turnover of the sector. Furthermore, although these “very small enterprises” include traditional trade firms (in the butcher’s and baker’s trades), the number of which is constantly decreasing, it has to be said that they have shown significant dynamism and growth in the last 20 years (the number of firms in this category rose from 50,000 to 57,000 in the period from 1987 to 1994), particularly in more elaborate products or special quality products (luxury goods, regional specialities).

Taking account of the statistical limits mentioned above, industrial agri-food enterprises achieved a 1.4% increase in turnover in 1998, reaching the 130 billion US dollar mark with a value added of 38 billion US dollars – which was higher than that of the agricultural sector (33 billion). This figure constitutes 15% of the total value added of French industry. Furthermore, according to the figures of the National Association of Food Industries, the 4200 industrial enterprises in the sector employed 403,000 workers in 1998, which was an increase of 5000 jobs compared to 1997.

Since the privatisation of the French tobacco industry in 1995, the public sector has been virtually absent from the agri-food sector. One

observes at most small subsidiaries of state enterprises, the greater parts of which belong to other sectors, and which account for a total of 1 million jobs. The co-operative sector, on the other hand, which is particularly strong in the agricultural commodity trade, is widely represented in certain processing sectors (milk products, meat, wine-making). The major co-operative groups (SODIAAL, SOCOPA) are now part of the group of major multinationals and have a large number of subsidiaries throughout the world.

The agri-food industry in *Spain* registered a turnover of approx. 58 billion US dollars in 1998, with 5% growth in current value compared to the previous year. The gross value added at market prices increased by 4.2%, amounting to 18% of that of the industrial sector as a whole. There were 34,594 enterprises in the sector in 1998, a decrease of 9% compared to the previous year; this trend confirms the concentration process which has been under way for several years. Some 389,000 workers were employed in the food industry, i.e. 3% of the total number of jobs in the country and 15% of jobs in the industrial sector.

Five subsectors – meat, milk products, oils and fats, biscuit, bread and pastry-making – account for over 59% of total agri-food turnover. As regards the workforce employed, the biscuit, bread and pastry-making industry plus the processed vegetables and milk product subsectors provide over 62% of the total number of jobs in the Spanish agri-food industry.

The agricultural and food industries in *Portugal* play a significant role in the national economy, accounting for 5.4% of total value added and 2.5% of the workforce employed. Their output grew by 3.5% in 1998, continuing the trend of the last few years. It must be pointed out, however, that this was partly due to the increase in intermediate consumption. The more intensive use of intermediate inputs had become possible with the drop in agricultural commodity prices which followed the change in the public

authorities' support policy, henceforth based on direct income aids rather than on market price support.

Approximately 40% of agricultural commodities in Portugal are channelled to the agricultural and food industries. The most important subsectors are the grain product industry (20.5% of value added and 45.5% of jobs) and the beverage industry (25% of value added and 10% of jobs).

The employment contribution of the meat and milk industries is greater than their contribution to value added: 14% and 9% respectively in the case of employment, and 11% and 5% in the case of value added. The oil industry, on the other hand, accounts for only 4% of value added and 2% of the number of workers employed.

Agri-food processing activities in *Greece* are continuing to develop. Large quantities of agricultural commodities are still exported unprocessed and are then processed in other countries and re-exported to Greece – a fact which is well illustrated by the examples of durum wheat, olive oil, wine and tobacco. And large quantities of foodstuffs are imported at the same time. However, the Greek food and beverage industry is still the most important branch of the manufacturing industry in Greece, accounting for 26% of GDP as against 19% in 1980. In fact the GDP of the food sector has grown at an annual rate of 2.1% since that year.

The principal branches in terms of value added and sales are canned fruit and vegetables, milk and other types of processed foods, cereals and vegetables, but also non-alcoholic beverages. The meat sector and the bakery and confectionery industries only account for a limited proportion of value added and sales, despite the large number of firms concerned. The most important branches in employment terms are the sugar, milling, canned fruit and vegetable, non-alcoholic beverage, milk, wine-making and cereal and vegetable sectors. It must be stated at all events that the food and beverages industry in Greece is still characterised by the small size of

its enterprises, since 94% of those firms employ less than 10 workers, and even 60% of them have only 2 or more.

The main fruits and vegetables processed are tomatoes, peaches, citrus fruits and grapes. Jams and other fruit preserved in sugar syrup are produced in small quantities. The Greek fruit-processing industry is geared to fruit preserves, particularly as regards peach production. This industry comprises 40 processing plants, mainly in the north of the country, and processes almost 300,000 tonnes of fresh fruit. Greece is the second largest producer of canned peaches in the world and the leading exporting country. The tomato industry processes almost 1,200,000 tonnes of fresh tomatoes in 52 processing plants. In addition, there are a dozen major units and about 50 small units for processing some 70,000 to 90,000 tonnes of grapes, almost all of which are now exported.

The food and beverage industry makes a considerable contribution to Greek agri-food trade. Exports in the sector account for 30% of total Greek exports. They seem to show a certain degree of concentration, since fruit and vegetables alone account for 40%. In addition to fruit preserves (apricots and peaches) and tomato products, the other main products exported are tobacco, fats and olive oil, and cereals (durum wheat in particular).

Although the available data on *Morocco* concerns only 1997, one can easily get an idea of the status and trend of the activities concerned. Industrial production increased by 10%, whereas production in the agricultural and food industries developed at a slightly lower but nonetheless substantial rate (8%). These industries thus retained their predominant position amongst the processing industries, since they still accounted for 26% of enterprises, 35% of output, 21% of jobs and 19% of exports. Within that category of industries, it was activities geared to domestic demand and the processing of what are known as strategic staples which were preponderant. The grain, fat, sugar and milk-product

processing subsectors totalled 53% of the output of the Moroccan agri-food industries, whereas fruit and vegetable-canning plants, which are geared in part to exports, accounted for under 8% of the total. Exports account for less than one-fifth of agri-food output and are only realised by a minority of firms (16% of the some 1640 businesses). It must be pointed out furthermore that quite a number of the enterprises in the agricultural and food industries are semi-public enterprises: almost half of the undertakings controlled by the state in all processing industries are agri-food enterprises.

The main problems of the agri-food industries, which have been identified for several years and have been highlighted once more by field surveys, concern the low level of integration of the agro-support and downstream industries, uncertainty regarding supplies, the deficiencies of production facilities and inefficient use of existing capacities, the “economic environment” (absence of a coherent strategy, cost of energy and credit, etc.).

The output of the agricultural and food industries in *Algeria* account for 25.8% of the value added of the entire industrial sector, 20.6% of employment and 23% of the total number of enterprises (1996 statistics - the most recent available). These industries are thus of major importance. After the implementation of the structural adjustment plan (1994), the subsector increased its share in the value added of the industrial sector (16% in 1992 and 25.8% in 1996) and in employment (19% in 1992 and 20.6% in 1996). However, the number of enterprises decreased after recomposition of the private sector. The public sector is still largely predominant in the agricultural and food industries, accounting for 78% of value added and 74% of jobs, generally through large-scale enterprises. It must be stated that 5 years after the implementation of the Structural Adjustment Plan the privatisation of the public agri-food sector is still in its infancy. Only one enterprise (processing cereals for human consumption in Sétif) opened its capital to the private sector in 1998, but the great majority of the shares sold were sold to public financial institutions. This being so, the private sector is

spreading in the agro-industry mainly through small and medium-sized enterprises. Labour productivity seems to be approximately the same in the two sectors, with a slight advantage for the public sector, which has managed to modernise its production facilities more successfully.

The agri-food industries in Algeria use mainly imported raw materials and intermediary goods (food cereals, milk powder, brown sugar for refining, molasses and presscake for cattle feeds, etc.) The firms most integrated into local agriculture are fruit and vegetable-canning plants and those producing concentrated tomatoes.

The agri-food industries in *Tunisia* accounted for almost 3% of the total volume of GDP in 1998 (as against 5% in the 1960s). Production is rather instable since it remains subject in part to the variability of agricultural production itself, particularly olive production (the olive-processing industry is second in rank after the cereal-milling industry). The share of agri-food industries in the total output of the manufacturing industries is only around 20%, whereas it was up to 70% at the beginning of the 1960s. This decline in the importance of the agri-food industries is due to the rapid development of many other industries over the past 30 years such as the textile and leather industries and the mechanical engineering and electrical industries.

A study published in 1998 showed that the sector of the agricultural and food industries in Tunisia is dominated by small enterprises with low technology and very limited investment possibilities. The sector as a whole comprises 5000 enterprises, cereal-milling firms being largely dominant with a total of 3700 units, 500 of which are industrial and the others tending more to be smaller craft firms. In particular, of the 2400 bakeries registered only 6 can be regarded as industrial bakeries. Plants extracting olive oil come second with 1400 units. The remainder is distributed amongst the other agro-industrial activities: canning and seafood products (about 100 firms for each activity), meat and milk and derivatives (about 50 firms for

each activity), wine (some 30 wine producers and carbonated beverages (about 20 firms).

Improvements were achieved in *Egypt* in the 1992/1993 and 1996/1997 periods in certain agri-food industries which had previously been uneconomical. The main products of the agri-food industries are white sugar, refined sugar, chocolate, pastry-making, canned vegetables, tomato paste, brewer's yeast, cottonseed oil, molasses, white cheese, processed cheese, pasteurised milk and sardines. Output developed favourably on the whole during that period, a considerable increase being achieved in the case of pastry-making (+98%), refined sugar (81%), treacle (28%), white cheese (19%), canned vegetables (15%) and yeast (11%). There was a drop in output of other products, on the other hand, as was the case with granulated white sugar (-53%), canned vegetables (-38%), pasteurised milk (-36%), hydrogenated oil (-15%) and cottonseed oil (-13%).

The cotton and wool downstream industries declined in general. From 1992 to 1997, for example, most of the activities concerned registered major decreases in output: -53% in the case of woollen textiles, -33% in the case of jute textiles, -26% in the case of woollen yarn and -20% in the case of cotton yarn.

Agri-food production constitutes the principal sector of the manufacturing industry in *Turkey*, accounting for 9% of total value added. Private enterprises are clearly in the majority with 464 units and 59,720 employees. Public enterprises are much fewer in number but larger in size on average, employing 20,280 persons in 122 units. In the 1997-1998 agricultural year, the output of the various activities in the agri-food sector progressed with the exception of vegetable oils, sugar and fruit products. Output levels rose significantly in the case of red and white meat, cheese products, sugar, rice, tomato paste and macaroni, spaghetti and similar products. Olive oil, on the other hand, suffered the effects of a bad year, which was to be explained by the phenomenon of alternating production.

The turnover of the Turkish food industry, which amounted to approx. 2000 billion US dollars in 1998, is constituted by cereals and milling products (36%), processed fruit and vegetables and vegetable oils (12% respectively) and slaughter products (11%).

In *Albania*, nine-tenths of the marketing of agricultural and agro-industrial products had been entirely privatised by September 1997, and the remaining one-tenth is currently being privatised. The 288 original state enterprises eligible for privatisation were divided into 4194 more or less independent “objects” in order to facilitate the privatisation process by making investments more accessible to Albanian investors.

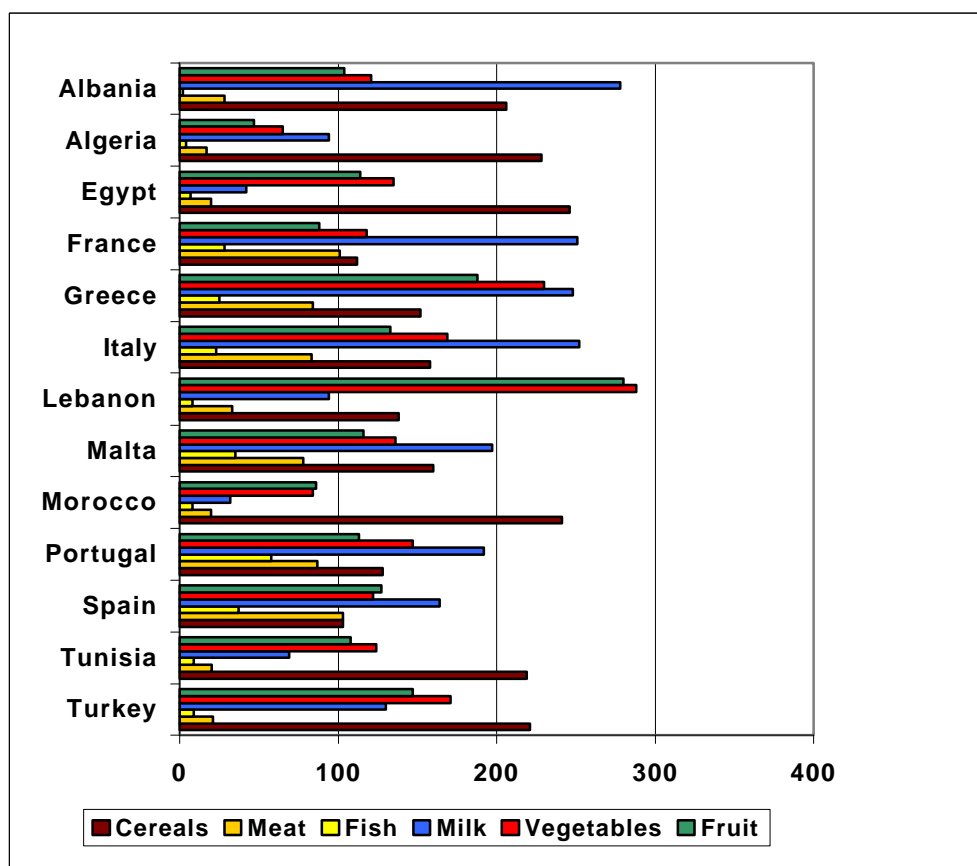
The agro-allied industry in Albania is now composed of small private enterprises. Almost 88% of the output sold now comes from the private sector, and 90% of investments in the sector are private investments. The industry employs 9600 workers. Of the 2016 firms in the agro-allied industry 65% operate in the bakery trade and milling, and more than 25% are located in the Tira Prefecture.

4.5 - Food consumption

When food consumption in this region of the world is under debate, the traditional “Mediterranean diet” is frequently cited, a diet which is fairly uniform throughout the “basin” and characterised by a vegetable component larger than the animal component. This diet is in fact constantly evolving as the result of the combined effects of the trends in agri-food supply, the purchasing power of the population, eating habits, and life style. It must be stated at all events that there are major differences between the Northern and the Southern shores of the Mediterranean, not only in terms of consumption but also in terms of consumption quality and structure.

It is easy to see from Chart 4.5, which shows the quantities of the main groups of products consumed per person in 1997, that each group of

countries has fairly distinctive characteristics. What is first observed is of course classical, proceeding from the general trend, which is virtually universal, linking growth in incomes to changes in habits and thus in the structure of food consumption; that consumption actually develops progressively from “primary” products such as cereals and legumes towards meat, milk and milk products, fish, and fruit. The relevance of this “rule” around the Mediterranean is quite clear, with only a very few exceptions.



Source: Our elaboration based on figures published in Medagri 2000, CIHEAM-IAMM

Chart 4.5 - Food consumption in kg/pers/year, 1997

Per capita cereal consumption, for example, is close to or over 220 kg in the countries on the Southern shores, to which Turkey must be added (its profile in this regard being more “southerly” than “northerly”), whereas in the EU member countries on the Northern shores the same indicator is barely 130 kg on average. In the case of meat, fish and milk consumption, on the other hand, the situation is quite the reverse: per capita consumption levels in the countries in the North are several times higher than those recorded in the South. In the case of meat, for instance, the average is 92 kg in the former and less than 22 kg in the latter countries; and in the case of milk consumption, the same indicator ranges from 221 to 66 kg. Between these two “camps” some countries do of course present more intermediate profiles or profiles which are very similar. Malta, for example, is more “northerly”, whereas Albania proves to be more “southerly” (except in the case of milk, since, with a consumption level of 278 kg, this country holds the Mediterranean record). Turkey and Lebanon differ, however, from the typical profile of the Southern Mediterranean countries, the former due to its high level of milk consumption (130 kg per person), and the latter due to its low level of cereal consumption (138 kg).

The differences are less apparent when it comes to fruit and vegetable consumption, and it is certainly relevant to point to a certain Mediterranean peculiarity in this context, which is confirmed both by production structures and by specific consumption traditions. For the consumption levels of these commodities do not seem to be as unequally divided between North and South. With only a few exceptions, vegetable consumption levels seem to be fairly similar throughout the Mediterranean. It is to be observed in particular that, although consumption levels in Algeria and Morocco are below the overall average, those recorded in Tunisia and Egypt seem to be higher than those registered in France and Spain, while Lebanon holds the “record” for the entire region (288 kg per capita). Practically the same observations apply to fruit consumption, where average consumption level in the Northern EU countries seems to be

virtually the same as the average level in the South, provided that Lebanon and Turkey are also included in the latter group.

This being so, it has been a well-known fact for several years that food consumption levels in the EU Mediterranean countries have reached a level of demand satisfaction or even saturation - at all events, levels where only minor increases are possible or where the aggregate in question simply stagnates. Moreover, this trend can only be confirmed by the low population and income growth rates. It is thus understandable that agri-food firms are gearing their activities more and more to stepping up marketing action with a view to boosting household consumption.

Furthermore, the salient event in this context in 1998 was undoubtedly the so-called "mad cow" crisis, which often caused a veritable slump in red meat consumption, destabilising the customary structure of European household consumption more or less permanently.

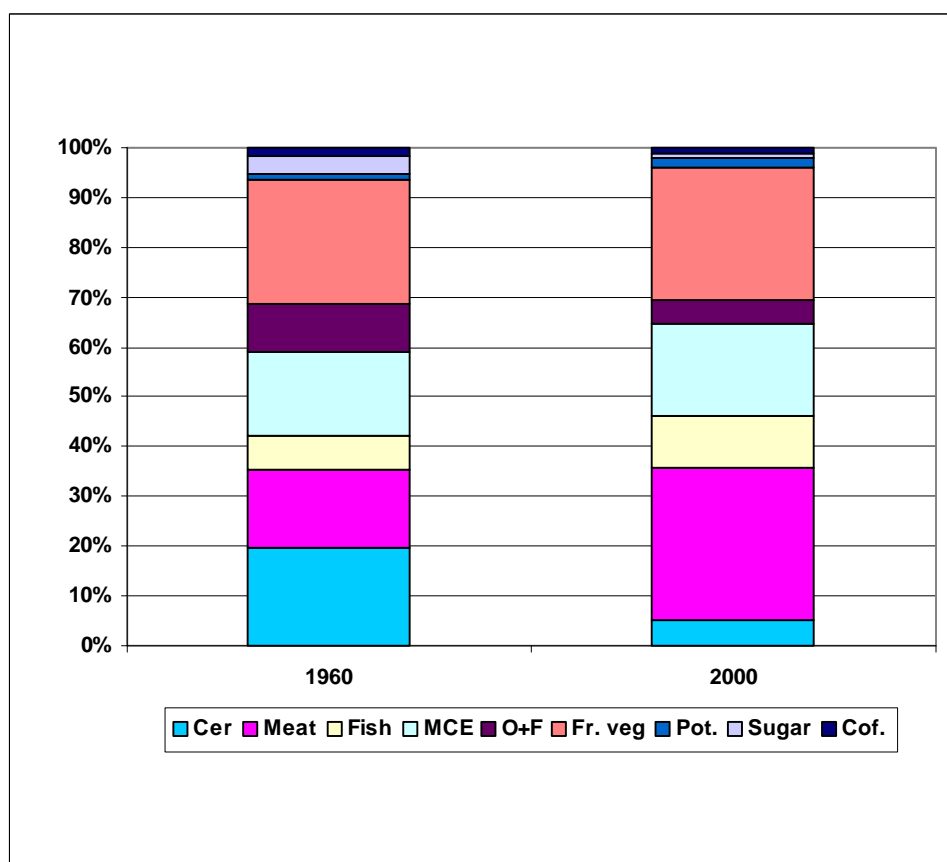
Italy provides an example well illustrating the above phenomena. For in that country, where consumption really lacked dynamism, it was to be observed quite clearly that the major agri-food firms in particular had to step up their efforts to try to stimulate consumption and attract consumers to their products. Each group had to invest considerable amounts in advertising and, in particular, intensify the practice of special offers in order to maintain or even develop its share in a market increasingly subject to the accelerating concentration process and thus to the intensification of inter-company competition.

Taken as a whole, recent trends are tending towards the development of products with a high service content guaranteeing intrinsic quality and components of marketing services (packaging, logistics, etc.). These aspects have an important role to play in the future, particularly with a view to acting as a counterbalance to the major international distributors, which are beginning to operate on a massive scale in practically every country.

As regards the development of the main components of consumption, attention is naturally drawn first and foremost to meat consumption. And in Italy, as is in fact the case in Community Europe, supply clearly levelled off as the result of the “mad cow” crisis, whereas meat consumption slumped. Sizeable surpluses thus had to be contended with, which were costly for both producers and for the community as a whole. This crisis came furthermore as a psychological shock to consumers, who, as a result, have become even more sensitive to questions regarding information on product quality and origin, the effect on human health, and environmental balance. Milk, cheese and eggs, for their part, come within a market which is approaching saturation point and thus cannot continue to grow rapidly, despite the downward trend in prices registered in the 1997-1998 period. A favourable trend is emerging, however, in the case of fresh, light and mild cheeses as well as yoghurts. The bread and cereals market has also arrived at saturation point, whereas in the case of macaroni, spaghetti and similar products the major brands are still having to segment supply in order to attract targeted customers, with a “price war” in full swing and growing insistence on the quality of raw materials. Fruit and vegetable consumption, which is also approaching saturation level, can only progress very slowly. Olive oil consumption has recovered after a favourable price adjustment following the steep rise in 1996, but it must be added that this product has also benefited from the increased investment in advertising and promotion campaigns financed by the European Union.

The food consumption profile in *Greece* is tending to become integrated into the European model with a certain time lag, although it is retaining several of its “specificities”, such as much higher fruit and vegetable consumption levels than those in the other EU member states. The trend in consumption structure has been showing a high growth rate in meat and milk product consumption for several decades (rising from 30% to 44% in the period from 1960 to 1990). When one adds seafood products to these 2 groups of foodstuffs, this group of products is liable to account for

almost 55% of consumption expenditure in the year 2000. The statistics do not show the high growth rate in fruit and vegetable consumption (since the share of these commodities appears to be stagnating around 24-25%), because this group actually also comprises legumes, whose consumption is considerably declining. The same applies to other traditional staples such as cereals and olive oil, whose shares have been decreasing steadily for a long time. The share of bread and cereals, for example, dropped from over 19% in 1960 to less than 6% in 1990 (see Chart 4.6).



Source: G. Mergos – D. Psaltopoulos, Country report – Greece, CIHEAM, 1999

Chart 4.6 - Structure of food consumption expenditure in Greece (%)

The changes which have come about in incomes and prices (in addition to the population growth, obviously) would seem to be the main factor explaining the favourable trend in meat and milk product consumption, at all events more than any development in consumer tastes or other “imitation effect” in “northerly” consumption habits. For due to renewed elasticity of demand, which appears to be slightly more marked in Greece than in other European countries, it is considered that the trend towards a structure of consumption that is even richer in animal products and in fruit and vegetables should continue in the future, assisted by the improvement of incomes and provided that the relevant prices remain stable.

Agri-food production in *Turkey* seems to present a surplus on the whole. During the 1996-1998 period, output exceeded consumption needs in the case of all foodstuffs with the exception of wheat (where the production deficit nevertheless remained below 3% in 1998). Dried bean and citrus surpluses were particularly large (with output-consumption ratios of 140% and 123% respectively). Per capita consumption seems to be fairly stable or is only developing slowing, except in the case of wheat again, where consumption is steadily declining). Potato, meat and milk consumption levels seem to have levelled off at around 76 kg, 23 kg and 137 kg respectively. Vegetables are the only case where consumption seems to be relatively unstable (183 kg in 1996, 171 kg in 1997, 216 kg in 1998).

Given the consumption habits and income levels in the North African countries, the food consumption profile is similar from one country to another with fairly clearly identified common features such as the preponderance of cereals and low meat, fish and milk product consumption levels. The food consumption statistics are not updated with any great regularity, which makes it difficult to follow annual trends closely. However, it can be reasonably assumed that since development is slow the changes from one year to the next are practically imperceptible.

But whenever a consumption survey is carried out (as has been done in Tunisia) it often reveals very interesting facts and trends.

In *Morocco*, even in the absence of new data with which trends could be updated, it can be said that the “sluggish” trends in the development of food consumption in that country (presented in the last report on the 1997 figures) are still to the fore. The main features were as follows: a drop in the food expenditure share of total household expenditure (from 48% to approx. 43%) and a food consumption structure marked by constant and predominant levels of cereals and relatively large proportions of sugar and fats, a certain progression in white meat, fruit and vegetable consumption, and persistent deficiency in red meat, fish and milk products.

It must also be pointed out that a consumption structure of that nature only partially corresponds to the production structure. At all events, the demand for staples such as common wheat, sugar or seedoil has for some time now only been satisfied through systematic recourse to imports. In 1998, the rates at which local production covered consumption needs were only 77% for common wheat, 54% for sugar, 23% for table oil and 87% for milk products.

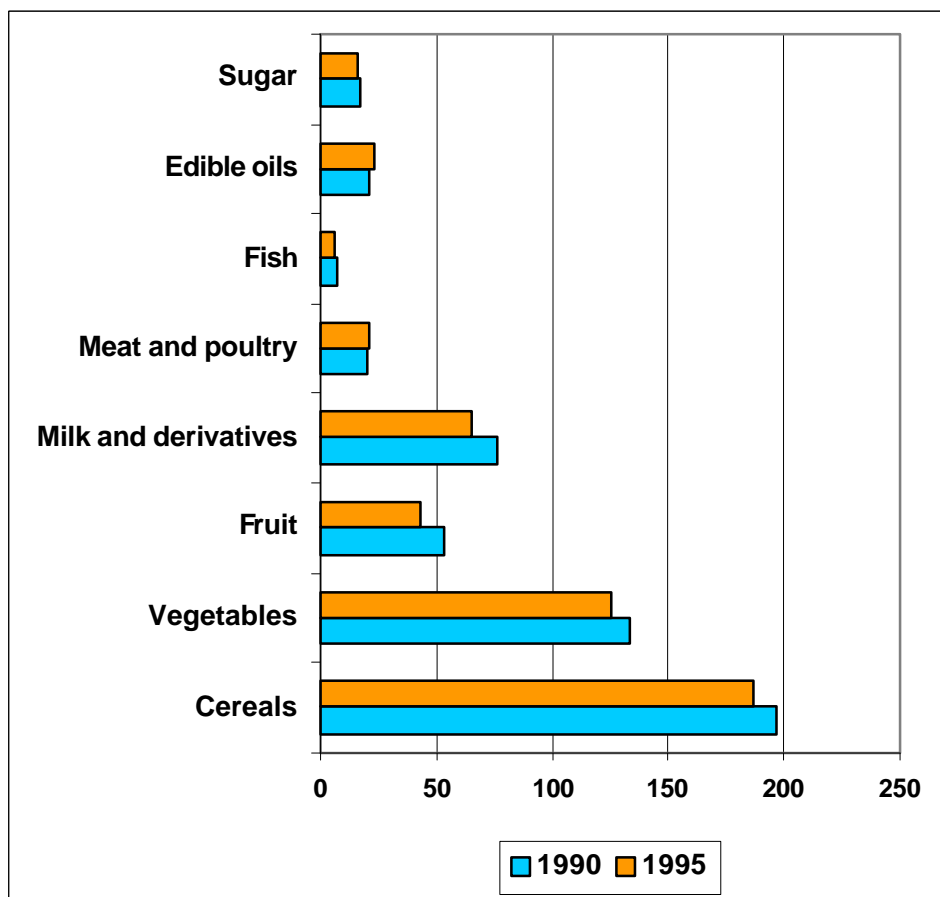
It is also a fact, moreover, that solvent demand is so low – due to inadequate purchasing power – that even insufficient production levels do not necessarily result in additional imports or serious market tension. The case of red meat is a perfect illustration of this phenomenon: with a total output of 290,000 tonnes in 1998, the production of beef and veal and mutton and lamb increased by 16% compared to the previous year, but amounted to barely 10.4 kg per capita. Yet, mediocre though it may be, this level nevertheless resulted in “oversupply”, since market demand dropped by a further 4% to a level of only 235,000 tonnes, i.e. an average consumption level of 8.5 kg per inhabitant. The same argument applies to the milk subsector, where local production only covers a fair proportion of

effective demand because that demand still relies on a very low level of consumption (less than 40 litres per capita per year).

In *Algeria*, it can be estimated on the basis of hypotheses taking account of the data on food availability, population growth and foodstuff imports, that food consumption did not deteriorate on average in 1998. This estimate would seem plausible in view of the following facts. First of all, it was a very good farm year, a fact which leads us to believe that abundant quantities of food have been available in rural zones. Urban areas also seem to have been well supplied, foodstuff imports having been sufficient to avoid shortages of particular commodities. Consumer prices rose at a fairly moderate rate compared to the past (5% in the case of the general index and 5.7% in the case of the food price index, as against rates of increase ranging from 18% to 32% prior to 1997). And lastly, the population growth rate was apparently only 1.6%. At all events, the prices of staple commodities such as bread, flour, semolina and oil remained stable in 1998. Egg and vegetable prices even went down (-9% and -4% respectively), but then there was a considerable rise in meat and fruit prices (between 9% and 18% in the case of meat and 12% in the case of fruit).

In *Tunisia*, the results of a large-scale survey on household food consumption have just been published. Based on the figures for 1995, it has transpired that the downward trend in cereal consumption has been confirmed, decreasing from 196.4 kg to 187 kg on average per inhabitant in the period from the early to the mid 1990s. This result thus substantiates the forecasts which the competent authorities have already made, predicting that this per capita consumption is liable to decrease further to 180 kg by the year 2000 and to 154 kg by 2020. At all events, although this trend seems natural, the survey reveals that other developments are less so. The average per capita consumption of vegetables, fruit, milk products and fish seems to be declining: from 133.7 to 125.3 kg, from 53 to 43.1 kg, from 75.9 to 65.2 kg and from 7.1 kg – already a low level – to 5.8 kg respectively. Even sugar consumption is decreasing - from 17.4 to 16.1 kg per capita.

And finally, only meat and edible oil consumption is rising slightly, from 19.9 to 21 kg and from 21.3 to 23 kg respectively (see Chart 4.7).



Source: M. Lasram – A. Khaldi, Country report, Tunisia CIHEAM, 1999
Based on the survey on household consumption conducted by the National Statistics Institute in 1995

Chart 4.7 – Food consumption evolution in Tunisia, kg/pers/year

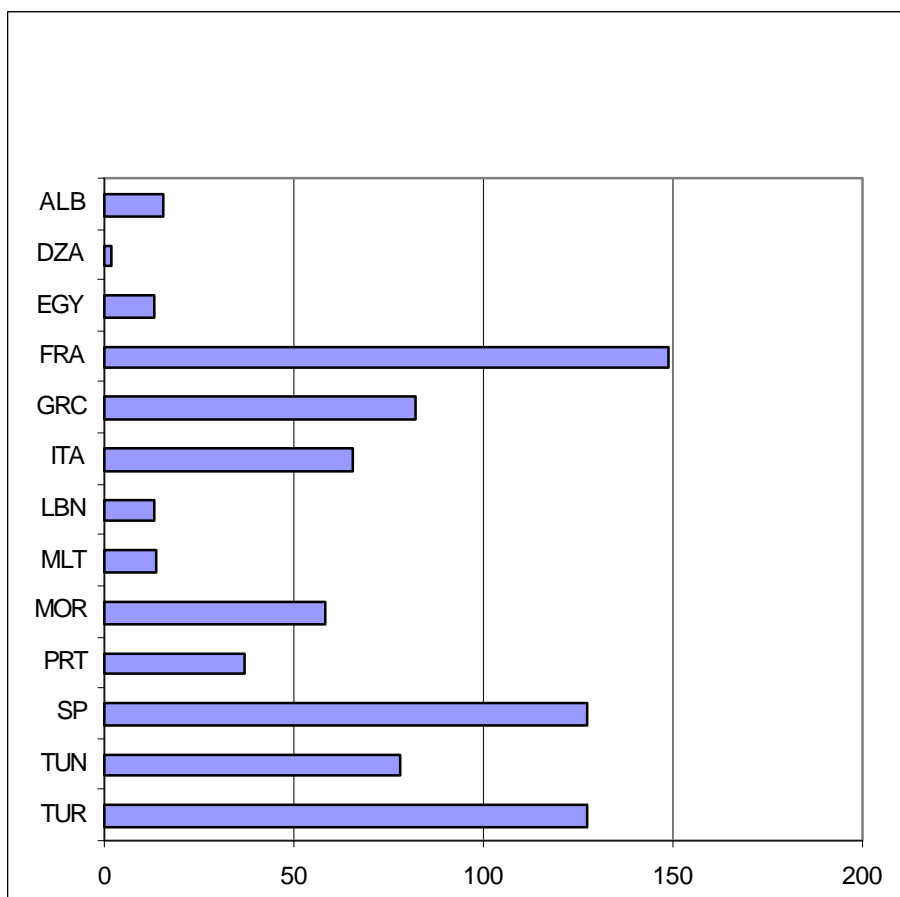
The official statistics published in Egypt for 1996 show that per capita consumption is growing, at least as far as certain staples are concerned. Wheat consumption was 191 kg per inhabitant in 1996 as against 160 kg at the beginning of the decade. Rice consumption also rose by 10 kg in a few years (48.2 kg in 1996). The same applies to meat and eggs, although growth rates were more modest and per capita consumption levels were at all events relatively low (red meat: 15.7 kg, white meat: 10 kg, eggs: 44 units). There was a steady rise in fruit and vegetable consumption, marking a certain qualitative improvement in food consumption patterns in the country. Paradoxically, however, there was a drop in milk consumption (from 41kg to 35 kg per inhabitant) and in sugar consumption (from 30kg to 24 kg in the period from 1991 to 1996), whereas edible oil consumption seemed to stagnate around 7 kg per capita.

4.6 - Foreign agri-food trade

The main and foremost feature of foreign agri-food trade on the Mediterranean scale is beyond a doubt its asymmetry, which is more marked here than in many other fields. Taken as a whole, the trade of the countries on the Northern shores amounts in value to 5 times that of those on the Southern shores, and if we confine the calculation to exports, the ratio is 1:13. France alone exports 20 times more than the 4 countries in North Africa together; and with Italy and Spain the ratio increases to 1:38.

It must be stated that it is the latter 3 countries of the "Latin arc" which constitute the 3 "agri-food powers" in the region: in 1997 they totalled almost 80% of the exports and 60% of the imports of the entire Mediterranean. Apart from the countries of Community Europe, only Turkey distinguished itself from the rest by realising almost 6% of the export total and 4% of the import total. The shares of the other countries were lower than 2%, with only a few exceptions (see Chart 4.8).

Though the latter countries very often present a significant level of agricultural foreign trade, more because of the fairly high level of their imports than because of that of their exports. The North African countries, for example, account for 8.3% of the total agricultural exports and only 2.1% of the total agricultural imports of all of the Mediterranean countries.



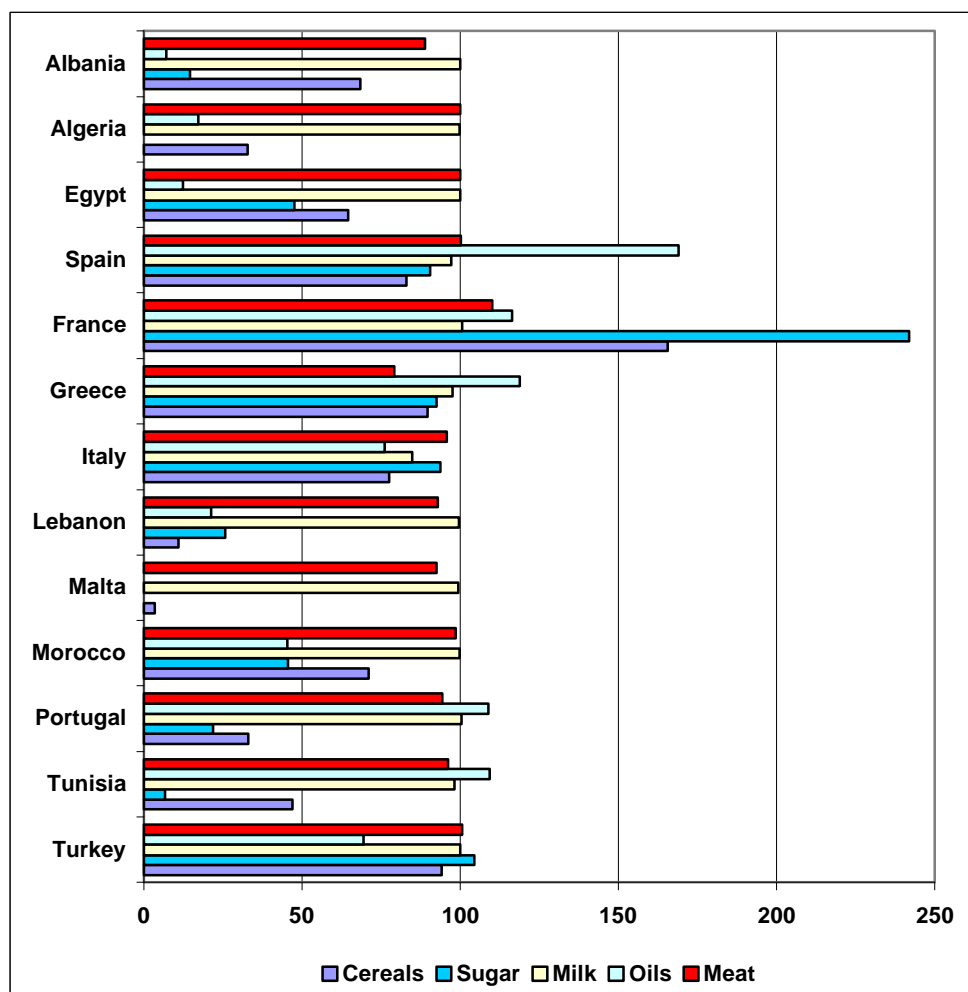
Source: Our elaboration based on figures published in Medagri 2000, CIHEAM-IAMM

Chart 48 – Agricultural exports to imports ratios, 1997 (%)

This indication explains the second major characteristic of the agri-food trade of the Mediterranean countries: surpluses in the case of several countries and considerable deficits in the case of most countries. This feature simply confirms the asymmetry which was already underlined above. Generally speaking, one can say that the North has surpluses and the South has deficits, since agricultural exports cover agricultural imports at a rate of 105% in the North and only barely 23% in the South. This initial approach must be expressed in more specific terms since it could otherwise be misleading. For only 2 EU countries, France and Spain, to which Turkey is added, have surpluses in reality; all of the others, both in the Northern and in the Southern Mediterranean, are having to contend with an external agricultural trade deficit. The countries with the biggest deficits include Algeria, Egypt, Albania and Portugal, with export-import ratios barely exceeding 2%, 13%, 16% and 37% respectively.

This reality is confirmed in part by the self-sufficiency rates of the various countries with regard to the main staple commodities (cereals, sugar, milk, oils, meat – cf. Chart 4.9). It transpires, for instance, that France is the only country whose self-sufficiency ratios for all of these commodities are higher than 100 – and even much higher in the case of cereals and sugar. Spain has an acute cereals deficit, and Turkey's deficit concerns mainly oils, but - as will be seen below - both countries achieve exports levels with other commodities (in particular fruit and vegetables) which are high enough to enable them to generate considerable trade surpluses. Countries such as Portugal, Albania, Malta, Lebanon and Algeria, on the other hand, owe their trade deficits primarily to the particularly low levels of their self-sufficiency ratios for one or several of those staple commodities. Other countries – in North Africa in particular (Morocco, Tunisia, Egypt) – seem to have intermediate positions with average or low self-sufficiency ratios, especially as regards cereals, sugar and olive oils, and export performances which do not suffice to equilibrate the agricultural trade balance. It should be pointed out in conclusion that,

as we have already explained, the apparent “self-sufficiency” in milk and meat in the countries of the Southern and Eastern Mediterranean must be qualified by their low consumption levels.



Source: Our elaboration based on figures published in Medagri 2000, CIHEAM-IAMM

Chart 4.9 – Self-sufficiency ratios for the main foodstuffs, 1997 (%)

The second interesting feature to be underlined concerns the origin and destinations of trade flows. It must be stated that Mediterranean agricultural trade is focused to a large extent on the European Union. The Mediterranean countries belonging to the EU realise between two-thirds and three-quarters of their trade with the other member states, thus highlighting the high degree of Community integration. But the other Mediterranean countries are in fact nonetheless concentrated on the European entity. Most of the countries concerned obtain supplies from the EU amounting to between 50% and 70% of their imports and concentrate their exports on the same regional entity in the same proportions. Only a few countries such as Egypt and Cyprus seem to have diversified their trade to some extent, realising almost half of it outside the EU (with the US and Canada in particular).

France realises one-third of the total agricultural foreign trade of the Mediterranean countries. What is more, French exports account for no less than 44% of the total agri-food exports of the same regional group (Medagri 2000). It must be stated that for more than 2 decades French agri-food exports have been constantly generating surpluses, which contribute favourably to the country's balance of payments situation. In 1998, however, there was virtual stagnation (-0.3%) in the export of processed agricultural commodities – for which France was one of the world leaders in the mid 1990s – after a 12.5% increase in 1997.

Unprocessed agricultural commodity exports developed, on the other hand, achieving record figures in the case of cereals and wines. The growth rate was so high in 1998 that the balance of trade in agricultural commodities exceeded that of unprocessed foodstuffs for the first time since 1993. Taken as a whole, the situation thus continued to be satisfactory, since, despite the increase in imports to be explained by the recovery on the domestic market, the overall surplus was still 59.7 billion francs and it still accounted for almost half of the country's total trade surplus.

And lastly, it should be pointed out that since French agri-food trade is integrated into the EU to a very great extent it was with the other EU member states that France realised 72% of its exports, 69% of its imports and 78% of its trade surplus. It is thus understandable that France attributes great importance to the development of the common agricultural policy and of multilateral negotiations within the WTO.

Italy comes second after France, since its agricultural foreign trade accounts for approximately one-fifth of that of the Mediterranean region. However, contrary to its Northern neighbour, the country has a permanent deficit in its foreign agri-food trade balance. The export-import ratio was 68.5% in 1998, which was a slight improvement compared to the previous year. Although imports grew at a lower rate than exports (3% as against 4.4%), it must be pointed out that the latter increased slightly more in volume than in value (5%), which indicates that Italy exports at relatively low prices (especially in lira) and imports at prices which are fairly stable.

At all events, this was the first time that the very relative improvement in the balance of trade was due to agricultural trade rather than to manufactured goods. This performance was achieved mainly through the expansion of typically Italian products on world markets, particularly those which create a certain consumer image of Italy in terms of authenticity, tradition, etc. (pasta, tomato sauce, wine). This image has been consolidated in the case of certain products (white meat, cheese, olive oil) by successful efforts to improve quality. It must be added that this "quality strategy" has been so successful that in Japan and Southern Asia, for example, agricultural commodities were the only products which were not affected by the economic crisis in those countries.

The fact remains that Italy's chief trading partners are also European: the EU provides 67% of Italian agri-food imports and absorbs 65% of its exports in that sector, with the result that three-quarters of the trade deficit can be attributed to this balance of trade. The non-EU Mediterranean

countries, on the other hand, account for barely 4% of Italian agri-food exports and 6% of the country's imports. And lastly, it must be stressed that certain branches of the agro-industry are highly dependent on foreign outlets. Although this sector as a whole exports 16.5% of the value of its total output, that proportion is almost 65% in the case of (canned) tomatoes, 44.5% in the case of olive oil, 32% in the case of macaroni, spaghetti and similar products and 23% in the case of all categories of processed fruit and vegetables together. It is clear from these figures that competitiveness is absolutely vital.

Agricultural trade is also very important in *Spain*, which comes third in rank, even if it lags quite a distance behind the first two countries, with a share of 14% of Mediterranean trade. The proportions relating to the foreign trade of Spain itself are quite appreciable: agricultural exports accounted for 15% of total exports and agricultural imports accounted for 11% of total imports (1997). Whereas Spain's overall balance of trade shows a deficit, there is an agricultural trade surplus: the export-import ratio is 85% for the former and 120% for the latter.

Spain is actually a major exporter of both fresh and processed fruit and vegetables, wine, olives and olive oil. At the same time, it is a net importer of animal products (including seafood products), cereals, seeds and seedoils, tea and coffee, and tobacco. This fact is thus understandably a frequent determining factor in the attitude which Spain adopts to agricultural issues both within the EU and in respect of its extra-Community partners (see Box 4.3).

Since its integration into the EU, Spain has further intensified its agri-food trade with its Community partners, which have purchased 78% of its exports and supplied 53% of its imports (as against 68% and 43% respectively in 1988). Spain's other major agri-food partners are the non-EU OECD countries and the Latin American countries: 8% of imports and 14% of exports for the former and 2% and 15% respectively for the latter. The

North African countries, on the other hand, account for only barely 2% of Spain's agri-food imports and exports, although these figures are no doubt underestimated due to the importance of illegal trading – realised with Morocco in particular – concerning mainly processed agricultural commodities.

Box 4.3 - Spain's position with regard to Agenda 2000

Spain is still the main recipient of both the structural fund and cohesion fund financing distributed by the European Commission in Brussels. In the course of 1998, several member states argued that Spain should no longer belong to the "cohesion group" (Portugal, Ireland Greece and Spain), since the country met the Maastricht criteria, but Spain defended itself with the argument that those criteria concerned the "nominal" aspect of the economies, whereas the cohesion funds tended to resolve problems of the "real economy". Most of the regions of Spain will continue to be eligible for Objective 1 during the 2000-2006 schedule. However, the rise in costs will no doubt also have repercussions on most of the current structural fund beneficiaries, and on Spain in particular. Given the country's financial position as main beneficiary of the resources and various instruments of the CAP, Spain cannot accept any change whatever in the present CAP financing, particularly as regards direct payments/income. The relevant proposals put forward by Germany in particular were received as interference with Spain's interests. Although they were finally rejected, it is still felt that CAP expenditure will sooner or later be substantially reduced.

From the point of view of the Spanish Ministry of Agriculture, the technical adjustments obtained in the context of the negotiations for Agenda 2000 (such as the increase in grain-sown area, milk quotas and cattle headage), constitute a stage in the process of reducing the historical

discrimination against Spanish agriculture, which was inherited from the Spanish EC accession conditions in 1986. Yet the farmers' and producers' organisations do not view these adjustments favourably, one of their arguments being that Spain's national quota is still inadequate, a fact which is leading to a sort of "black market" in milk, which operates mainly in the regions in the north-west and which is creating dependence on imports in order to satisfy local demand. With regard to the maximum headage eligible for premiums, Spanish cattle farmers see themselves as the victims of discrimination compared to producers in the other member states. The extension of grain-sown area was viewed favourably, on the other hand, whereas Spain still has one of the smallest "institutional areas" in the EU – a fact which implies less compensatory payments. And lastly, the new regulation on the wine sector is considered to be better than the regulation presented by the Commission in 1994, which clearly underestimated Spanish wine-production potential.

The fact remains that the "adjustment" debate has not yet really commenced at the national level, except in Andalusia.

Source: E. Cebrian - J.M. Garcia Alvarez-Coque, Spain, Country Report, CIHEAM, 1999

Portuguese agriculture suffered from its integration into the EU single market in the 1990s, since it was still relatively vulnerable. Its openness (measured by the ratio of imports and exports to gross value added at market prices) thus immediately increased – from 54% to 108% - while that of the agri-food industries increased from 49% to 59%. This development was due primarily to imports, whose share in gross value added at market prices rose from 47% to 93%, as in the case of agriculture. The export-import ratio was thus barely 16% in 1998, and when one takes account of the products of the agri-food industries it was still less than 36%. These

figures demonstrate the extent of Portugal's agri-food trade deficit, which, moreover, has actually become structural.

The commodities for which the country apparently depends on imports to a very large extent are namely wheat, maize, dried beans and fish, with self-sufficiency rates of 22%, 44%, 38% and 54% respectively. On the other hand, the country has a surplus or is self-sufficient in the case of certain fruits and vegetables (tomatoes, pears), fresh and powdered milk, and butter, and it comes fairly close to being self-sufficient in the case of commodities such as citrus fruit (80%-90%), meat (beef and veal and mutton and lamb: 68%-72%, poultrymeat: 99%), eggs (96%), and olive oil (71%).

Although Portugal now realises almost 70% of its agri-food foreign trade with the member states of the EU, it must be stated that the major part of its trade actually concerns the two neighbouring countries: Spain and France alone account for almost 39% of Portuguese agri-food exports and 50% of agri-food imports.

The agri-food balance of trade in *Greece* showed a surplus until the early 1980s, after which date the export-import ratios have varied between 80% and 95%. In 1997, exports covered 81% of imports. This agri-food deficit weighed heavily on the overall deficit in the country's balance of trade. For agricultural commodities accounted for almost one-third of total exports and 15% of total imports. The main changes which came about in the structure of agri-food trade are evident:

- stagnation in the exports of traditional products such as tobacco and grapes;
- a considerable increase in fruit and vegetable exports;
- a marked increase in meat and milk product imports.

This development reflects both the difficulty of agricultural production to adapt to changes in consumer patterns and the lack of competitiveness

on foreign markets. Thus, the increase in the consumption of meat and milk products inevitably led to steep increases in the imports of such products, since national production could not meet demand. On the whole, exports grew at a lower rate than imports, which explains why the balance of trade deteriorated to some extent.

The current structure of the agri-food trade balance shows that Greece exports mainly fruit and vegetables, tobacco, cotton and olive oil; and it imports meat, milk products and – to a lesser extent – cereals, fruit and vegetables, and seafood products. There was a sharp drop in fruit and vegetable exports as the result of the crisis in former Yugoslavia, the main effect of which for Greece was that the transport routes to Central Europe, which was precisely where its main export markets were located, were closed. The loss of those market outlets was not compensated by the opening of markets in Eastern Europe, where the development of Greek exports was very limited.

In *Turkey*, the trend which has been observed since 1995 has continued: foreign trade surpluses in animal and fish commodities and deficits in vegetable commodities. Since the latter account for by far the largest share in agri-food trade (86% of imports and 90% of exports), the overall agri-food trade balance still shows a deficit, with an export-import ratio of 82% in 1998. There has been a downward trend in the export of several commodities in the last 3 years - lentils, potatoes, onions, citrus fruit and apples - whereas the trend has been upward in the case of barley, chickpeas, dried beans and tomatoes.

The situation of Turkey with regard to food self-sufficiency can be shown more specifically with more detailed data (cf. Chart 4.9), which is less general but concerns only cereals and oil products. It shows that the country only has a surplus in barley, local production covering consumption needs at a rate of 112%, and the rate has, moreover, been steadily rising (107% in 1997, 102% in 1996). But the same indicator is only 87% for

wheat, 71% for maize and 64% for sunflowers. This rate is improving steadily in the case of sunflowers, whereas it is stagnating in the case of wheat and maize.

Turkish agri-food trade remains concentrated on OECD countries to a large extent, and in particular those which belong to the EU. In 1998, OECD countries accounted for 63% of Turkish imports and 73% of Turkish exports, and the EU-member OECD countries accounted for almost half of the same aggregates. Germany is both the principal customer and the principal supplier (accounting for 20% of the country's exports and 16% of imports).

In *Morocco*, foreign trade in agricultural commodities developed unfavourably in 1998, registering the effects of the drought of the previous year and inadequate performance in the current farm year. Under the pressure of grain imports – which grew by 61% in volume and 54% in value -, agricultural imports increased by 15%, whereas there was virtual stagnation in agricultural exports. The deficit in the agricultural trade balance consequently worsened, amounting to almost 802 million US dollars, which is equivalent to an export-import ratio of only 53% - 7 percentage less than in the previous year. This state of affairs was due primarily to trade in foodstuffs, since it was naturally predominant in the agricultural trade balance. In 1998, agricultural trade accounted for 79% of exports and 72% of imports.

Non-food trade, in terms of exports, concerns in particular wood and cork, hides and leathers, agar-agar, herbs and medicinal plants, and flowers, and in terms of imports it concerns wood, cotton, breeding animals, raw tobacco, seed potatoes, and wool. Actual food exports are still dominated by three groups of products: citrus fruit (oranges and clementines), early fruit and vegetables (tomatoes and potatoes) and canned products (olives, fruit and vegetables, juice), with respective shares of 39%, 20% and 21%. Then there are several legumes, wines and olive oil.

Despite the increase in citrus fruit exports and the even greater increase in tomato exports (+49%), the growth rate for food exports in 1998 was low – barely 3%. The fact is that several instances of below-average performance had to be compensated for, particularly in the case of olive oil, potatoes and certain canned vegetables.

The food import structure confirms Morocco's strong dependence on staple commodities, since domestic demand is still higher than local output. This deficit concerns cereals – particularly common wheat and, to a lesser extent, durum wheat and maize, seeds and vegetable oils, sugar and milk products. These commodities accounted for 48%, 16%, 15% and 6% of food imports respectively, i.e. a total of 85%, which was 5 points higher than the previous year. This growing concentration on several staple commodities is to be attributed to cereals to a large extent, cereal imports having increased tremendously, whereas imports of other products actually decreased. The remaining share of 15% covers mainly tea, coffee, several legumes and red meat.

This general deterioration in the agri-food balance of trade, which worsened in 1998, is a matter of great concern on the eve of decisive negotiations both at WTO level and in the context of the Association Agreement between Morocco and the European Union, which will lead to the liberalisation of agricultural trade with a view to achieving greater integration of the world economy and to building up a Euro-Mediterranean free trade zone.

In *Algeria*, agri-food imports are still higher than exports (which were confined to limited quantities of dates and wine and accounted to only 0.3% of total exports in 1998). In view of the relatively good performance at production level, imports grew less rapidly than in the past (by 2.4% in value), but the agricultural trade balance deficit is estimated at 2.5 billion dollars, which was equivalent to one-fourth of the revenue from hydrocarbon exports.

The structure of these food imports reveals the strong predominance of cereals and their derivatives (32.6%), followed by milk and milk products (15.5%), vegetable oil (11.7%) and sugar (9%). This import profile, which highlights the areas of the country's food dependence, is comparable to that of the other countries in the Southern Mediterranean region. At all events, Algeria's self-sufficiency rate seems to be lower in the case of a larger number of products. In the 1990-1997 period, foodstuff demand was covered by imports at the following rates: seed oils, sugar, coffee, tea and rice: 100%; cereals: 68%; dried beans: 70%; milk and milk products: 61%; red meat: 6%.

It must be pointed out furthermore that the liberalisation of foreign trade in agricultural commodities and food products, which has been under way since 1994 with a view to membership in the WTO (see Box 4.4), has made it possible to supply the domestic market with processed food products to a fairly large extent and at the same time has encouraged the creation of a large number of small and medium-sized enterprises in the agri-food sector, which use imported intermediary products. This increase in the supply of processed goods has mainly benefited the domestic market, since exports have barely increased.

Box 4.4 - Algeria's negotiations for joining the WTO and association with the EU

Algeria has been negotiating its accession to the World Trade Organisation and the establishment of a free trade zone with the European Union for some time. Little progress was made in 1998 and 1999 with regard to joining the WTO. After signing the final act of the Uruguay Round in Marrakech in 1995, Algeria filed its memorandum in June 1996 and replied to the questions subsequently asked by several countries. An initial meeting was held on the memorandum in Geneva between Algerian and WTO experts, and Algeria has since been preparing the factors required for the final negotiations. This is liable to take some time in view of the complexity of the studies and reflection to be conducted in this field.

As regards the negotiations with the European Union on Algeria's accession to the free trade zone, preparatory talks were held in 1998, but the positions of the parties still seem to be a long way from consensus. The main stumbling block is Algeria's request for freedom of movement of persons, which the EU rejects. The other moot point is the application of free trade principles to agricultural commodities; the EU wants to exclude Mediterranean agricultural commodities from the agreements for a certain amount of time in view of the pressure to which it is subject from its producers in the Mediterranean zone.

Source: S. Bedrani, Algeria, Country Report, CIHEAM, 1999

Tunisian imports consist mainly of staples such as cereals, seed oils, sugar and milk products. On the other hand, the country exports primarily olive oil, seafood products and, to a lesser extent, cereal flour and meal and dates. The extent to which domestic consumption needs can be covered by domestic production still depends of course on weather conditions, but domestic output seems in general to be covering a growing number of commodities. In particular, self-sufficiency in milk products seems to have already been achieved in 1998 – whereas it was forecast for 2001. Self-sufficiency in milk was only 50% at the beginning of the 1990s.

The overall *export-import* ratio in Tunisian foreign agri-food trade deteriorated in 1998, dropping from 77.0% to 68.2%, i.e. by about 10 percentage points. This deterioration in the food trade balance deficit was due more to exports, which dropped by 12.9% from 1997 to 1998, than to imports, which actually virtually stagnated (-0.4%). The decrease in exports was due in turn primarily to poor performance in the olive oil sector, where there was a sharp drop in both shipments and prices in the context of a market which was abundantly supplied by the good harvests realised in most producer countries. Olive oil shipments, which accounted for almost half of the value of agri-food exports in 1997, dropped from 120,000 to 95,000 tonnes in 1998, and olive oil export prices also fell sharply from 2285 to 1778 dinars per tonne – to the extent that this leading product in Tunisian export activities accounted for only less than one-third of exports in 1998.

In *Egypt*, despite the reforms under way since the mid 1990s with a view to liberalising foreign trade and, in particular, to developing agricultural exports, it must be stated that there was very little growth in those exports in the course of the 1990s – the level reached in 1997 was even slightly lower in absolute value than the level achieved in 1990 (298 million US dollars as against 317 million US dollars). In relative terms, the share of agricultural exports in total exports even dropped from 15.6% in 1990 to almost 8% in 1997. Agricultural imports grew, on the other hand, even if their share in total imports decreased, particularly towards the end of the period, when they dropped sharply by 19% to a level of 15%.

There are two commodities which play a predominant role in exports – cotton and rice; in 1998, these two commodities alone accounted for 58% of the total. Other commodities which are exported to a lesser extent include potatoes, onions, dried beans and frozen vegetables, medicinal plants, citrus fruit and peanuts (these commodities together accounted for one-fourth of exports). As regards imports, Egypt imports mainly staples such as wheat, maize, vegetable oil, milk products and sugar: these commodities

together accounted for almost 95% of agri-food imports in 1998. Yet this food dependence does not seem to be worsening; on the contrary, judging by the development of self-sufficiency rates since the beginning of the 1990s, there has been a definite improvement as regards most of the above-mentioned commodities. Since the beginning of the 1990s, for example, the self-sufficiency rates for wheat, sugar and seedoil have apparently improved, and as regards milk, margarine, eggs and white meat, Egypt seems to be virtually self-sufficient. It even produces a surplus of rice as well as fruit and vegetables, with self-sufficiency rates ranging between 110% and 120%. However, the self-sufficiency – or surplus – levels actually seem to have dropped in the case of red meat in particular (to a current level of around 80%).

Box 4.5 - The process of Lebanese accession to the World Trade Organization (WTO)

Lebanon has regarded accession to the World Trade Organization not as an end in itself but as a major component of its foreign trade policy and of its vision of the economic development of the country. The major benefits which Lebanon should obtain from joining the WTO include the opening of new markets and the trade opportunities as well as the corresponding transfer of expertise and technology. This phase should also encourage foreign investment, which traditionally seeks safe and constant interaction and treatment as well as clear legal protection. A further advantage would be the legal framework provided by the WTO for most commercial disputes.

In order to achieve these objectives, the Lebanese government has taken the following measures to prepare for accession to the WTO:

- the establishment of a committee on the modernisation of laws and regulations within the Ministry of Economic Affairs and Trade; the passing of the Copyright Act in April 1999
- the completion of the privatisation programme;

- the preparation of regulations for the introduction of a value added tax through which customs duties can be gradually reduced;
- preparation of the regulations for better trading efficiency, which would facilitate transactions and thus reduce the cost of foreign trade;
- reorganisation of the Norms and Standards Institute.

In addition to the above measures, the government is elaborating a clear holistic strategy based on the following focal points in order for Lebanon to be able to join the WTO:

- a) analysis of the major constraints which emerge when one joins the WTO and, thus, efforts to set priorities and to devise an integrated plan of work to facilitate the process;
- b) the establishment of a clear co-ordination plan within the public administration with a view to preparing for the negotiations, with a sound basis for allowing the private sector to participate in the process;
- c) training and retraining for public administration employees;
- d) support for acceptance of the process through better awareness to be achieved through the media, universities, trade unions, NGOs and public lobbies;
- e) reconsideration of several rules in legislation and regulations in order to achieve better adaptability to the international systems;
- f) efforts to obtain national and international support for the WTO affiliation process, in particular through talks with the main trade partners, the Arab countries and the countries of the European Union, especially since Lebanon has commitments in the context of the Arab Free Trade Agreement and is in the process of concluding the Euro-Mediterranean Partnership;
- g) efforts to seek the support of international organisations and partners which are members of the World Trade Organisation in order to ensure that there is an appropriate administrative framework for the success of the operation.

Source: M. Hanzé – W. Khoury, Lebanon, Country Report, CIHEAM, 1999

5 *Development of agricultural and agri-food policies*

5.1 - Introduction

The aims of the agricultural policies implemented in the Mediterranean countries may be classified into two categories depending broadly on whether their point of reference is "northerly" or "southerly".

An improvement in agricultural performance, especially in irrigated agriculture, and food security are the aims pursued in the majority of the Southern Mediterranean countries, whereas in the European Mediterranean countries, efforts appear to be directed more towards enhancing the competitiveness of the agri-food system at all stages of the process, greater account being taken of environmental constraints, and strengthening the policy of improving food quality and safety.

In the first category of countries, the reform of the agricultural sector undertaken in recent years via a process of disengagement by the state and granting freedom for private initiatives is making headway and even speeding up as markets and economies open up to the outside world. The development strategies adopted focus on the following approaches:

- the resolution of problems of a structural nature and those associated with optimising the use of factors of production;
- "the dam-building policy" justified by the dryness of the climate and the irregularity of rainfall, which should allow modern, high-performance agriculture to become established;
- the strengthening of agricultural support services and in particular research and agricultural advisory and vocational training services, which are the fundamentals of any process of modernisation and improvement of performance in the sector;

- the implementation of undertakings entered into in the context of the World Trade Organization with the aim of pursuing the process of liberalisation stemming from the Marrakech agreements.

It is in conjunction with this last point - trade liberalisation - that difficulties arise in the majority of countries which are carrying out policies to protect their production and to meet more of their internal consumption demand through domestic production.

The 1999 reform, adopted at the Berlin Summit, will no doubt prove to have marked a decisive turning point with significant long-term implications for the countries of the EU. Henceforth, the major strategic aim is no less than the establishment and defence of a "European agricultural model" (see Box 5.3). With this reform, the multiple functions of agriculture are recognised and the scope of the common agricultural policy is opened up to include new tasks: in addition to preservation of the environment, rural development becomes the "second pillar of the CAP".

We will now examine in turn structural and investment policies, price and market policies, rural development policy and agro-environmental policy.

5.2 - Structural and investment policies

The structural policy in the EU countries is aimed at promoting development and structural adjustment in regions which are lagging behind (regions in which the average GDP per capita is less than 75% of the EU average), supporting the economic and social re-conversion of regions experiencing structural difficulties and implementing measures to encourage the development of human resources. The most frequently used measures are support for producers taking early retirement, aid for the modernisation and diversification of holdings through investment and help to allow young farmers to become established. The new arrangements

relating to structural policy in the EU are to be found in the Agenda 2000 reforms (see Part I, Chapter 2.2.).

These provisions, which go beyond the existing structural policy, are aimed at:

- enhancing the effectiveness of structural instruments by improving management and clarifying the division of responsibilities between the parties involved;
- maintaining the level of budget resources required for economic and social cohesion;
- extending the regional cohesion efforts to future member countries.

In *Italy*, intervention at the national level is contained in Act 441/98, also known as "*the young farmers' package*", and backed by resources of around 87 million dollars over three years. This legislation, which is designed to encourage an entrepreneurial spirit among young people in agriculture, provides for tax breaks and loans to young people below 40 years of age. Due account is taken of the relative difficulties arising from the nature of the agricultural holdings: only 4.5% of Italian farms are run by farmers below 35 years of age (the EU average being 7.7%) whilst 37% are operated by farmers over 65 years of age (the EU average being 27%). More serious still, 94% of farmers do not have anyone to take over the farm from them. Consequently, provision has been made for aid for farm management when taking over a farm or when farmers below 40 years of age take over their first farm. Such aid can also be given to one-person companies, partnerships, or co-operatives in which two-thirds of the partners meet the necessary requirements and undertake to remain in the business for more than 5 years. Tax exemptions are granted on inheritances and gifts involving the transfer of property to young farmers, provided it does not go beyond the third degree of kinship. Financial incentives are also given for investment plans put forward by young farmers.

A recent report drawn up by the Ministry for Agricultural Policies sets out the "reference guidelines" at regional and national level for the global development programme to be carried out during the 2000-2006 programming phase in those regions qualifying under Objective 1 of the conditions for support from the Community Structural Fund (regions lagging behind in terms of development).

This report sets out the priority approaches for action in the sector which should form part of the next Community Support Framework (CSF) on the basis of the details contained in Agenda 2000. These priority approaches include:

- improving the competitiveness of the agricultural and agro-industrial systems as part of a "branch" approach;
- support for the development of rural areas, including making the most of its environmental, historical and cultural resources. Help in the form of direct aid for investment and consolidation of farmland is proposed for this purpose. There is also provision for aid for small and medium-sized companies that process and market quality products as well as for forestry and reforestation, the diversification of local economic activities, support enabling young farmers to become established and aid for setting up companies in less favoured areas.
- horizontal support: this involves carrying out measures in favour of development support services, in particular, innovative research, training and advisory pilot schemes, and support measures for a number of inter-regional industries for the design and production of financial engineering tools.

In *Spain*, the structural policies still aim to provide support for the irrigation sector, the modernisation of farms and crop insurance and credit policies. Public and private loan initiatives for agriculture in Spain are relatively well-developed; they accounted for approximately 62% of the gross value added to the factor cost. In 1997, public investment for

improving agricultural structures came partly from the investments made by the Ministry of Agriculture and Agro-Industrial Policies (MAAP) and financed with budget credits provided for in the general State budget (for a total of 152 million US dollars) and partly from subsidies to private investors (480 million US dollars). The MAAP investments are mainly channelled into farming and rural infrastructures, irrigation systems, making good damage in the wake of catastrophes, and plant and animal health and research.

In the case of agricultural insurance, the MAAP draws up and publishes a national agricultural insurance plan each year for farmers and aquaculturists. This annual insurance plan aims to guarantee incomes by compensating for economic losses caused by unfavourable weather conditions. The 1999 plan, worth 154 million US dollars, covers all crops, five animal husbandry products and four aquaculture products. The insurance must be taken out with the "Agroseguro" group (Spanish Group of Insurance Entities of Combine Crop Insurance). Farmers and aquaculturists can insure their production on an individual or collective (co-operatives, farmers' associations, etc.) basis.

The basic legal framework for farm structural development policies in Spain is Act 19/1995 on the "modernisation of farm properties". This legislation applies at the national level, although each Autonomous Community establishes its own implementation rules. More specifically, each Autonomous Community must draw up the necessary rules and procedures for obtaining public aid. The Autonomous Communities can thus guarantee additional aid to meet their own requirements.

Act 19/1995 identifies improving agricultural structures and modernising farms to increase the sector's efficiency and competitiveness as the priority goals of Spanish agricultural policy. The major challenge is achieving a substantial cut in production costs to become more competitive on European and international markets. The act defines the type of farms

and farmers that can benefit from structural aid. The main feature of the scheme is linked to the definition of a "priority farm" which can benefit from tax advantages and reduced lawyer's fees and registration costs when farms are being sold. The act grants preferential conditions to "priority farms" as regards subsidies, insurance, structural improvements and the allocation of quotas.

Irrigation has been a recurring priority for those determining Spanish agricultural policy, since it is a major requirement given the country's physical and climatic constraints (irregular distribution of rainfall, poor soil quality). The agricultural sector is currently facing serious water resource constraints, some of which are the result of bad farming practices: excessive or inappropriate use of nitrogenous fertilisers, particularly in the south-west regions, leading to poor water quality; over-use of underground water resources resulting in wells drying up, infiltration of sea water and salinity; growing competition in the demand for water from other sectors (tourism, urban development, etc.). The Spanish Agriculture Minister therefore submitted a proposal for a national irrigation plan to the farming organisations, co-operatives, the representatives of the Autonomous Communities and the political parties in November 1998. This plan makes provision for modernising 1.1 million hectares and irrigating 228,000 hectares.

Agricultural research in Spain is carried out through the MAAP's sectoral research and development (R&D) programme, led by the National Agri-food Research Institute (NARI). The sectoral R&D programme finances research activities at the NARI Research and Technology Centre and at Centres transferred to the Autonomous Communities. The basic aims of the 1996-99 R&D programme are as follows:

- improving competitiveness and profitability in farming and the agri-food industry through technological innovations, cost reduction and diversification of production in the context of sustainable farming;

- developing technologies aimed at improving food quality and safety and developing new products;
- developing analysis and management tools for use in rural areas, bearing in mind their impact on the ecosystems;
- carrying out analyses and prospective studies of markets and distribution circuits in order to channel production more effectively;
- carrying out research into technological change (transfer of technology and adopting technical innovations).

In *Portugal*, the main support measures for direct investment in agriculture can be divided into three areas:

- investments in off-farm collective infrastructures, of which water projects and electrification are the most important;
- investments on farms, of which machinery and equipment account for 50% and building-work 23%. Specific measures apply to vines and olive growing. There are more generous support measures for young people under 40 who are responsible for 40% of farm investment;
- intellectual investments: research, training, education, studies.

The programmes include other support instruments with a more limited geographical impact (in the case of the Portuguese islands). Support for infrastructures and material investment is financed almost wholly from public expenditure. Investments in farms (80% of the total) are financed primarily by the farmers themselves, with public aid mainly intended to direct and speed up the process.

Table 5.1 - The scale of investment support for farms in Portugal

	1994-98
Investment with public support/total investment (as a %) (1)	55.2
Support for investment/investment with public support (as a %) (2)	42.2
Support for investment/total investment (as a %) (1) x (2)	23.3

Source: "Panorama Agricultura 1998", GPPAA, October 1999

In *France*, the "Loi d'Orientation Agricole" (Agricultural Guidance Act) voted in by the French Parliament in July 1999, which will come into force at the end of the year, marks an important phase in French agricultural policy, especially on account of its main provision, the "Contrats Territoriaux d'Exploitation" (CTE) (Regional Farming Contracts). Indeed, the Government would like to make the CTE the new focal point of its guidance policy for farm structures (see Box 5.1). The aim is to guide the development of farming systems towards a "sustainable and multifunctional" type of agriculture within a locally-defined collective framework.

Box 5.1 - The Agricultural Guidance Act and the Regional Farming Contracts in France

These are 5-year contracts concluded between the state and a volunteer farmer which must include two components:

- a socio-economic component: creating added value and jobs by creating new work-start projects, incorporating quality lines and diversifying activities;
- an environmental and territorial component: protecting the natural environment and bio-diversity, observing a countryside charter.

The farmer undertakes to carry out the activities or implement the practices set out in the contract in return for a flat-rate annual amount of aid. An important aspect of this policy is the link between the individual nature of the contracts and the desired goal of having an effect locally on rural development. In order to achieve this, "standard" Regional Farming Contracts (CTE – Contrats Territoriaux d'Exploitation) incorporating all of the measures deemed most appropriate, are drawn up for each department.

The rather complex question of financing these contracts can be broken down as follows:

- for the first contracts in 1999, national funding is granted to which the European Union has agreed to pay an additional amount because of the innovative nature of the measure and its relevance. The total amount should be 81 million US\$; of the basis of estimated average aid of 3,900 US\$ per annum (or 19,600 US\$ over 5 years), some 20,000 contracts could be signed.
- from the year 2000, the funding earmarked for agro-environmental measures (except the grassland premium) should gradually be switched to the CTE. Moreover, in the context of the CAP reform implemented as of this year, France has opted to implement a modulated system of aids, i.e. a levy of up to 20% on the compensatory payments received by farmers in case where the total amount received will be in excess of 40,700 US\$ (which corresponds, for example, to approximately one hundred hectares of cereals in an area of average productivity). The savings thus obtained on EAGGF spending, to which the French state will add an equivalent amount, should make it possible to conclude around 100,000 CTEs when the programme is up to speed.

There is no doubt that farmers in both the Mediterranean regions and mountain areas believe that the CTE could be a powerful tool for them in re-balancing aid and income through the diversification of production and activities which they are already trying to put into practice.

Source: G. Miclet, France, Country Report, CIHEAM, 1999

Other forms of aid, established within the framework of the CAP, relate to early retirement measures. Their main purpose is the restructuring of holdings, particularly by encouraging schemes to enable young farmers to set up or to increase the size of holdings. Bearing in mind the very rapid fall in the number of farms, the mechanism has been limited since 1998 and

has focused on social aid for farmers facing economic and social hardship. As a result, the number of beneficiaries (4,800 new cases in 1998 and 20,500 receiving help) should be much smaller in future.

Two of the main tools of French structural policy are the “Plans d'Amélioration Matérielle” (PAM) (Material Improvement Plans) and subsidies for young farmers. The PAM work by providing help, in the form of a loan with an interest rate subsidy, and advice to farmers embarking on an investment programme to improve the farm's economic and social position whilst taking account of certain environmental goals (ensuring livestock units meet standards). 5,900 PAM were authorised in France in 1998. This figure is 12% down on 1997. 112,000 PAM have been authorised since 1986, or an average of 8,500 a year. The main reason for the decline is the fall in interest rates, which limits the advantage to be derived from loans with subsidised interest rates.

Aid for young farmers is made up of two main components which are linked to each other, with a farmer usually benefiting from both: a capital premium, the “Dotation Jeune Agriculteur” (DJA) (Young Farmer's Grant), of an extremely variable amount depending on the area (higher in mountain areas) and the situation (the lowest amount is 8,460 US\$ and the highest 55,750 US\$) and a loan with a subsidised interest rate. 8,200 applications were submitted in 1998 (-12.5% compared to 1997). Overall, the annual number of DJAs has remained between 8,000 and 9,000 since 1992.

In Greece, approximately 80% of the help from the programmed structural policies forming part of the Community Support Framework (CSF - 1994/1999) relating to the Structural Fund is channelled into productive investment and directed towards 5 kinds of development activities:

- improving communications inside the country and promoting integration through investment in the main infrastructures;

- improving living conditions through action on the environment, urban development and sanitation;
- development and improved competitiveness of the economic fabric by drafting industrial policy measures and modernising agriculture, tourism and fishing;
- developing human resources and strengthening labour market structures;
- minimising regional disparities and improving access conditions to island regions by setting up 13 regional development programmes.

On the southern shores of the Mediterranean, in *Morocco* in particular, special attention should be given to the land policy measures set out in the Finance Act, such as land development within irrigated areas, or the opening up of a number of "grouped registration sectors". In addition to these measures, the policy set out in the Draft Five-Year Plan 1999-2003 as regards improving the physical composition of farm holdings is based on the following broad outlines:

- promoting the formation of viable farm holdings to encourage the intensification of the production process, particularly through land consolidation and the fight against the fragmentation of farm properties;
- guaranteeing farmers stable conditions in order to encourage investment, particularly by continuing with measures for privatising collectively-owned land;
- lifting all legal constraints that hamper the intensive farming of land;
- promoting the registration of land and buildings, extending the national land register to the whole of the AAU, completing the mapping process.

Depending on the year, public investment in agriculture accounts for between 12 and 15% of total public investment, compared with more than a quarter in the past. Sources of private funding also fall far short of requirements. Bank loans in 1998 covered only 17% of farmers' funding needs, with 14% being met by the farmers' national credit fund and barely 3% by the private commercial banks. According to official estimates, private investment fluctuates from year to year between 100 and 200 million US\$, which is well below what the sector needs to cover depreciation.

The scarce resources are compounded with the very limited possibilities for their allocation. The large-scale irrigation programme and the amount of land under irrigation still soak up most of the resources available for irrigation projects compared with the other aspects of rural and agricultural development policies. This category of expenditure takes up nearly 55% of total spending under the 1999-2000 investment budget, as it has done in previous years. The development of rain-fed agriculture as a whole - i.e. close to nine-tenths of the AAU - receives only 18% of the funding. Measures to support agricultural development receive the same proportion of the budget, whilst training and research are given barely 6%.

Agricultural research in *Morocco* is still plagued by a shortage of resources, even though it is acknowledged to have scored several undeniable successes, particularly in essential areas such as genetic improvement or rural and water engineering. The funding allocated to research in 1998 was barely 0.25% of the GAP, whereas the figure in a number of comparable countries is 1.3% and up to 3.3% in the developed countries. Nevertheless, there is also a need to redefine the priority guidelines of research and to re-deploy the existing facilities to make them more relevant and efficient.

In *Tunisia*, investment in the agriculture and fisheries sector grew by 12% in volume over the previous year in 1998, up from 618 million US\$ in

1997 to 692 million US\$, which is close to 15% of overall investment at national level. Investment in the agriculture sector in 1999 should be around 770 million US\$, or close to 14% of the country's total investment. These investments are mainly intended for water projects (37% of total investment in agriculture), livestock rearing (15%) and tree-growing (10%). The breakdown by category of operator shows that private entrepreneurs were responsible for 50% of these investments.

A 10-year plan for agricultural research was drawn up in 1998 and adopted for the period 1999-2008. Investment earmarked for agricultural research during the 9th Plan amounts to 25 million US\$. Ten priority research areas have been identified for the first 4-year phase (1999-2001) and a programme involving 40 unifying projects has been set up. Investment for this four-year period has been increased to 29 million US\$ and is intended to back research projects in the 10 selected priority areas, strengthen the institutions, allocate research on a regional basis, put its results to good use and set up a national information and communication system in this area.

Adding together all the funding received by the national agricultural research system (funding from inside and outside the country) over the past 3 years (investment, operating costs including salaries) would give an annual average total of 15 million US\$, which is around 5.5% of the AGDP. Whilst higher than figures for neighbouring countries, this total is still relatively low, but should improve over the next few years as a result of the expected increase in investment.

The pilot advisory scheme operated in Tunisia by the profession in the 6 chosen areas seems to be producing good results following the increase in the number of support staff, the intensive retraining of advisory staff and better targeted advisory activities that meet farmers' requirements. This trial will be assessed at the end of 1999 before being extended to other regions. Furthermore, a vocational training programme put forward by the

Agricultural Investment Promotion Agency (Agence de Promotion des Investissements Agricoles - APIA) was launched on an experimental basis in 1998. This programme is intended for potential young developers and farmers' sons with "baccalauréat" ("A level" equivalent) standard qualifications keen to undertake a project for developing land belonging to them, or made available to them by their parents. For this purpose, they receive additional technical training in management and project organisation over a 24-week period in order to prepare them for managing farm enterprises. Six-week practical courses in farming and management form part of this training programme. The first two batches of some 30 participants are expected to complete the training in 1999. Finally, the Agricultural Advisory and Training Agency (Agence de Vulgarisation et de la Formation Agricoles - AVFA) is launching a short continuous training programme for farmers and fishermen and their sons. Nearly 10,000 farmers came forward to take part in the various continuous training programmes offered by the 40 AVFA vocational training centres in 1999.

In *Algeria*, the most important developments in structural policy have impacted on land policy, investments in infrastructures, agricultural research and advisory activities. With regard to land policy, land from the former self-managed sector remains the property of the State and is run privately by workers' collectives organised into collective farms (exploitations agricoles collectives - EAC) or individuals to whom it has been allotted (exploitations agricoles individuelles - EAI). Ever since the structural adjustment plan was put into practice (1994), agricultural policy has been unclear as to the definitive status of this land. Moreover, a draft law providing for the sale or leasing of this land is before the National Assembly which has been putting off its examination from one session to the next.

The 1987 law left around 180,000 ha of AAU run in the form of State farms which are supposed to be model farms and seed production farms.

172 of these farms were transferred to Public Holding Companies⁴⁰ in 1998 to be managed on a commercial basis whilst continuing to produce selected seeds and various other factors of production. The "Agro-Alimentaire de Base" holding company was entrusted with 87 farms mainly devoted to arable crops and beef cattle rearing. The "Agro-Alimentaire Divers" holding company took over 85 farms mainly involved in tree-growing or sheep-rearing. Around a dozen farms have been kept under the supervision of the Ministry of Agriculture and Fisheries for use in research and as national stud farms.

As regards private land, the aim of the policy is to draw up and implement legislation that should enable farmers and the State to benefit from laws and regulations that pave the way to modern land management. A number of preliminary draft laws on the consolidation of farmland, farming leases and the right of pre-emption by the State were drawn up in 1998. These laws were needed because of the current difficulties that tenant farmers face in negotiating sufficiently long leases to see a return on investments in irrigation and planting. Indeed, in the majority of cases, contracts dictate that farmers are only able to rent the land for one season which makes it too risky for them to consider medium- and long-term investments.

Investment in public infrastructures for agriculture has mainly gone to water engineering projects (dams, drilling, creating irrigated areas), forestry and the preservation of fragile ecosystems (steppe and mountain zones). Water policy has been characterised by a relatively steady level of investment. However, whilst some 10 dams have been completed over the last twenty years, the water resources made available as a result have not

⁴⁰ The holding companies manage the State portfolio made up of shares which the latter holds in economic undertakings. Two holding companies were set up in 1996 bringing together the public undertakings and offices in the agriculture and food sectors : the "Agro-alimentaire de base" holding company inherited all the public enterprises operating in the cereals and cereal-processing sphere.

been used - or not properly used - for irrigation due to insufficient levels of investment downstream (primary and secondary irrigation networks). The security conditions that have prevailed in certain rural areas since 1992-1993 have played a part in the slow-down in investment in this area. The water policy has been relatively more successful in the Saharan regions. At the end of 1998, drilling work carried out as part of the farm ownership scheme (accession à la propriété agricole - APFA) since 1984 has made it possible to irrigate areas covering 99,700 ha in these zones (of which around 70,000 were effectively irrigated). Since the APFA is only of interest to small and medium-sized holdings, it is continuing its work in this area using another approach: enterprise farming. This approach involves the State preparing areas of up to 1,000 ha (soil surveys to ascertain their suitability for irrigation, carrying out the necessary drilling work, bringing in electricity for pumping water, building access tracks). These areas are then granted as a concession to investors with enough funds to develop them in line with specifications drawn up by the agriculture department. Those behind the scheme feel that enterprise farming in the Sahara should be increasing "strategic" agricultural crops (cereals, dates) and early vegetables for export. There are plans for it to be extended to some 150,000 ha and around 10,000 ha should be prepared by the end of 1999 and 16,000 ha in the year 2000.

Public investment in forestry and soil improvement represents one of the main items of public expenditure, even though the loans taken up in 1997-1998 have fallen sharply in volume. Forestry and the fight to combat desertification have been the main areas to benefit from the so-called "Major Works" programme launched in 1994 to create jobs and reduce the growing level of unemployment. There were consequently plans for developing and protecting 11 catchment areas affecting 13 regions,

consolidating and extending the green barrier⁴¹ which covers 9 regions and for maintaining and extending forested areas over 36 regions.

Agricultural research has benefited from the priority the Government has given to scientific research since 1998. An act was passed giving special status to researchers and setting the target of allocating 1% of GDP to scientific research by 2002. Funding has thus been substantially increased since 1998 and organisation of the research has been considerably improved. Researchers will henceforth have to meet calls to tender in the priority research areas. Axing prior public financial control has made the use of funding much more flexible. It should also be pointed out that a measure of rationalisation has been achieved as regards the organisation of agricultural research. A Livestock Institute has been set up, bringing together the Technical Institute for Small Animal Rearing and the Technical Institute for Cattle Rearing. The National Institute for Agricultural Research now co-ordinates the whole research programme and is adopting a stricter approach vis-à-vis its scientific council which now meets more regularly.

The policy on agricultural training has been to restrict the number of training institutions depending on the Ministry of Agriculture and Fisheries. Consequently, some twenty training centres have closed down over the last few years and their premises have been handed over to the Ministry for Higher Education and Scientific Research. Agriculture now has 14 centres (8 for training technical experts, 2 for training fieldmen, 3 for training forestry protection workers and 1 institute of technology for training foresters) to which should be added 6 centres offering training in the fisheries sector and an intermediate technical college for fisheries and

⁴¹ Work on the green barrier was begun at the beginning of the seventies. It involves re-planting trees on a strip of between 10 and 40 km in width running from the Moroccan border to the Tunisian border, more or less along the Northern foothills of the Saharan Atlas. It was intended to limit the influence of the Sahara on the Northern part of the country.

aquaculture. This move to restrict training is justified by the difficulty in finding outlets for those completing the courses and a desire to adapt to meet demand.

In *Egypt*, the structural policies focus essentially on making more intensive use of agricultural land through co-ordinated plans financed from a range of sources, research and training.

As regards the first aspect, it should be pointed out first and foremost that the Egyptian State has been pursuing a strategy in support of the expansion and more intensive use of agricultural land for some time, with the result that projects launched some ten years ago are part of a continuous and long-standing process. Hence in 1990, the Egyptian Government launched the North Sinai project, a major horizontal expansion programme, to irrigate 260,000 hectares of new land, including 92,000 hectares in the eastern delta area and 167,000 in northern Sinai. The Sinai Development Authority, which is responsible for co-ordinating activities, has drawn up a national plan for developing Sinai (1994-2017) providing for multi-sectoral development and investment over the period in question. Irrigable land is sold to large private investors (200 hectares or more), to small investors (less than 200 hectares), small farmers and the qualified (with diplomas) unemployed (4 hectares). Large investors will be responsible for the internal infrastructures, developing the land and building housing for employees, whilst small land-owners and the qualified unemployed will be monitored by the Egyptian government. A second major investment programme has also been launched in the south and to the west of the Nile valley. The aim is to provide opportunities for the private sector, which would be responsible for 80% of the investment, to develop industry, tourism, services and mining and farming activities.

In *Lebanon*, the Council for Development and Reconstruction (Conseil pour le Développement et la Reconstruction - CDR) has recently published the first five-year plan for the construction and development of 17 different

economic, administrative and social sectors. The projects covered by this plan will cost a total of 7,556 million US\$, of which 3,384 million US\$ will be for new projects, with the rest allocated to projects already being carried out. The largest proportion of the funding goes to the electricity and communications sectors and the road network (45.3%), whilst the social infrastructures and services receive 38.1% and the productive sectors 13.30%, of which roughly 2% will be for irrigation and agriculture.

Loans for the farming sector are currently made available from a limited number of sources, either directly from the commercial banks (but, according to official statistics, they allocate only 1.5% of loans granted to agriculture), or through special development programmes carried out in rural areas, as in the case of the Integrated Rural Development project in the Baalbeck-Hermel zone, or other small-scale projects being implemented by a range of NGOs and financed by foreign governments or development agencies.

In *Malta*, public policy efforts in the short and medium term to promote agricultural production and development programmes can be summed up as follows:

- as regards the formulation of policies: the re-assessment and identification of options in the new development policy pursued by the new Administration, special attention being paid to water management, the rural and urban landscape, and the identification of marketing and export promotion measures;
- as regards stock farming: the conservation of genetic animal resources together with the introduction of new techniques which could improve the sector's performance, including the breeding of goats and bee-keeping;
- as regards growing vines and wine making: assessing the local varieties of vines and introducing new varieties suitable for the local weather and soil conditions;

- as regards agricultural advisory and information services, the development of advisory services and the introduction of an educational programme in farming areas for children of school age;
- as regards fisheries and aquaculture, the creation of the National Aquaculture Centre of Malta at a regional training centre for Fisheries and Aquaculture.

In order to increase production and improve the socio-economic conditions of farmers and fishermen, the Loans and Subsidies Section of the Department of Agriculture and Fisheries has launched an investment support plan for full-time or part-time farmers in the various sub-sectors. Investment subsidies range from 30 to 50% of the project cost below a certain ceiling. In the case of livestock subsidies, preference is given to relocating herds at a certain distance from urban areas. It has been decided to exclude the poultry industry from priority investments because of the threat hanging over production. The national advisory service is largely responsible for deciding whether a loan application is successful. If the service is not convinced that the investment represents a technological advance, the application is not forwarded to the Loans Committee.

In *Albania*, promoting a market for agricultural land continues to be a priority. The current fragmentation of plots combined with the insecurity regarding property rights make it difficult to adopt economic and effective strategies for introducing mechanisation or other industrial inputs or for developing marketing and distribution activities.

The goals pursued in the future will be the creation of an institutional basis for dynamic, fair and sustainable land markets, introducing a standardised system for registering property and drawing up policies for supporting and guiding the property market (see Box 5.2).

Box 5.2 - The law governing land transactions in Albania

Remarkable progress was made with legislation on land transactions in 1998. In theory, land transactions (purchase and sale, mortgages and tenancy leases) were possible under the terms of the Purchase and Sale Act (no. 7983 of 27.07.1995). However, the Act was restricted by: (a) the right of first refusal, which held that a vendor must first offer his land to a member of his family, then his neighbour, then the former owner and then the members of the village before being able to offer it for sale to a third party; and (b) family co-ownership, no working definition being provided of what constitutes a family. These two aspects (and others) were the subject of the recently approved Act on land transactions ("Act governing the transfer of farmland, meadows, pastures and forests", no. 8336 of 23.04.1998), which should make land transactions less risky.

Land transactions have even been effected for plots which were not fully registered. The Government has authorised the Chief Registry Institution to implement special registration criteria so that land transactions can be carried out at registration offices in areas where definitive registration has not been completed.

Acceptable measures authorising leasing contracts of sub-leasing of farmland (and protecting the rights of the contracting parties) are contained in the new Albanian Civil Code (Act no. 7850, 19 July 1994). Under Act no. 8318 of 01.04.1998, land leases for foreigners range from 30 to 99 years, depending on the various investment activities on state-owned land.

Some 2,050 land transactions were carried out in 1998, compared to only 150 in 1997.

Sales of farmland have occurred mainly in the areas granting planning priority for building and various industries. These have mainly been: (a) in the suburban area close to Tirana and the country's other large cities; (b) close to the main corridors and access routes to Tirana; (c) close to tourist areas. The selling prices range from 8 to 12 US\$/m².

Source: G. Malorgio, Report on Albania, CIHEAM, 1999

The following action needs to be taken with these goals in mind: establishing draft legislation covering public property; setting up or rehabilitating district registration offices; up-dating and creating explanatory maps and plot registers for more than 1300 land register zones; compiling certificates and documents on private property, including agricultural land.

In *Turkey*, the structural problems in agriculture are due to the heterogeneous structure of the sector and the organisation of farm holdings. Infrastructure investments have therefore been given priority in virtually all the development plans and annual programmes. Special concessions and support measures have been granted more specifically to the least developed regions in Turkey.

Investment in agriculture accounts for 5% of total investment and takes fifth place compared with other sectors of the economy, such as housing, transport or manufacturing industry. The public sector's contribution to the total investment in agriculture (2,700 million dollars) is shrinking (down from 42% in 1997 to 33% in 1999). Other major components of the structural policy have included induced investments and farm credit in the form of loans and subsidised interest rates. Indeed, farmers obtain the loans they need from two different sources, i.e., the organised and non-organised Credit Institutions. The second group provides large amounts of short-term credit, whilst the organised credit institutions are the main source of credit for farmers for any duration. These institutions are the Farmers' Bank (Banque Agricole), the Farm Credit (Crédit Agricole) and the Farm Sales Co-operative (Coopératives de Vente Agricoles) financed by the Farm Banks Fund (Fonds de Banques Agricoles).

Over the past few years, farmers have continued to benefit from loans granted at subsidised rates. Interest rates on loans for crops from the "Banque Agricole" were 65% in 1998-1999 compared with around 54% for livestock and investments. These rates were lower than commercial rates.

Farms loans account for between 12 and 17% of total loans. Most farm loans are managed by the Farmers' Bank.

5.3 - Price and market policies

As stated in Chapter 2 in Part I, the conclusion of the Agenda 2000 negotiations was the most remarkable event of 1998-99. This led to the reform of the Common Market Organisation (CMO) for various products (arable crops, beef and veal, milk, wine) and the introduction of new environmental and socio-economic rules and conditions for the allocation of direct income subsidies.

The last aspect follows the line of the 1992 reform with the three-fold aim of:

- strengthening the competitiveness of European agriculture by bringing European prices closer to world prices;
- continuing the regionalisation of the CAP so that reform can lead to the development of a sustainable, competitive and multi-functional form of agriculture for all the regions, including those experiencing specific problems;
- basing farmers' earnings on production and their contribution to the well-being of society, particularly from the viewpoint of protecting the environment and the countryside.

Further to the presentation made in chapter II, part one in particular, the following are the main events and reactions in the Mediterranean countries of the EU to the decisions of Agenda 2000.

As regards the other Mediterranean countries, it is clear that in *Morocco*, the liberalisation of the trading and prices of wheat, sugar and table oil which was begun in 1996 has still not been completed. It was obvious in 1999 that the price system upstream was still regulated and more less subsidised by the State and that the liberalisation of imports was

accompanied by a tariff protection mechanism which quickly revealed its limitations. Indeed, to maintain domestic prices at a level close to the target price, it is essential to be able to react quickly to adjust the tariff equivalents in line with shifts in world prices. However, that has been virtually impossible because the system adopted was neither sufficiently transparent nor flexible and the decision-making procedure put in place proved to be too cumbersome.

A mechanism based on a set of decreasing tariffs established in advance on the basis of the target price and the import price was introduced for bread-making wheat. When the import price rises, the tariff "automatically" falls and vice-versa, the aim always being to recoup the difference between the target price via the tariff. Whilst this system undeniably offers the advantages of being automatic and transparent (thereby giving greater visibility to private operators) its shortcomings became clear after just a few months' operation. Indeed, because of its propensity to channel any difference between the import price and target price systematically into the State's coffers, it proved to be a "disincentive" for certain operators, if not actually a positive source of tax fraud and lost capital for the State. As soon as an importer notices that whatever efforts he makes to reduce his purchase costs they are wiped out by the automatically adjusted tariff deduction, leaving him in exactly the same place as his competitor who has otherwise been less efficient, he sees no reason to continue "working for the State" in this way. Or else he might be tempted to declare an import price higher than the one he actually paid, taking care to keep the difference invested in a foreign bank. Unfortunately, this are not mere conjecture, but facts recorded by the National Inter-Professional Office for Cereals and Legumes (Office national Interprofessionnel des Céréales et des Légumineuses - ONICL).

The liberalisation process upstream seems hardly any further forward than last year. The reform of the so-called consumer subsidy system is still "under preparation" and prices of the products affected - set 10 years ago -

are officially still in force, even though disruptions in supplies to the market, largely caused by a number of operators, have resulted in illegal increases in the prices paid by consumers.

Other than that, it is interesting to observe that, contrary to what has regularly been stated since the beginning of the structural adjustment policy, "the subsidies era" does not seem to be completely over. We are seeing the subsidies policy making some advances at the level of production and even of marketing abroad. Thus, in the case of cereal seeds, it has been necessary to grant "an exceptional production price increase" (of 12 to 19%) to encourage seed multipliers to boost their output and deliver seed into the official circuit and consequently grant a subsidy representing 56% of the price increase for farmers using the seed. For its part, the programme of making certified plants (olive, almond trees, etc.) available free of charge to interested farmers has been given a fresh boost since the numbers handed out have risen to more than three million. As for olive oil, a decision was taken to grant it a subsidy, for the first time and on a "one-off basis", to encourage exports during the months of October and November 1998. This is tantamount to adopting the practices that have long been implemented by Morocco's European competitors for this product (Greece, Italy, Spain)⁴²

Finally, it should be noted that measures for safeguarding and protecting herds were adopted to cope with a shortfall in animal feed in certain regions affected by a partial drought (in the Eastern and Southern parts). These were grouped together in a "regionalised emergency programme" and comprised:

⁴² The subsidy was granted in the form of a premium of 200 US\$ a tonne for a maximum quota of 30,000 tonnes, the aim being to off-load some stocks of oil and reconstitute the country's liquidity before the new agricultural year just beginning, see *Libération*, Casablanca, 2.10.1998.

- the subsidy of 590,000qx for compound feed, granted on a 40 to 50% basis for the provinces of the South and 30 to 40% for the provinces in the Eastern part.;
- supplying the local market with imported barley and distributing it at support prices, with the State meeting the storage and transport costs; this approach was also adopted for other animal feeds (bran, dried beet pulp, sunflower cake);
- stepping up health protection for the herd by vaccinating the animals and treating them for parasites which weaken them during periods of drought;
- creating watering places and taking over the task of bringing in water in the South of the country.

In *Algeria*, the prices of agricultural inputs, equipment and products have gradually seen the support they received during the period of the managed economy withdrawn. At present, only durum and bread wheat are still receiving price support, with all other prices being freely determined on the market. National statistics point to a considerable reduction in the use of fertilisers and phytosanitary products since this policy was implemented and a drastic fall in sales of agricultural equipment. Expressed in terms of fertilising units, the use of fertiliser has fallen from the index of 100 in 1986 to 70 in 1990 and 20 in 1996. Deliveries of phytosanitary products to farmers have plunged similarly, down from the index of 100 in 1986 to 16 in 1996. The same applies for all farming equipment. This situation prompted the public authorities to reintroduce a form of support for the use of fertilisers and phytosanitary products for cereal growers in areas with high potential (plains with rainfall in excess of 450 mm) in time for the 1998-1999 farming year. It should be noted that gas oil and electricity for pumping irrigation water have also been subsidised since 1998.

The policy of production price subsidies affected a large range of agricultural products at the beginning of the nineties. Its format has since changed. Those in charge of agricultural policy have allowed prices to be fixed on the market so that the market can allow producers to meet its needs and have instead given preference to subsidising farmers with their investments on the farm or with their collective investments (co-operatives) for products or techniques that the collective wishes to encourage. In this way, investment in production equipment (making water available, forage harvesting machinery, stables, milking machinery, artificial insemination), milk collection and storage equipment (mini-dairies) are subsidised, with subsidies varying in accordance with the nature of the investment and whether it is individual or collective. There are thus subsidies for new and replacement planting (vines, olive trees, citrus fruit trees, date palms). Subsidies are also granted for developing land (reclamation, putting in irrigation, conditioning, planting), particularly in the steppe, mountain and Saharan regions. Subsidies were also granted in 1994 and 1998 for investments for keeping potatoes in cold stores.

In addition to the investment subsidies, other subsidies are being given to growing bread-making and durum wheat where they cover:

- full payment of the interest due on credits for the agricultural year (which cover all the inputs needed for cereals),
- the production premium, made up of the difference between the average price of imported cereals and the price paid to producers by the collecting agency.
- the recently introduced yield premium, which is paid on all of the farmer's production provided that he achieves or exceeds an officially set yield established for each geographic zone (2 tonnes/ha for durum wheat and 2.5 tonnes/ha for bread-making wheat in the northern zone of Algeria, but only on the 1.2 million hectares considered as being suitable; 3.5 and 4 tonnes respectively for durum and bread-making

wheat in the southern zone of the country - cereals grown with irrigation) and which forms part of the intensive farming programme.

- support for the use of fertilisers.

Cereals also receive help from an account providing production support. This account was managed by the Algerian Inter-professional Cereals Office (Office Algérien Interprofessionnel des Céréales - OAIC) until 1998. It is currently managed by the Production Department of the Ministry of Agriculture, but still available through the OAIC, and funded by a tax on imports and the collected cereals production (15 Algerian Dinars per 100 kg). It essentially funds the premiums paid to producers of selected seeds, certain materials for these producers (complementary irrigation, processing and sowing equipment), interest on the pre-financing by the OAIC of agricultural inputs for cereal producers and research into cereal growing carried out by the Technical Institute for Arable Crops.

Although milk does not receive production subsidies as such (the price is freely negotiated between producers and the milk processing plants in their area), it does benefit from a subsidy paid to producers agreeing to deliver their milk to processing or treatment plants. This premium went up from 2 to 3 Algerian Dinars (1 Algerian Dinar = 0.015129 US\$) per litre in 1998. Finally, to encourage producers to improve the quality of the milk delivered to the processing plants, a premium of 0.50 DA per gramme of fat is applied as of 34 grammes per litre.

The subsidy policy seems to facing the problem of shortage of resources. Overall, it would appear that very modest use is made of the subsidies written into the State budget (with the exception of subsidies for the collection and processing of milk and for wheat production). Indeed, it seems that the FNDA, the main fund providing subsidies, paid out only 31% of the funds allocated to it between 1990 and 1998.

The subsidy policy in *Algeria* is still very modest, even taking into consideration the credits granted by the budget and not those actually

used, and even including the revenue generated by special taxes which the Fund receives for zoo-technical protection and the OAIC account that provides support for cereal production. The total from these two sources barely accounts for 4% of gross agricultural production (GAP) and 0.41% of the gross domestic product (GDP) for the period between 1990- 1998.

Since the adoption and implementation of the agricultural structural adjustment programme in *Tunisia*, price policy has been based on "real prices", enabling market mechanisms to play their part. However, in the case of certain so-called essential commodities, such as cereals, milk and olive oil, prices are still managed. The prices set are intervention prices and producers are under no obligation to deliver set quantities produced at this price. The following table shows how intervention prices for the production of a number of agricultural commodities have evolved.

Table 5.2 - Evolution of intervention prices for production in Tunisia

	Dinars/T	
Product	1995	1998
Durum wheat	275	285
Bread wheat	240	250
Barley	200	170
Milk	330	350
Olive oil(*)	(2330-2730)	(1100-1400)

(*) Depending on the degree of acidity

In 1995, 1US\$ = 1.06 Dinars. In 1998, 1US\$ = 1.18 Dinars

Source: 1999 Economic Budget. Ministry of Agriculture, Tunis, Tunisia.

It should be pointed out that cereal prices have been maintained at the level of the 1995/96 farming year for the third year running, whilst the price of olive oil has fallen substantially because its price is indexed to international prices. Prices of inputs, and particularly of fertilisers and selected seeds, did not increase during 1998.

Moreover, the legislation governing wholesale markets was enacted in 1998 and is intended to improve the marketing circuits for fruit and vegetables. Two inter-professional groups have been set up in Tunisia, the Inter-professional Milk Group (Groupement Interprofessionnel du Lait) and the Interprofessional Red Meat Group (Groupement Interprofessionnel des Viandes Rouges). These groups have helped to strengthen the "branch" approach for the main agricultural lines of production and create a framework for co-operation between the various professions dealing with the same product.

Lebanon is continuing with its policy of protecting local agricultural production via the adoption of an agricultural calendar for exports and imports of goods and levying taxes on certain food and farm products.

The Council of Ministers approved a new decree in April 1999 establishing new taxes or altering the old taxes on imports of various agricultural, industrial and luxury goods. Agricultural goods were most affected by this new tax on goods for which local production is sufficient to meet the needs of the domestic market. The most recent tariffs for import taxes on agricultural and food products can be divided into roughly three categories:

- tariffs of between 10 and 25%; this category includes dairy products and most soft white cheese, dates, figs, melons, water melons and various types of berries;
- tariffs of between 50 and 90%; this category includes beer, bananas and various sub-tropical fruits;
- tariffs of over 90% and up to 105%; this category includes fresh and dried flowers and ornamental plants, alcoholic beverages and tobacco.

The taxes on other agricultural and agri-food products remain unchanged with respect to previous decrees.

The Lebanese government had traditionally adopted a price subsidy policy for three crops - wheat, sugar-beet and tobacco - which are considered strategic crops for the country's socio-economic development. The new subsidy levels to be adopted in 1999 are still clearly defined by the budget, but are calculated at roughly the same levels as last year, i.e. 5 million dollars for wheat, 30 million dollars for sugar-beet and 25 million dollars for tobacco.

In *Turkey*, the price and market policy is based on programmes of direct subsidies to producers through price support calculated on a basic price for certain products and support for production factors. The public intervention system works through Government organisations to buy the relevant products at fixed prices. Even though support for producers in the form of support prices does have disadvantages, it continued to rise in 1997. The number of products receiving support has not changed, but the volume of purchases with support has increased since 1996. The following eight products are concerned: wheat, barley, oats, other cereals, tobacco, beet and cotton.

Table 5.3 - Subsidised purchases in Turkey (in 1000 tonnes)

	1996	1997	1998
Products			
Wheat	632	3435	5240
Barley	623	1841	1927
Other cereals	28	66	120
Maize	239	500	616
Oats	0	6	19
Tobacco	105	124	196
Beet	11414	12800	16000
Cotton	282	277	250

Source: SPO, Annual Programme 1999, p. 289

B. Türkekul, Turkey, Country Report, CIHEAM, 1999

The subsidy programme covers fertilisers, seeds and plants, pesticides and processed milk. Fertilisers currently make up the largest item, receiving close to 87% of total subsidies.

The Producer Subsidy Equivalent (PSE) and the Consumer Subsidy Equivalent (CSE), which are important indicators in assessing support policy, are regularly calculated in Turkey, as they are in all of the OECD countries. According to provisional data, the PSE for Turkey is 37%, a figure which is higher than the 1996 level (25%) and the OECD average (34%). 56% and 85% of the total transfers were paid by consumers in 1996 and 1997.

In *Albania*, two new laws governing the customs systems were passed in December 1998 and January 1999. The first, approved by the Parliament in December 1998, makes provision for a consumer tax on both imported goods and goods produced within the country. It covers certain food industry products such as alcoholic and non-alcoholic beverages, including mineral water and tobacco. The other law, approved by the Parliament in January 1999 and drafted with help from European experts, relates to the new customs code and sets out the methods for introducing new customs procedures in line with international standards. Under its terms, the floor price for production will no longer be applied.

In order to ensure that the country's agricultural sector develops and to encourage the setting up of a processing industry for national products, Albania will give the necessary level of protection to its local production by applying customs duties on imports. Tariff quotas have been drawn up and subjected to tax rates of between 10 and 40% in order to protect national production. However, bilateral negotiations with other WTO member countries are scheduled.

In *Malta*, the market organisation for the majority of agricultural products is characterised by an attempt to offset the effects of a dispersed production structure. Virtually all the national markets, including the

markets for exports and imports, are monitored by the government which guarantees farmers a fair price for their products. The retail markets play an important role as a staging post and connecting point with local farmers, particularly the part-time farmers and the retail business.

Import and export markets for agricultural products are highly organised. A system for regulating marketing is aimed at ensuring a fair distribution of the profits from trade between businessmen and Maltese citizens without producing any adverse social impact. Exports are managed by the Agricultural Export Marketing Board.

5.4 - Rural development policies

EU rural development policy has sought to achieve objectives clearly distinct from those of production and market competitiveness, aiming more to develop agricultural models which respect natural, social and human balances and can promote a form of agriculture which can maintain territories where a population can continue to live and work in favourable conditions. This approach was also justified by the need to recognise that peasants have the mission of “guardians of nature” and at the same time to enable them to diversify their sources of income as an alternative within an integrated overall strategy for developing the rural world extending beyond regional development at EU level.

Various proposals were adopted over the years. The reform of the CAP in 1992 brought in particular accompanying measures which are financed by the European Agricultural Guidance and Guarantee Fund (FEOGA) and the Structural Funds: agro-environment programme, afforestation of agricultural areas, early retirement schemes; to these can be added the compensatory payments for least developed areas and mountain zones and the integrated Mediterranean programmes. But it was the 1999 reform which marked a real turning point in this respect: the multi-functional

dimension of agriculture has now been recognised with the “*European agricultural model*”.

Box 5.3 - The European agricultural model

The European agricultural model should be based on the following features:

- a form of high-performance European agriculture which can be competitive on international markets without subsidisation;
- production methods which are sound, environmentally friendly and able to produce quality products which meet society’s expectations;
- a form of agriculture rich in diversity, whose mission is not only to produce but also to maintain the plurality of European societies and the diversity of European landscapes;
- an uncomplex and transparent agricultural policy, in which the policy-makers have managed to draw a clear line between what must be decided jointly and what must be reserved for the member states;
- an agricultural policy which clearly explains that the expenditure it entails is absolutely justified by the advantages it brings and that it enables farmers to fulfil the missions society expects of them.

Of the five Mediterranean EU countries, Portugal, Spain and Greece are those most concerned by the rural development programmes financed through the structural funds in accordance with the list of present “objectives”. Although *Spain* meets the Maastricht criteria and has a fairly high level of development, no less than 10 regions were eligible for

Objective 1 of the 1994-1997 programme⁴³, and there were 6 areas falling under Objective 5b⁴⁴. After the recast brought by the 1999 reform, only Cantabria has lost its eligibility for Objective 1 of the 2000-2006 programme.

Rural development policy in *Portugal* is also based to a large extent on Community fund support. The main instruments implemented are the accompanying measures of the 1992 CAP reform, on which a programme was drawn up for the 1994-1999 period with the agreement of the European Commission. To these were added the Compensatory Payments for Disadvantaged and Mountainous Regions (CPs) and the Community LEADER II initiative, which aimed to support certain rural zones in a very wide range of sectors (agriculture, small industries, tourism, heritage, crafts, services, training, etc.). In 1999, the major part (55%) of the funds that were mobilised were drained by the agro-environmental measures, followed by the CPs, afforestation operations, LEADER actions and, lastly, early retirements.

In addition to these instruments there are further support measures within the framework of programmes of more limited geographical scope, as is the case of the schemes reserved for the Portuguese islands. Rural development measures are of course also planned in the context of the state investment budget, but the latter measures received barely 4% of the funds programmed over the 1994-1998 period, and less than 15% if one adds the funds allocated to forestry.

The Agenda 2000 financial framework should enable Portugal to obtain more funds for the 2000-2006 period than were received in the previous period. The increase in funds earmarked for rural development should make it easier to accept the other less favourable aspects of the reform (in particular the reduction of the guaranteed prices). The government has

⁴³ These regions are Cantabria, Asturias, Galicia, Castilla-Le.:n, Extremadura, Andalusia, Castilla-Lancha, Murcia, the Community of Valencia and the Canary Islands.

⁴⁴ These areas falling under Objective 5b of the 1994-1999 programme are situated in the rural zones of Madrid, the Basque Country, Navarra, La Rioja, Aragon and Catalonia.

drawn up a programme focusing on various rural development measures, but this programme has not yet been approved by the European Commission.

In *Greece*, the state has certainly been the principal actor in rural development. The Ministry of Economic Affairs is responsible for co-ordinating Community and national policies in the field at the regional and local level. Five priorities have been selected:

- investments in basic infrastructures:
- improvement of living conditions through action at environment level:
- development of the competitiveness of the economy, in particular through measures to modernise agriculture, fisheries, industry and tourism:
- human resources development and action to strengthen labour market structures;
- reduction of regional disparities and improvement of the accessibility of the island regions.

Rural development policy in Greece falls within the field of Objective 1 and enjoys financing from the European Regional Development Fund (ERDF), the European Agricultural Guidance and Guarantee Fund (EAGGF) and the European Social Fund (ESF). In the context of Objective 1, the EAGGF also finances measures to improve rural infrastructures, irrigation measures and other agricultural projects; the Fund is furthermore involved in action to improve living conditions in rural areas, village renewal operations, the implementation of a product quality policy and the promotion of such products, and the development of applied research. The ERDF finances job-creating investments, infrastructures and support for local development initiatives. The ESF supports training activities.

The rural development policy ensuing from the CAP also implements “horizontal” and accompanying measures as well as the Community LEADER initiative. The “horizontal” measures consist of special projects for modernising farms, helping young farmers to set up, supporting farmers in disadvantaged regions, and providing aid for the processing, conditioning and marketing of agricultural commodities and forest outputs. The accompanying measures aim to facilitate better control of production including environmental aspects and to support early retirement, following, and programmes for promoting more extensive farming systems. Whereas the role of the LEADER initiative is to fund local development projects aiming to promote local resources and to develop networks amongst groups of local participants. Innovation, transferability and tangible results are the criteria for defining priority action and the investment programmes required.

And lastly, the Community Cohesion Funds, which finance projects in EU countries where average per capita GDP is less than 90% of the European average, provide additional funds for reducing regional inequalities, beginning with those in the rural world.

Through the last European support programme covering the 1994-1999 period transfers were effected through the Community structural funds (including the Cohesion Fund) amounting to a total of 3.7% of GDP on average. The funds allocated to Greece within the Agenda 2000 framework should amount to 26.2 million Euro (3 million of which will be in the form of cohesion funds and 1.2 million in the form of Community initiatives). All of the regions of Greece are still eligible for Objective I of the Structural Funds. The Greek authorities consider that the funds they will be allocated for agriculture and rural development, which will represent a 30% increase in funding compared to the 1994-1999 period, will contribute significantly to the realisation of the objectives pursued, particularly in the context of the Ministry of Agriculture’s operational 2000-2006 Rural Development Programme.

In *Italy*, special attention is devoted to rural development programmes along the CAP guideline, the purpose being to build up an integrated system in which agriculture is linked to other sectors so as to ensure the overall development of rural areas. Programmes for diversifying farmers' incomes are given pride of place by encouraging rural tourism and promoting facilities for games and leisure activities on the actual farms. This would enable farmers to play their multifunctional role and supply not only raw materials for the agri-food industry but also services which could contribute favourably to the social development of rural zones, the economic development of local potential, and the conservation of the environment.

A new initiative has been taken with regard to determining the criteria for implementing the planning tools of development projects and the ways in which they are to be implemented. This new initiative comprises regional agreements and programme contracts. Negotiated at farm level, they are a continuation of the government's line of policy aiming to boost the growth of firms, strengthen competitiveness and support the multifunctional dimension of agriculture. Various means of action are planned, all within the context of the same approach: the negotiating process is organised at various levels involving a number of institutional, economic and social operators; it is then implemented by the persons actually operating out in the field through an approach integrating the agricultural sector and the other economic and social actors with a view to defining and reorganising the development process in a given zone.

The first regional agreement in the agricultural sector was concluded in early 1999 with a zone in the Apulia region; it concerns the agro-support and downstream industries producing the main commodities in the zone such as flowers, wine and olives.

As soon as the CAP was launched, *France* expressed the wish to conserve an autonomous and complementary policy. The agricultural

legislation passed in the early 1960s thus formed the basis of the Structural Policy which profoundly marked farm development. But it was a policy which went beyond the level of the actual farm, contributing to collective countryside management action.

However, it was the Agricultural Guidance Act, which was passed in 1999, which was the clearest statement of the intention to take account of the imperatives of a sustainable form of development sensitive to both man and nature in the rural environment through regional farming contracts (see Box 5.1). It should be pointed out that the regional and environmental section is one of the two parts of the compulsory commitment which every contracting farmer must undertake: it involves protection of the natural environment, biodiversity and observance of a landscape charter.

In order to ensure a link between the individual nature of the contracts and the local effects expected in terms of regional development, “standard” contracts comprising the measures deemed most suitable have been defined for each of the French departments at very specific local level. This measure, which is complemented by the work of implementation committees operating at departmental level, has vested these contracts with the appropriate local content and made them rapidly operational.

In *Morocco*, there is broad consensus on the diagnosis of the situation and the conclusions to be drawn. Three factors are observed – a conclusion which can in fact be applied to most of the other countries in the Southern and Eastern Mediterranean zone, with nuances here and there to allow more for differences in degree than for differences in the nature of the facts:

- the state of underdevelopment of the rural world in all respects has become positively alarming (see Box 5.5);
- this situation is now a major handicap, which is impeding the development of agriculture and even of the national economy as a whole, just when it has become imperative to improve its

competitiveness at all costs in order to face the challenges of globalisation;

- action to “upgrade” the economy of the country and, in particular, the agricultural sector thus inevitably involves “upgrading” the rural world: it has therefore become a sine qua non to implement a policy of integrated rural development.

Box 5.4 - Morocco: indicators of rural development on the eve of the 1999-2003 Plan

Rural development, in Morocco, is characterized by:

- low incomes, with marked disparities between rural and urban earners, with the result that almost two-thirds of the poor population live in the rural areas ;
- a human development indicator for rural areas that is less than half of the indicator for urban zones, which is already considered to be very low ;
- an illiteracy rate of 67% ;
- a percentage of children in full-time education of only 46% of all children of school age and only 23% in the case of girls;
- notoriously inadequate basic infrastructures: 54% of rural villages are enclaves, 63% of the population does not have access to drinking water, 93% do not have access to health care, and 87% of rural households have no electricity;
- a high degree of degradation of natural resources: under demographic pressures and due to the fact that economic activities are not sufficiently diversified, these resources tend to be tapped through mining. The agricultural area in use has thus grown by 1.5 million hectares in 20 years, mainly in zones where the ecology is fragile, and an annual loss of forestry resources of approx. 11,000 ha has been registered.

Source: Le Terroir, n°1, March 1999, MADRPM, Rabat, p.16

In the years that lie ahead, the integrated rural development policy should focus on two main areas: the first concerns the agricultural area and agricultural activities, and the second is that of developing special programmes. Policy must give action to modernise agriculture and manage agricultural areas new impetus, ensuring that non-agricultural production activities, socio-economic infrastructures and basic services are integrated into development programmes to a greater extent. And of course the specific programmes which are currently running, such as the national irrigation programme, rangeland management programmes, afforestation programmes, and watershed development programmes, must be continued.

The new approach also places emphasis on the need to strengthen producer associations in order to make them effective partners of a high-performance agricultural system which is competitive and creates jobs. Non-agricultural activities to be developed in rural areas are being examined in greater depth than in the past and should concern more specifically the agro-allied industry, handicrafts, mining, tourism, fisheries and services such as commerce and minor repairing and maintenance trades.

In *Algeria*, the approach of the authorities is to relate rural development and ecological concerns. Rural development policies are leading to action to improve the physical and the social environment (efforts to fight erosion, develop watersheds, protect the natural environment, reduce income disparities between regions, and fight poverty). They involve investment aid in disadvantaged rural zones and general "social safety net" programmes, which are the work of the Ministry of Agriculture and Fisheries, since the Ministry with special responsibility for Rural Development, which was created in 1998 under the supervision of the Ministry of Amenities, does not seem to have developed any activities since its establishment.

As is the case in the other developing countries, poverty is found essentially in the rural areas: 75% of the poor population were living in those areas in 1995. Poverty increased considerably in the period from 1988 to 1995. To fight this development the Algerian government had to resort to the liberal receipts advocated by the international financial institutions. When the structural adjustment policy was being introduced at the macro-economic level, the state sought to create an effective development dynamic in the rural zones. The policy of facilitating land ownership was intended to encourage investment, particularly by small and medium-sized farmers, by granting them ownership of state land for one symbolic dinar, with the obligation for the beneficiaries to develop the land within 5 years. This policy targeted the disadvantaged zones of the country in particular (mountain areas, steppe and Sahara) and was rapidly complemented with state aid for development: mobilisation of water, land development, building of tracks and water points, plantations. It definitely benefited small farmers and thus provided a means of reducing poverty to a certain extent.

The so-called “Major Works” programme was launched explicitly in 1994 for the benefit of the least developed rural zones (mountain, steppe and Sahara). It was designed to create jobs in order to cope with unemployment and underemployment while increasing agricultural output and fighting the various forms of erosion and soil degradation.

Agricultural activities or activities to conserve the natural environment do not alone suffice to reduce the poverty level in rural zones. Making an impact on poverty requires creating non-agricultural jobs by expanding industrial activities and services in rural zones. To do so, economic policy must create the necessary conditions: adequate public infrastructures (roads and telecommunications, health services, schooling and training), efficient banking services, tax exemptions and other advantages for investors.

In *Tunisia*, rural development policy is based essentially on the implementation of projects with an agricultural component, which are designed to promote agriculture, conserve natural resources and create jobs in rural zones. Three new agricultural development projects were launched in 1998.

In addition to these development programmes, special attention is devoted to improving living conditions in the rural environment. Action to provide drinking water supplies was thus continued and by the end of the year a cover rate of 74% had been achieved for all regions.

Turkey has been making efforts to develop rural zones since the 1960s, in particular within the framework of the various 5-year development plans. Various projects have been carried out successfully, some being financed by the state alone, others with the support of international donors such as the World Bank or the FAO.

The ambition of these rural development programmes, which reflect an integrated approach, is to use local resources to the best possible advantage for the rural populations concerned. Their main objectives are to boost agricultural production, improve agri-food chains and meet the needs of the rural population, particularly in the field of regional infrastructures. The major Southern Anatolia Project, which was drawn up and launched to develop the south of the country as a whole, must be mentioned in this context. Furthermore, special programmes for developing priority regions have been launched in order to avoid development disparities between eastern and western Turkey.

Although this approach to rural development has already been most successful, the contribution of the rural and agricultural world to the Turkish economy has not yet reached the level desired. The rural population consequently has not been rewarded for its efforts in terms of prosperity. In view of these facts and of the special importance of agriculture in the Turkish economy, sustainable agricultural development

inevitably requires that studies be conducted in various regions of Turkey at both macro and microeconomic level as well as in the social field.

5.5 - Agro-environmental policies

The question of ecology is becoming crucial in the Mediterranean basin but arises in very different terms on the two shores. In the North, particularly in the EU member countries, agro-environment problems are primarily the result of the intensive-production model and more generally the price to be paid for growth which has given precedence to prosperity to the detriment of ecosystems and quality of life. The challenges to be met thus concern mainly intensive-production farming methods, set-aside, landscape conservation, the conservation of natural resources and/or the development of organic farming. The policies pursued in order to meet these challenges fall to a large extent within the field of competence of the EU bodies; they are constantly gaining importance, undergoing improvement and being vested with sizeable means.

In the countries of the Eastern and Southern Mediterranean, on the other hand, the vast majority of environment problems are the result, indeed the epitome of underdevelopment and poverty. In those countries, for example, nitrate pollution is not yet a cause for concern simply because chemical fertilisers are not yet widely used. Problems such as deforestation, the exhaustion of free groundwater, soil erosion, the extinction of plant and animal species or desertification, on the other hand, are often directly related to the poverty of the populations and the states' lack of means. With more or less substantial support of the international organisations, the states are doing their utmost to halt the ongoing degradation process, but their efforts rarely prove to be adequate. What is more, in the absence of any global vision on the regional scale, there is neither co-ordination nor dialogue with regard to how the meagre means available to the states are to be used – in a field where history and geography attach little importance to the contingencies of history.

The bases of the CAP are to be found in the Treaty of Rome, but the environment issue was not taken into account when that Treaty was signed. The implementation of the CAP and of the intensive farming model have thus played a major role in the various forms of environmental degradation.

At the beginning of the 1970s, political leaders began to take environmental problems into consideration to a greater extent, devoting more attention in particular to environmental problems in agriculture. At European Community level, the Paris Summit in 1972 led to the adoption of the first Environmental Action Programme (EAP), which established the principles and objectives in the environment field. As regards agriculture, the new approach was given concrete form with the adoption of the directive on least developed areas, which contained an environmental dimension, especially in the member states in the North. From the mid 1970s to the mid 1980s, the environment policy of the European Community was developed mainly through the Environmental Action Programme.

During the second half of the 1980s, the European Single Act provided a strong legal basis for that policy. Several measures were taken at the time to control agricultural production and at the same time encourage environmental protection: these measures included in particular Regulation 797/85, which was amended to include environmental protection measures, and aid for ecologically sensitive areas, landscapes and natural resources. The Regulation also contained provisions – with EAGGF funding as of 1987 - allowing each state to define the zones affected by a particular agro-environmental problem and then to propose contracts to the farmers in that zone concerning all or part of the land they farm: through such contracts the farmers undertook to make their practices conform to locally defined specifications specific to the particular operation and environmentally friendly, generally for a period of 5 years. Furthermore, this new legal basis provided a means of elaborating and then

implementing the Nitrate Directive (91/676), which aims to reduce water pollution caused by the nitrates from agricultural activities. Regulation 2092/91 on organic farming, on the other hand, provides the possibility of classing farm produce and identifying products termed “*organic*” products.

Within the framework of the “*accompanying measures*” of the reform of the CAP, a new general framework was drawn up in 1992 to aid and support agro-environmental action, and farmers wishing to reduce their recourse to intensive farming methods. That framework provided that each country was to elaborate a special implementation programme for a 5-year period to be approved by the European Commission in Brussels. More specifically, Regulation 2078/92 granted aid to farmers who adopt less pollutant practices or agree to refrain from farming land for environmental reasons; and Regulation 2080/92 offered aid and subsidies for the afforestation of land within farm holdings. EU rural development policy furthermore recognised the environment as one of its major components, and this dimension of structural policy was strengthened when it became obligatory in 1993 to make an environmental impact assessment for all projects to be launched.

Measures to strengthen the agro-environmental instruments were still on the Agenda of the 1999 reform. The possibility was created for each country to adjust the amounts of premiums either according to employment level on farms or according to environmental criteria. A decisive step was thus taken with the explicit introduction of the eco-conditionality principle into the CAP machinery, even if only on an optional basis. As has already been stressed, environmental protection and rural development together became a major pillar of the CAP.

It was not until 1989 that *France* began to use the opportunities provided by the various European regulations adopted in the 1980s, although the real start did not come until the 1992 CAP reform and the ensuing agro-environmental measures. Within the framework of the July

1992 Regulation, France presented and obtained approval for a 5-year programme, which was then renewed in 1998. Three main categories of action were accepted:

- a national measure, the Premium for Maintaining Extensive Livestock Farming Systems (PMSEE – Prime au Maintien de Systèmes d’Elevage Extensifs), known more widely as the “grassland premium”, whose conditions are not particularly restrictive. In return for a certain amount per hectare, which is fairly low (300 francs) but nevertheless amounts to a contract, the farmer undertakes to maintain the current farming conditions of his pastures for 5 years. This measure involved 80,000 farms in 1998;
- measures known as “regional” measures: the zones and procedural rules differ from one region to another, and the total budget is distributed a priori region by region.

The most important of these measures are:

- (i) conversion to organic farming: recourse to this measure is becoming increasingly widespread – 2,350 new contracts were signed in 1998 out of a total of 4,300 contracts. These contracts involve a total of 134,000 hectares and an annual budget of 130 million francs;
- (ii) extensification through the reduction of headage per acre (21,000 ACU) or the reduction of inputs (53,000 hectares). These two measures were not renewed in 1998, and very few new contracts were signed.
- and lastly, local measures (known as local agro-environmental measures, or OLAE), which are the continuation of the above operations.

The “grassland premium” accounts for the major part of the budgets allocated and of the areas and farm holdings concerned, although the local operations have also registered a considerable measure of success and

played an important role in the learning of the new connections between agriculture and the environment and with the rest of society.

With regard to the eco-conditionality principle introduced by the 1999 reform, France has already made it known that it has decided to carry out the necessary adjustments according to environmental criteria and has stated further that any savings should contribute to the financing of the Regional Farming Contracts.

In *Italy*, the environment component is playing an increasingly important role in the structural support policies of the EU. The new scale of compensatory amounts has been fixed at 600 Euro per Hectare for annual crops, 900 Euro for special perennial crops, and 450 Euro for other land uses. Measures must also strengthen the system of aids and incentives for encouraging tree-growing, in order to develop the economic and ecological functions of forestland, increase wooded areas and encourage any action that might reduce fire hazards. The amounts paid to farmers to offset the loss of income resulting from afforestation range from a ceiling of 724 Euro per hectare for contractors and their associations to a minimum of 185 Euro for the other actors. And in the case of other measures for the protection and monitoring of forestland, the subsidies range from 40 to 120 Euro per hectare.

In 1997 and 1998, Italian farmers were more concerned by the implementation of the provisions of Community Regulation 2078/92 on agro-environmental measures. After getting off to a slow and tentative start in the first few years of application (1993-1996), the volume of expenditure committed in the context of these measures has since grown considerably and at a higher rate than in the other European countries. When one takes account of the proportion of beneficiaries (7%) and area concerned (14%, approx. 2.3 million hectares), Italy is above the European average - up to 40% of the total area of agricultural land being concerned in certain countries. In view of the funds allocated (600 million ECU, including the

share of national co-financing), this data suggests that the subsidisation rates in Italy have generally been higher than in the other European countries. This is due to the fact that the implementation of the regulation has focused mainly on the dissemination of integrated and organic farming techniques, which often require far-reaching technological changes and considerable initiation periods. Some of the measures adopted are connected with reducing the use of chemicals (half of the financing), countryside preservation and management and organic farming (40% of the expenditure covered).

In *Greece*, implementation of the provisions of Regulation 2078/92 is not yet totally satisfactory. Administrative difficulties and long approval periods have delayed the entering into effect of the programmes (this did not come about until 1996, whereas most of the other EU countries have been operating since 1994) and have limited farmers' awareness of the advantages of the new arrangements. Only 4 programmes have been implemented in the following fields organic farming, reduction of nitrate pollution, permanent set-aside, and a programme for endangered species. The EU granted a total of 145 million ECU to these schemes for the 1994-1999 period. It must also be mentioned that 3 other programmes were proposed (erosion barriers, habitat and plant varieties) but were not approved by the European Commission.

Due to the advantages it offers small farm holdings, the organic farming programme has been quite successful in Greece: it concerns 1,500 farms, which account for only 0.2% of the country's arable land. Farmers often regard converting to organic farming as an undertaking fraught with difficulties and risky from both the technological and the financial point of view. Almost 6.5 million ECU have been devoted to this programme. The European Commission considers that it has potential but states nevertheless that it should not expand beyond the capacities of the bodies responsible for monitoring it. Almost 11 million ECU have been used in the context of the programme for reducing nitrate pollution which has been

implemented in Thessaly. The programme is running on only 750 holdings, but the impact of these fertilisers on water resources is moderate. The Commission has argued in favour of extending this programme to other commodities (such as durum wheat, for example) which require less nitrates. As for the permanent set-aside programme, 13 million ECU have been committed. It has been recognised that it plays an important role in the preservation of resources, but doubts have been expressed as to its relation to farming realities. And lastly, the programme for protecting endangered species has been allocated almost 0.5 million ECU.

Considerable progress has been made in project follow-up and assessment, even though Greece's ability to make full use of the opportunities offered by the Regulation 2078/92 programmes is limited by the lack of adequate resources at Ministry of Agriculture level. The Ministry of Agriculture has submitted a proposal for EU approval for the forthcoming planning period, involving a much larger budget than in the 1994-1999 period.

The implementation of Regulation 2080/92 in the period from 1993 to 1999, on the other hand, can be regarded as satisfactory, an assessment which is justified by the extent to which the afforestation objectives have been achieved but also by the annual credit consumption rate and the follow-up and assessment procedures established at both the national and the regional level. The national programme had appropriated almost 100 million ECU for the afforestation of some 20,000 hectares; that objective was achieved, and almost 75% of the funds allocated were used, the remainder having to be used by the end of 1999. Since, in the final analysis, demand from farmers was very high, at all events well above the resources of the programme, the Ministry of Agriculture has proposed an afforestation programme involving 30,000 hectares for the 2000-2006 period, involving a budget of 150 million ECU.

Spain also took several years to implement the agro-environmental programmes which were developed after the reform of the CAP in 1992. In particular, the number of holdings benefiting from the incentives for encouraging organic farming began to increase from 1996 onwards, and there are now some 7,800 farms in Spain which practice those methods, i.e. 8% of the European total and twice as many as there were in 1997. It is estimated, however, that this is still inadequate in that Spain accounts for 17% of the arable land of the EU. Whereas the major part of organically farmed land is generally sown with fodder crops, the salient feature of the countries of Southern Europe is the wide extent of horticulture. This production category covers 8% of the land concerned in the EU, whereas the share of horticulture in total arable land is barely 1.2% (1995 figures). This significant growth in horticultural production on organically farmed land clearly reflects consumer demand for “organic” agricultural commodities and foodstuffs.

The integrated action to fight harmful insects has gradually gained importance since the first relevant regulations came into force in 1983. ATRIAS, which are the producer organisations which group farmers for integrated treatment, are the main actors in this undertaking, whose objective is to organise collective action to prevent and combat harmful agents by promoting integrated treatment with the assistance of the official plant health services in each Autonomous Community. The ATRIAS receive two main types of public aid: first, full or partial payment of the salaries of the technical staff employed specifically for the integrated efforts to fight harmful agents; and second, the offer of subsidies for the use of sexual hormones and organic pest management. 85% of the producers in the ATRIAS are fruit and vegetable farmers and olive and wine growers, and most of them are organised in co-operatives. They are located mainly in the regions in north-west and south-east Spain, Catalonia and the Community of Aragon, Valencia and Andalusia.

On-going degradation of natural resources has been registered in *Morocco* for the past few years and is now reaching alarming proportions. The most obvious manifestation of this process are deforestation, erosion, desertification, the reduction of available water and the extinction of many plant and animal species. It is estimated, for example, that 5.5 million hectares are threatened with erosion every year (2 million have already been affected), 8 million hectares of pastureland are considered to be severely degraded, and desertification is advancing, while 93% of the area of the country is situated in the arid zone.

These ecological threats have been a matter of concern to the public authorities for several years. The government structures which have succeeded one another since the beginning of the 1990s have comprised either a Ministry of the Environment or an Office of Junior Minister of the Environment. A National Observatory of the Environment of Morocco has been set up, and a “National Strategy for Environmental Protection and Sustainable Development” was even elaborated in 1996⁴⁵. However, greater attention has been devoted to the urban and the industrial dimension (air pollution, waste, drinking water) than to the dimensions related to agriculture and the rural world (soil conservation, forests, irrigation water). At all events, this strategy, which proposed to halt the degradation process by 2005 and then to reduce these forms of degradation by 2020, has not yet been significantly implemented.

With regard to the agri-food dimension, the agricultural development strategy has made the protection of natural resources a national priority. As yet, only a limited number of studies have been or are being conducted, and several measures have been taken, the most important of which to date having focused on protecting the forest heritage. A National Forestry Project was drawn up in 1998 in the context of the preparation of the 5-year

⁴⁵ Ministry of the Environment, *Pour une action concertée et ciblée en faveur de l'environnement*, Rabat, 1996

Plan for the 1999-2003 period. This programme, which is scheduled to be implemented in two 5-year phases, reflects a global approach, acting on both the resource itself (the trees) and on its environment – at the human level (action to raise the awareness of the population living in forest areas and to improve their standard of living), the infrastructural level (introduction of new forms of energy reducing wood consumption) and the organisational level (partnership with the local authorities and producer organisations). A Main Afforestation Plan has been drawn up for the more immediate term, and an afforestation programme was adopted for the 1998-1999 farming year: it involves 32,340 hectares (20,076 ha for production, 2,670 ha for regeneration and 1,385 ha for soil protection), and the funds necessary for implementing the Plan have been released.

The principal environment problems which Algeria has to contend with in the field of agriculture are wind-induced and water-induced erosion, the destruction of plant cover – which is sometimes irreversible – and the salinisation of the soil. Nitrate pollution does not yet seem to be topical, in view of the fact that the use of chemical fertilisers is not widespread.

Wind-induced erosion is affecting mainly the steppe zones, which have light soil and are used as rangelands. This area has been primitively grubbed for growing cereals under the pressure of a rapidly growing, jobless population. As herds and flocks have grown, grubbing has subsequently been motivated by the desire to appropriate rangeland for private use.

The destruction of plant cover is due mainly to overgrazing and to forest and scrubland fires. Overgrazing is confined essentially to the steppe zones and is to be explained primarily by the increase in stock and population growth and by the inadequacy of policies proposing alternatives to traditional animal husbandry. Fires have been particularly

devastating in the past few years (272,000 hectares were affected in 1994 alone).

Water-induced erosion is particularly widespread in the north of the country, where Mediterranean rainfall, which is generally violent, affects soil which has no plant protection and has often been tilled without any particular precautions.

And lastly, salinisation is affecting in particular certain areas under irrigation in the west of the country and in the Sahara, because of unsound irrigation and inadequate drainage.

Environment policy in *Algeria* essentially takes the form of action to fight rural poverty, which is considered to be the main cause of the degradation of natural resources, and of the creation of nature reserves, which are designed to protect the flora and fauna.

Since the beginning of the 1980s, Algeria has created some 20 national parks situated in the main regions of the country, under the supervision of the National Nature Protection Agency. The El Kala Park, which has an area of 80,000 hectares on the Mediterranean coast and along the border with Tunisia, has received a donation from the World Environment Fund for financing the development of the park and the elaboration of a management plan.

The action carried out in *Tunisia* to protect the environment aims to pursue the following programmes:

- the afforestation programme, with the objective of achieving a rate of 15% by 2005;
- the water and soil conservation programme, the objective being to protect agricultural land and towns from flooding;
- the programme for fighting desertification;
- the programme for installing wastewater plants.

Furthermore, organic agriculture seems to be finding a ready market – several economic agents have established themselves as producers of “organic” products, and the promulgation of the Organic Farming Act and the creation of a specialised technical centre, scheduled for 1999, are likely to boost this trend. The products concerned will be mainly olive oil, dates and certain other fruit and vegetables for export.

In *Lebanon*, several projects of agro-environmental interest have been carried out or are currently under way. Most of these projects are launched and/or given technical support by various international organisations or regional groups such as the UNDP or the EU. The main projects aim:

- to strengthen Lebanon’s basic capacities for conserving biodiversity. This programme was launched in 1996 and should be completed by 2001. It aims to set up an effective land protection system with a view to preserving plant and animal species which are threatened with extinction. It is considered that preserving biodiversity is an integral part of bearable human development. The project also comprises educational measures and action to raise the awareness of local communities with a view to effectively combining the contributions of both population and institutions for the conservation of the natural environment.
- to draw up a National Action Plan for fighting desertification in Lebanon. The aim of this project covering the 1997-1999 period is to assist the Government in the elaboration and implementation of the Action Plan in the context on the United Nations Convention on action to fight desertification.
- to prepare a National Strategy and Plan of Action for preserving biodiversity. A national multi-sectoral Steering Committee has also been set up.
- to conserve the biodiversity of land in the more or less arid regions in the north-east of the country. This is a regional project, which was

launched in 1999 for 5 years and involves teams in Lebanon, Syria, Jordan and the Palestinian Authority, which are co-ordinated by the International Centre for Agricultural Research in Dry Areas (ICARDA).

In *Turkey*, the question of sustainable agricultural development and of seeking to establish the best environmental conditions for agriculture is a notable feature of development policy, particularly in the context of the Seventh 5-Year Development Plan. Many efforts to protect the environment have been made in this context. Institutional arrangements have been made and legislation has been re-amended with a view to effectively controlling the environmental effects related to farming activities.

A great deal remains to be done, however, particularly in terms of regulation an adjustment of action, especially when one agrees that it is necessary to combine agricultural and environmental policy measures and devote attention to identifying, implementing and assessing those measures in order to ensure that they do actually improve the quality of the environment and help to preserve it for future generations. The practices carried out by Turkish farmers – in particular as regards the use of fertilisers, pesticides, irrigation systems and animal waste – have had a direct impact on the environment and have themselves in turn also been affected by that environment in the broad sense of the term, particularly in the last few years. Air and water pollution, nuisances caused by pesticides, the degradation of arable land and soil erosion are typical examples of the environmental problems related to agriculture, which are liable to worsen in the future.

However, several basic precautions have already been taken and important institutional arrangements have been adopted in the context of the activities of the Ministry of the Environment. Further efforts are needed both to improve the relation between agriculture and ecology and to achieve environmental objectives that are compatible with the other advantages of the new agricultural policy.

PART III

*Sustainable rural
development
in Mediterranean countries
and the role of Ciheam*

6 *The socio-economic context of sustainable rural development in Mediterranean countries*

6.1 - Introduction

The essential objective of rural development is to improve the incomes and living conditions of rural populations, particularly in disadvantaged zones. It is a necessity well realised by all, whether in the context of promoting balanced area management, strengthening the national cohesion of countries by reducing regional disparities, improving the socio-economic production environment, or conserving natural resources.

It must be borne in mind that in the Mediterranean region:

- farm households still constitute the majority of rural households in the countries of the South;
- agriculture continues to play an essential role in production, employment, land use and equipment planning and ecosystem management;
- although rural development depends on agricultural and food policy, it is also coming to rely increasingly on the efforts of other sectors of national economies and international economic contexts.

The first section of the present chapter analyses rural development through the most important dimensions of this complex problem in the Mediterranean context.

The second section outlines a prospective vision of the principal issues at stake in food security, the future of agricultural systems and the role of rural development in the context of globalisation.

6.2 - Analytical factors

Rural development is defined as the realisation of the potential of the talents and possibilities of people and rural areas. As such, it is an all-embracing phenomenon encompassing intellectual, cultural, social, economic, technological and biological factors and thus calling for a pluridisciplinary and inter-institutional approach. In order to acquire a better understanding of rural development its many and varied dimensions in the Mediterranean zone must be analysed.

6.2.1 - The human dimension

Since 1990, the United Nations Development Programme (UNDP) has been assessing the status of human development throughout the world every year in its annual global Human Development Report, which places people at the very core of that development.

That report establishes a classification of countries according to human development indicator (HDI) level, that indicator being composed of three variables: *life expectancy, the results obtained in the education field, and income indicators*. It thus gives a composite measurement of human development.

Table 6.1 - Human development indicator of the Mediterranean countries

Country	HDI	World ranking
Albania	0.655	102
Algeria	0.737	82
Croatia	0.760	77
Cyprus	0.907	24
Egypt	0.614	109
France	0.946	2
Greece	0.923	20
Italy	0.921	21
Jordan	0.730	84
Lebanon	0.794	65
Libya	0.801	64
Malta	0.887	34
Morocco	0.566	119
Portugal	0.890	30
Slovenia	0.886	35
Spain	0.934	11
Syria	0.755	78
Tunisia	0.748	81
Turkey	0.772	74

Sources: UNDP 1994 - "The State of the World", 1999.

The virtue of this table is to reveal the existence of a North and a South in the Mediterranean in development terms.

Taking only three variables into account is liable to give an inaccurate picture of the degree of human development. What is more, it is a global indicator for each country, a fact which conceals a large number of disparities, particularly between rural and urban zones, between rich and poor, and amongst regions. With an HDI of 0.566, for example, Morocco has a world ranking of 119, which places the country at the average HDI

level observed for all developing countries (0.576); but there is a significant difference between urban Morocco (88) and rural Morocco (140).

Given this excessive disparity between urban and rural areas, it can be suggested with regard to incomes that efforts must focus primarily on improving incomes in the rural world.

However, despite all of these inadequacies, the HDI has become an international reference which must be taken into account.

6.2.2 - The demographic dimension

The Mediterranean region constitutes only 7.1% of the world population, which is now over 6 billion.

Table 6.2 - Mediterranean population and world population

	1950	1980	1985	2000	2025
□ World (in millions)	2516	4500	4837	6122	8206
□ Mediterranean countries (in millions)	212	333	356	433	547
□ Share of the Mediterranean countries in the World (in %)	8.4	7.5	7.4	7.1	6.7

Source: Blue Plan, United Nations, 1988

It is observed that the phenomenon of population transition is spreading in the Mediterranean region: the population doubled in the period from 1950 to 2000, but by 2025 it will only have reached the 550 million mark.

Taking the figures provided by the United Nations as a basis, we can analyse the population trends in Mediterranean countries by dividing them into three groups: the countries in the North (Spain, France, Italy, Greece), the countries in the East (Malta, Israel, Cyprus, former Yugoslavia, Albania,

Turkey) and the countries in the South (Syria, Lebanon, Egypt, Libya, Tunisia, Algeria, Morocco). The population of the countries in the East and South will rise from 218 million in 1990 to 360 million in 2020 and will thus constitute two-thirds of the total Mediterranean population, which is the equivalent of the population of the entire Mediterranean basin in 1985.

In fertility terms, there is still a marked difference between urban and rural areas, and despite the drift from the land the rural population is continuing to increase in absolute terms.

National and international migratory movements are part of the general dynamic of drift from the land and urbanisation, mainly along the coastal zones, as was observed on other continents during the second half of the 20th century.

Almost 58% of the population of the Mediterranean basin are living today in urban zones, but the figure could soon be over the 80% mark due to the ongoing urbanisation process in the countries in the Southern and Eastern Mediterranean. This process is identical to the trend observed in the North, where land use and equipment policies have been unable to maintain a sufficient number of people in the hinterland.

Urbanisation is accompanied by a phenomenon of concentration in the coastal zones: in 1985, the coastal regions of the Mediterranean had a total population of 133 million, i.e. 37.5% of the population on only 15% of the total area. According to the Blue Plan scenarios, the Mediterranean coastal zones should have between 195 and 217 million by 2025.

Attention must be devoted to this population drift to the coastal regions: if we judge by the developments observed in other parts of the world, it also means greater concentration of agricultural systems. For agriculture does not actually reclaim any areas that become derelict as the result of migratory movements; it follows those movements.

All in all, there are four striking features which mark the development of the Mediterranean population: growth, the restoring of balance, mobility, and concentration in the coastal zones.

6.2.3 - The cultural dimension and education

The Mediterranean population, which is large, young and mobile, needs its own distinctive form of education and culture. There can be no Mediterranean without a sentiment and culture peculiar to the Mediterranean which are shared by all of the various peoples who compose it, beyond the conflicts, wars and antagonisms which have marked the history of the region.

With its diversity and its asserted sensitivity to identity, the Mediterranean enjoys a real asset in the face of the globalised world of the future. The challenge to be met is both quantitative and qualitative. Let us take the quantitative aspect first of all: there is still a very high rate of illiteracy amongst persons over 15 years of age (ranging from 34.7% in Tunisia to 50.7% in Morocco in 1990), despite the considerable efforts devoted to primary education in the countries of the South and East; and as for secondary education, Egypt and Algeria were the only countries in 1990 where the enrolment rate exceeded 50% of an age group. The question of education thus concerns the entire Mediterranean region.

Over and above the quantitative aspect there is now also the question of quality: how is the Mediterranean to be conceived and apprehended? The Mediterranean on its own is the theatre of the cultural challenge which we find at world level.

6.2.4 - The employment dimension

The working-age population is expected to increase by 50 million in the next 15 years and by a further 15 million over the following 15-year period in the countries in the South and East alone. Until 2020, the number of

persons entering the employment market will continue to be greater than the number of persons who leave it (Xavier Gizard, 1993).

The unemployment rate is over 20% in the countries of the South. In the European countries, where there is also a high level of unemployment, the trend is unlikely to be reversed until 2010, by which date there will be fewer persons entering the labour market than leaving it, due to the ageing of the population and the drop in natural population growth. Until that date, France, Spain, Portugal, Italy and Greece will continue to be faced with the problem of unemployment. Not even the informal or underground sector can resorb the surplus of available labour.

As is the case in the rest of the world, the Mediterranean is having to contend with a precarious situation in the employment field, a phenomenon which covers both a high demand for unskilled labour and the growing requirement of skills as regards the remainder of the workforce.

This complex situation can no longer be analysed in terms of matching the education profile with the labour market for two reasons:

- supply is always higher than demand, irrespective of the level of skill:
- the technical training acquired is becoming obsolete more and more rapidly (because of the continuing development of technologies and processes, the computer revolution and the explosion in communications).

The concentration of Mediterranean economies and societies in the coastal zones seems to be disqualifying not only a very large proportion of the territory but also certain Mediterranean societies, and in particular peasant and nomadic societies. Is this the end of peasantries?

6.2.5 - The environmental dimension

Water is obviously the essential limiting factor in agricultural production in the Mediterranean region, particularly in the Southern and Eastern zones. Water is in high demand, whereas the supply provided by rainfall is extremely low.

There is consequently virtually constant water stress in the arid part of the Mediterranean basin, and this stress becomes seasonal in the more humid zones. Total or supplementary irrigation is the only way to remedy the water shortage and intensify crop-farming. There is a very marked contrast between the North and South of the Mediterranean basin. In the countries in the South the volume of water available per inhabitant is less than 1000 m³/year on average, whereas it is over 4500 m³/year in the countries in the North. And this water availability is liable to be reduced by half in the Southern countries by 2020. The water use indexes in most of those countries are very high, and non-renewable fossil resources have already been tapped on a large scale. Furthermore, water has become a source of conflict between countries, particularly in the East and South (Tigris, Euphrates, Jordan, Litani, Nile, etc.).

Agriculture is by far the primary user of water resources: over 75% in most Mediterranean countries, although demand from other sectors is rising rapidly.

Although irrigation has developed steadily over the last 30 years in practically all Mediterranean countries, the possibilities for extending irrigation systems are unfortunately becoming more and more limited in most of the countries in the South, since they lack adequate water resources. Emphasis will thus have to be laid in future on water-saving technologies, recovery, discharge processing and recycling (waste water, drainage water, etc.) and on measures to improve the development of available resources in the biological and economic field.

A further limitation is constituted by the high degree of salinity of a large proportion of the water available in most countries in the South. This salinity, which is aggravated by the high level of evaporation due to the arid climate, is causing the salinisation of irrigated soil.

In the North, intensive farming using high doses of fertilisers and pesticides and the concentration of livestock breeding present the growing danger of chemical and organic water pollution.

Crop acreage is decreasing in the developed countries of the Northern Mediterranean as the result of the idling of land which has become economically marginal. In view of the aridity of the climate, crop acreage must not increase any further in the Southern countries. It is even recommended for both ecological and economic reasons (environment conservation – low profitability) that cereal crop acreage be reduced in the infra-marginal zones in those countries (steeply sloping land or low-rainfall zones).

Production can thus only be increased by intensifying farming systems in the zones which are more favourable as regards climate and soil science.

6.2.6 - The food dimension

The problem of food security is still acute in the countries in the Southern and Eastern Mediterranean. The food situation should stagnate on the whole in the entire Maghreb-Mashraq zone, i.e. the Arab countries on the Mediterranean front. Although production and productivity efforts can be envisaged and planned in certain countries such as Morocco, Tunisia or Jordan, they are liable to be insufficient to meet the increase in food demand related to population growth, even if there is confirmation of the trend towards population transition.

It is thus to be expected that in order to meet the needs of urban populations a food supply model based on massive imports will continue

to develop. This is already happening in Algeria and Egypt and even in Morocco as the result of the recurrent droughts. But the growth of this model, which is, moreover, costly in foreign currency, has limits which can prove a burden as regards the improvement of food rations and their nutritional balance.

Turkey is in an intermediate position typically symbolising its position bridging two continents. Agricultural development in Turkey should enable the country to appreciably improve its provision of supplies to a rapidly growing domestic market and even its position as a net exporter to neighbouring countries, whether in the North-West (Balkans), North-East (former Soviet Union) or South (Middle East).

All in all, the food shortage in the Mediterranean region is liable to worsen.

6.2.7 - Agricultural and rural development

Agricultural and rural development are obviously both dialectically related and complementary. For there can be no agricultural development unless there is a living economic and social fabric in the rural areas. Conversely, there can be no rural development without dynamic production agriculture, pastoral farming and forestry activities.

Agricultural development shapes rural zones, maintains and enhances the natural environment, creates employment and a demand for services, and supplies commodities. It is thus a factor of rural development in its own right which encompasses other activities (crafts, mining, industrial and commercial activities, tourism) and other dimensions (cultural, socio-political, etc.).

At the institutional level, the administration, planning, financing and implementation of agricultural development and the extension services provided have always fallen within the field of competence of ministries of

agriculture and their departments in the field as well as that of the public or private enterprises under their supervision or attached to them by virtue of their activities.

Rural development, on the other hand, falls within the field of competence of several ministerial departments, each operating in its own field, and also of local authorities as an integral part of the planning and management of the economic and social development of their own communities. It thus comes under a variety of national and local structures and consequently a large number of agents and intervention procedures. It is at all events certain that local communities have an essential role to play and should thus be encouraged by the political authorities to fulfil that role.

6.3 - Perspective notes

Reflection on rural development in the context of agricultural and food policies must not be isolated from the general economic and political context of those policies: however specific they may be, they can only be apprehended today as being closely linked to the policies pursued in other fields.

The real issues at stake in sustainable rural development in the Mediterranean region can be apprehended through four major interfaces: food security, the future development of farming systems, agricultural integration, and poverty and marginalisation.

6.3.1 - Food security

Food security has been unanimously recognised as a universal issue since the World Food Summit in Montreal in 1997. A further recognised fact which has been confirmed is that poverty and lack of education are the origin of famine and malnutrition in the world. Resources must thus be redistributed to the advantage of the poorest in order to enable them to increase their food production. It is these established facts which form the

basis of the main lines of the policies which make it possible to provide for the food needs of all populations, to improve the quality of their nutrition and to give them the health and physical well-being that is essential. Implementing a strategy of that nature presupposes that nutrition objectives become an integral part of general objectives such as the prevention of infectious diseases and the promotion of breast-feeding and healthier lifestyles. From this point of view, every government should make a precise assessment of the impact of its development programmes on nutrition. In this way programmes could then be planned coherently.

Agricultural policies must ensure the promotion of sustainable agricultural systems, crop diversification and agri-nutritional planning. The latter is particularly necessary in the Mediterranean region, where there has been no serious nutritional deficiency since the 1950s except in zones where there is fighting, but where, on the other hand, there is a steady increase in diseases related to diet. Diets in the region, which are mainly vegetarian (fruit, vegetables, cereals), have in fact developed considerably, and more meat, fat, sugar and salt is now being eaten in these countries. The consumption of such a typical Mediterranean product as olive oil thus decreased progressively over the last few decades as butter consumption increased, before arousing renewed interest as the result of the confirmation of the merits of the "Cretan diet", which is a promotional asset with excellent prospects for Mediterranean producers.

Both the economic gap and the physical distance between producers and consumers are growing steadily. Unless measures are taken to correct this trend, farmers will soon be reduced to suppliers of raw materials which are subject to the conditions imposed by the major food-processing industries, as has been demonstrated by the recent disputes in the mass marketing sector. Small and medium-sized farms must thus be integrated into these structures. The involvement of farmers in marketing and processing would thus seem to be both an imperative for survival and an effective prospect. Seen from this perspective, there are a number of

difficulties which must be overcome: low volume of activity, underutilisation of investments, lack of management training, and insufficient integration into the marketing networks and final links in the agri-food industry.

6.3.2 - Farmers and the agricultural systems of the future

Since agriculture obviously cannot confine itself to producing foodstuffs, even if these commodities must remain its principal objective, it must invest in at least partial control of the food networks and at the same time turn to producing non-food commodities such as medicinal plants, ornamental plants or plants with industrial uses. There should be new, highly profitable, openings for the agriculture in the tourist and leisure industries as the result of the growing interest in ecology.

Far-reaching changes should be made in the agricultural policies of the Mediterranean countries, influenced by the present economic situation and the foreseeable development of international relations since the signing of the Marrakech Agreements and the prospect of establishing the Euro-Mediterranean free trade zone by 2010. In terms of human capital, the agriculture of the future is no doubt liable to be marked by a decrease in workforce and the renewed promotion of the concept of farmer-entrepreneur requiring better training both in techniques and in economics.

Furthermore, given the need to manage natural resources more efficiently, three types of agriculture should coexist in the future:

- a capital intensive agriculture using a limited acreage but a high level of capital and technology, with high yields and moderate impact on the environment, and supplying the bulk of world production;
- a less capital intensive agriculture using, on the contrary, extensive acreage but a limited amount of capital and labour, producing high-quality foodstuffs, and environmentally friendly;

- a moderate capital intensive agriculture, developing in reduced geographical areas, focusing on the optimisation of very specific forms of farming, and environmentally harmful.

Will the development of Mediterranean agriculture make it possible to rethink the man-production-land relationship? Or are we to consider, on the contrary, that the only possible future for agriculture lies in the intensive off-land model, in which peasants are reduced to abandoning their land? Is there a modern course for land-based agriculture with a demand for labour and generating both individual identity and the feeling of collective effort? The question is all the more relevant since the rural population will continue to grow in absolute terms.

These issues convey the obvious conflict prevailing in the Mediterranean basin at the present time between intensive agriculture, which is geared to exports, and an agricultural system which is designed mainly to cover national food needs. Through the capital and methods it uses and the purposes it serves, the former participates fully in the process of globalisation of agricultural trade and in particular of relocation and mobility, whereas the latter, operating on the national scale, is caught in the stranglehold of the declared objectives of agricultural policy and the non-solvency of a sector of the agricultural population.

6.3.3 - Agricultural integration

The reform of the Common Agricultural Policy of the European Union goes beyond measures concerning markets; it also has the ambition of limiting production and promoting set-aside and it comprises accompanying measures targeting disadvantaged regions : measures to encourage the development of alternative activities such as the exploitation of forestland, or specific government aid to support extensive or traditional farming systems. The reform also encourages young farmers to set themselves up and promotes the renewal of the farming population, in

particular through early retirement aids. According to Community standards, disadvantaged regions make up 85% of European land. It is thus absolutely essential to create the necessary conditions for keeping rural populations where they are so as to prevent a situation where the absence of activity or lack of income causes a massive drift to the coastal and urban zones.

The Structural Adjustment Programmes have imposed macroeconomic reform on the countries in the South which is necessary but will not suffice to create a level of growth through which rural development can be achieved. *The ambitions of the reform must be set much higher in order to increase export penetration, enhance agricultural and non-agricultural activity in rural areas, make large-scale irrigation financially viable and use water more efficiently in irrigation systems.*

Since the 1970s, experience has shown throughout the world that countries which are integrated rapidly enjoy rapid growth and that open economies are more successful than closed economies, whether in terms of growth, macroeconomic stability or resistance capacity in a world undergoing rapid change.

The degree to which agriculture is integrated into the global economy and the extent to which incentives, institutions and investments in the agri-food sector are restructured in order to sustain that integration will be determining factors. This is the creed of the international financial organisations, and it is based on the following arguments: as world trade expands, a small economy with limited markets will see the limits imposed on rural growth by low domestic demand disappear. Trade is the classical vehicle for promoting dynamic growth, which benefits from the efficiency of specialisation and the introduction of new processes and products. Furthermore, there has been more expansion in agri-food exports than there has been in world trade.

Although necessary, integration *entails costs for certain vulnerable groups in the short term*. The liberalisation of imports will bring a higher growth rate but it is also liable *to bring unemployment in the short term*. The integration of agriculture into the world economy thus faces a fundamental dilemma in the form of the conflict which prevails between an increase in growth and a short-term rise in unemployment.

6.3.4 -Poverty, marginalisation and rural development

Aid must be granted to small farmers and the rural poor to help them to adapt successfully. Rural development concerns many groups including small farmers in rain-fed cereal-growing zones and the poor in rural areas. Helping such groups to become economically viable in the long term is the very essence of the rural development strategy proposed by the World Bank and shared by the European Commission.

The assistance they need to be given should be provided in the form of:

- compensatory programmes to sustain consumption and support employment in the short term;
- education and training measures facilitating mobility and providing more viable and better- paid job opportunities;
- economically viable alternative crop systems aiming to absorb labour.

Improving the social situation of the underprivileged presupposes that their integration into the economy be taken into account in the actual planning of development. This has been and will remain a constant of the guidelines for developing the rural world. It can be achieved essentially by attributing importance to promoting employment, improving farmers' incomes and living conditions and reducing regional disparities as strategic objectives of the new social development programmes, particularly in ecologically fragile zones where a large proportion of the underprivileged population is located.

Farming, pastoral activities and forestry are still the main activities in these disadvantaged rural areas. The arable land, however, is generally scattered, very poor and divided into small farms.

Apart from farmers, the disadvantaged population is composed essentially of young people who do not own any land and who work as casual farm labourers, domestic workers or herdsman.

Women are also concerned, most of whom do not own land; they attend to the housework and also work in the fields.

6.3.5 - *Is there an alternative?*

On the basis of these various logics, *the problems can be placed in the general economic context and in the context of territorial policies*. The experience gained in the projects for equipping and developing areas under irrigation and the integrated agricultural development projects as well as the encouraging results of the participatory community development measures taken in ecologically fragile zones confirm the relevance of a global approach to development integrating both technico-economic production objectives, which are geared first and foremost to improving incomes, and the objectives related to human development and environmental protection (social services, living conditions, etc.).

In addition, the rural world has a sociological and cultural wealth and diversity, which, depending on the region, offer two basic assets for promoting integrated and sustainable rural development:

- a spirit of solidarity: life in rural society has for centuries been characterised by the communal organisation of certain types of farming work or machinery and by moral and practical support in difficult situations or disasters;

- a spirit of initiative: the population takes charge of its own development by mobilising financial resources, developing farm machinery, introducing technologies, processing and conservation.

With the appropriate incentives it ought to be possible in this context for rural development to draw on the savings accumulated by members of the rural population living either abroad or in the cities.

The ability and innate organisational skill of the rural world are a further asset which can be mobilised to promote development.

7. *CIHEAM and sustainable rural development*

7.1 - Introduction

Ever since its creation, CIHEAM has devoted attention to issues relating to agriculture, agri-food and rural development. Its four institutes have been providing teaching in scientific disciplines necessary to agriculture, the rural economy and the environment, training students from the Mediterranean region and retraining professional executives working in the region. It has also organised debates, workshops and seminars on topics related to rural development. Having gradually opened up to the Southern and Eastern zones it has undertaken partnerships with national institutions and international organisations concerned by the Euro-Mediterranean area.

CIHEAM is now changing. It is emancipating itself from the “technical” sphere dominated by agronomists by involving specialists from other sectors such as the “academic” world and by opening up further to the economic and socio-political field by establishing a dialogue with political decision-makers, donor’s agencies, producers’ organisations, international organisations and non-governmental organisations (NGOs).

CIHEAM wishes to become a place where knowledge and experience converge, and it intends to take part in the development projects run in the Euro-Mediterranean zone. With this in view, the organisation led the initiative of convening the first meeting of all of the ministers of agriculture, or their deputies, from the Mediterranean member countries, which was held in Rome on 11 May 1999.

The conclusions drawn at that ministerial conference expressly recognise the role played by CIHEAM as a place of reflection and analysis for following up on agricultural and agri-food policies, with the vocation of becoming a true observatory of those policies in the Mediterranean zone and thus of consolidating agricultural co-operation in the region.

7.2 - The international seminar on sustainable rural development in Mediterranean countries to be held in Marrakech in April 2000

CIHEAM is organising this seminar, which has been planned in the context of the co-operation programme co-financed by the Commission of the European Union. Its objective is to put forward ideas and proposals making an original contribution which will relaunch the rural development process in the countries of the Mediterranean basin and give it a new dynamic.

This international event will be held in Marrakech in the spring of the year 2000 and will bring together a large number of key figures involved in various capacities in the problem of sustainable rural development in Mediterranean countries: policy-makers, teachers-researchers, local actors, and the representatives of producers' organisations. The participants will debate appropriate new strategies for ensuring sustainable rural development.

CIHEAM plans to organise the seminar on three essential items:

- awareness of the state of rural zones in the Mediterranean region; this point will include a descriptive analysis of the rural zones in the various countries and their specific problems plus the syntheses necessary to global reflection on the issue;
- identification of the concept of sustainable rural development in the countries of the Northern and Southern Mediterranean. This approach will be carried out in the light of the socio-economic developments which have taken and/or are still taking place in the current phase of structural adaptation prompted by the globalisation and liberalisation of trade;
- efforts to seek the possible content of sustainable rural development policies which are adapted to the specific realities of the respective

Mediterranean countries. At the conclusion of the seminar, these elements could be set out in a general policy statement formulating in particular proposals for a programme of international support for developing the rural zones of the countries of the Southern and Eastern Mediterranean.

7.2.1 - The state of rural zones in the Mediterranean region

Approximately half of the population of the Mediterranean area lives in areas described as rural zones in the countries concerned.

In both North and South a model of agricultural development has become established which is based on efforts to seek a constant increase in labour productivity.

The implementation of this model has considerably affected employment. Over the last 30 years there has been a sharp decrease in the number of persons working in agriculture in the North (- 39%), whereas that number is continuing to increase in the South, although there has been a marked decrease in the proportion of this working farm population in the total working population – from 54% to 27%. One of the main causes of this relative decrease is the strong pressure exerted on producer prices.

A large number of agricultural workers have thus found themselves excluded from farming in the North or, in the South, are still excluded from that activity.

In the *North*, with the drop in the working farm population both the deprived and the intermediate zones have seen their total population decrease to such an extent that the States concerned have pumped large volumes of capital into the areas in various forms with a view to alleviating the adverse effects of depopulation. These transfers provide a large proportion of the income of the working farm population which has remained in farming.

In the *South*, on the other hand, the process of transferring funds to rural zones undergoing depopulation is not yet under way. What is more, there are sometimes huge disparities between urban and rural zones as regards social and educational facilities. Public intervention to boost the rural development process has often been regarded as a most effective means of combating poverty.

And finally, in the *North* - and to a lesser extent also in the *South* - rural areas are emerging where farming is no longer the predominant activity.

7.2.2 - The concept of rural development in Mediterranean countries

On the Northern shore as well as on the Southern one, the rural concept is steadily decoupling from agriculture, and the concept of rural development is becoming more and more distinct from that of agricultural development. But demographic pressure is making it increasingly imperative to consider the problem in terms of natural resources management and thus of sustainable development.

Rural development is first and foremost the development of local resources, whether natural or cultural, and access for marginalised persons to those resources. It presupposes that a minimum of economic, social and cultural infrastructures be established.

The processes of rural development must be redefined as upward, "bottom-up", processes rather than as "top-down" processes, which means, in turn, that the roles of the actors operating at the local, regional and national level must also be redefined. These imperatives raise the problem of the "governance" of rural development and thus of the new institutions which are emerging or need to be set up.

Thus, in short, there are three factors which could characterise rural development in the Mediterranean region:

- the regionalisation of development processes;
- the multisectoral dimension of activities;
- the running of development institutions by local actors.

7.2.3 - The sustainable rural development policies to be implemented and the means to be mobilised

The transformation of rural zones has been the concomitant of CAP reform in the North and of structural adjustment programmes in the South, which comprised concrete measures for the partial withdrawal of the State from these zones. A widespread – and significant – phenomenon is now emerging whereby local actors are taking charge of development: with the rapid and widespread expansion of local development institutions in the North and the increasingly frequent management of development problems by NGOs in the South.

As the result of this transformation, policies whose object is neither agricultural nor rural have also undergone change, and this has often had an important impact on the rural world. These changes must be analysed from the point of view of Agenda 2000 of the European Union and the Euro-Mediterranean association agreements.

The seminar proceedings should make it possible to define the guidelines for a final declaration, which could constitute a reference document for the future of rural development policies in the Mediterranean region. Amongst other things, that document could put forward the idea of the specific funding by the European Union of the rural development programmes implemented in the countries of the Southern and Eastern Mediterranean similar to the funding provided within the European Union.

One possibility in this context might be that the rural development operations that are set up by combining the LEADER groups of the European Union and groups to be created in the Southern and Eastern

Mediterranean could be taken into account in the context of the “transnational co-operation” section of the new “LEADER Plus” programme. This would thus entail financing a programme of North-South-East co-operation in the Mediterranean region comprising EU LEADER financing of transnational co-operation plus the MEDA programme in the case of the implementation of measures in the South and East, part of which could be reserved for rural development.

In its conclusion, the final declaration of the CIHEAM seminar could invite the competent political authorities to examine this proposal.

7.3 - CIHEAM Mediterranean Agronomic Institutes and their contribution to sustainable rural development

IAM-Bari

7.3.1 - Introduction

Non-sustainable or inappropriate policies and programmes, unsuitable technologies, and inadequate rural and institutional structures are entailing inefficiency and the wastage of natural and human resources, investments and production in various regions of the world. Quite apart from the danger entailed in the inefficient utilisation of water resources and in climate change, it is the basic resources for food supply, agriculture and afforestation which are being placed under pressure and threatened by desertification, deforestation and the loss of bio-diversity. The negative impact on food security and environmental safety is thus twofold.

Social and economic development of the rural sector is imperative in order to guard against such consequences. Poverty in rural areas is a complex phenomenon, which varies considerably from one country to another and within each individual country.

The rural zones in the developing countries of the Mediterranean basin are suffering from a general shortage of financial and technological resources, which adds further to the deficiencies inherent in the educational infrastructures.

It is not easy to find employment in these rural zones; harvests are rare, and it is difficult to standardise farming systems; furthermore, the raw materials available, investments and distribution networks are all inadequate. These are all impediments which must be taken into account if achieve sustainable rural development is to be achieved. The deficiencies are reflected primarily in the high rate of population growth and immigration, whether internal or external (Action Plan of the FAO World Food Conference, 13-17 November 1996, Rome, Italy).

It is in the context of this scenario that the Mediterranean Agronomic Institute in Bari (IAM-B) conducts its activities. Its strategy for the socio-economic development of the rural sector in the Mediterranean basin is based on traditional operational means – training, research and development co-operation.

The IAM-B is thus helping to combat environmental degradation, and in particular to combat drought and desertification, infestation, the loss of bio-diversity and the degradation of natural resources by reintegrating and exploiting the basic natural resources. It furthermore promotes programmes which combine measures to develop skills and technological training which are compatible with the sustainability of growth in rural zones and in the most disadvantaged zones.

The Institute takes special interest in soil and water resources management (irrigation farming), the integrated protection of Mediterranean fruit crops and organic farming.

7.3.2 - Soil and water resources management

In almost all Mediterranean countries it is agricultural development which determined a considerable increase in irrigated acreage. Water needs then increased as the result of the growth of the industrial sector, the increase in migratory movements from the land to the cities which ensued, and the population explosion which came about in this context. This in turn gave rise to problems at the economic, political and social level requiring increasingly urgent solutions.

The general situation of crisis which has resulted is no doubt more marked in the southern region of the Mediterranean basin. If this situation were to persist the medium and long-term prospects would be disastrous: practically all of the countries on the southern shores of the Mediterranean Basin would suffer chronic water shortage in the next 30 years.

In the Mediterranean basin 72% of water resources are used for irrigation, 10% for drinking water and 18% for industry. In the countries on the southern shores agriculture absorbs almost 80% of the water used, less than half of which is actually used for crops. There is a total loss of 55% in irrigation systems, i.e. almost twice the volume used for civilian and industrial purposes. If these losses incurred in the irrigation systems were drastically reduced, enormous quantities of water could obviously be recovered for industrial and civilian purposes without harming agriculture.

In addition to the efforts to combat technical inefficiency, the new approach to the problem of agricultural development places emphasis on the more specifically socio-economic dimensions of water resource management. Rural development has thus highlighted the limits of the present models for managing those resources, which are designed on the basis of inappropriate price-fixing schemes and standards, a very low level of participation of the local communities, inadequate institutional management skills, and the employment of unsuitable technologies.

To sum up, the main characteristics of this sector are as follows: the mismatch of water availability and water needs; the decrease in water supply due to environmental degradation; the increase in demand due to the expansion of irrigated areas; the inefficiency of irrigation systems; institutional inadequacy; inadequate skills of the personnel involved; incomplete information; and the absence of integrated water resources management, which is a precondition for optimising water utilisation, particularly in agriculture.

A number of remedies to these problems are provided involving not only courses at the Institute (post-graduate specialisation diploma and Master of Science Degree) but also activities conducted by the research networks co-ordinated by the IAM-B, the partners being public institutions, the universities and the research centres in Mediterranean countries. This work concerns the rational utilisation of non-conventional water resources and emergency irrigation. The latter activity is being developed in the following areas of research in particular:

- the practice and management of saltwater irrigation with a view to devising new strategies;
- the utilisation of halophytes in agriculture, the aim being to promote their use in the Mediterranean basin as a biological means of improving salty soil;
- proper water management in crop protection, with a view to overcoming the problems of salinisation of the soil and fertilisation;
- emergency irrigation, with a view to devising new practices suited to arid conditions and drought.

Attention must also be drawn to the special importance of the course which the Institute runs with the Institute for Economic Development of the World Bank to disseminate Participatory Irrigation Management (PIM) and to the exceptional level of the students taking that course, as well as to

the programme for user participation in the management of irrigation systems.

In all developing Mediterranean countries, the global management of large areas under irrigation falls exclusively under the field of competence of the public irrigation bodies which control water supply and distribution and are also responsible for managing and maintaining the systems. If water demand for agricultural purposes is to be managed more efficiently, appropriate intervention is essential in order :

- to promote the creation of user associations which guarantee that farmers participate effectively in the management of areas under irrigation;
- to improve the management of irrigation systems by entrusting their operation and maintenance to the users, whereas they are currently under the authority of public bodies;
- to have the areas under irrigation placed under the supervision of the local users' associations and furthermore to give those associations the responsibility of supplying farm inputs, guaranteeing marketing and promoting and financing *ad hoc* projects.

These projects are exactly in line with the courses which the IAM-B and the EDI have been organising in the month of September for the last 3 years on the Institute campus.

The Institute's rural development strategies also include the project entitled "Provision of Technical Support to the Decision Support System for Water Resources Planning Components", which is the fruit of Italo-Egyptian co-operation and is one of the initiatives ensuing from Chapter 18 of Agenda 21⁴⁶.

⁴⁶ United Nations Conference on the Environment and Development (UNCED), Rio de Janeiro, 1992)

This project focuses on the planning and integrated management of water resources and recognition of the role they play as an economic asset, its purpose being to devise a planning methodology with which the sustainable utilisation of resources can be achieved. It is based on a holistic approach involving the assessment of the quantities and qualities needed both at the present stage and in the foreseeable conditions in the future. Two objectives have been set in particular:

- to define a methodology integrating both environmental and socio-economic aspects into the planning process;
- to devise an automated means of decision-making (DSS) for public decision-makers, through which the environmental and socio-economic compatibility of activities for developing water resources can be assessed and the policies concerning this sector can be defined more satisfactorily.

7.3.3 - The integrated protection of Mediterranean fruit crops

Citrus, oilseed, vine and olive are crops typical of the Mediterranean. These commodities, which are fundamental to the diet of the local populations, are gaining strategic importance for the economies of many Mediterranean countries and account for a significant share of their exports.

At the present time, the average output of the Mediterranean countries is still very low compared to more advanced agricultural systems. This is to be explained by a variety of different factors, in particular the heavy burden of plant disease problems, which is aggravated in these countries by the chronic lack of technical assistance services, well-equipped diagnostic laboratories and means, staff and instruments in general.

Virus and virus-like diseases, which are spread through infected propagation material as well as through natural carriers, are a very

worrying problem. The limited surveys conducted by experts of international organisations (FAO-IAMB) in the Mediterranean countries have actually revealed that the main viral infections are present for the above-mentioned species.

Output is considerably affected by these diseases as regards both quantity and quality. But these diseases also affect glasshouse output, reduce longevity (by up to 10 or 15 years), promote attacks by other pathogenic agents and pests, and reduce plant resistance in hostile climatic conditions. The presence of these diseases furthermore makes it imperative to use only tolerant varieties, which are not always appreciated by local markets are refused outright by foreign markets.

Unless appropriate measures are taken (quarantine, health certification of propagation material) to prevent the entry and uncontrolled spreading of new pathogenic agents, the further opening of frontiers to international trade and the slackening of customs controls will expose the Mediterranean countries to the risk of considerable aggravation of the state of plant health.

In the light of the above, it is important to note that the IAM-B has been devoting attention to these issues for almost 15 years now and intervenes at both technical level and in the standardisation field. The post-graduate diploma and MSc courses in particular prepare students in favourable conditions for applying the principal methods for assessing and improving the state of health of these crops through on-site health selection and the production of material by thermotherapy and tissue culture. On the basis of the knowledge they acquire, students are able to conserve plant material in healthy conditions and thus to contribute towards resolving the problems inherent in the deterioration in the health of fruit crops. They thus contribute significantly to the improvement of the existing assessment schemes in their countries or to devising such schemes where they have not yet been introduced.

And finally, the students are given the necessary training for planning and managing crop protection schemes and programmes for improving crop health autonomously and for using the most suitable techniques properly, from the economic as well as other points of view.

In addition to the training activities described above, the IAM-B's contribution to rural development takes the form of the co-ordination of three research networks and development co-operation projects, such as the project for the "Production, conservation and use of propagation material as certification for the development of high-quality nursery activities in Albania". The purpose of the latter project is to launch a programme for assessing nursery production of tree species (citrus, oilseed, olive and vine) with a view to boosting the fruit-tree nursery sector.

The IAM-B's support for rural development thus lies in the contribution it makes to the competitive development of fruit crops by developing native species and varieties and to the adaptation of local commodities to international standards. Through these activities guarantees can be given on the state of health of local commodities, the current export restrictions can be overcome and the potential for developing the sector can be increased.

This action promotes the development of fruit-growing, and its socio-economic impact is all the greater since it stimulates the creation of small and medium-sized nursery enterprises, boosts the export of these commodities and, even more important, creates activities for farmers and increases their incomes.

7.3.4 - Organic farming

The environment, its conservation and the threats to ecological balance have become a subject of crucial importance throughout the world over the past few years.

Agriculture has been vested with a decisive and concrete role of protecting and conserving the environment in order to hand down a less polluted world to future generations, and in particular a world that is fit to be lived in. Although agriculture can contribute to the conservation of traditional landscapes and natural habitats, bio-diversity and the management of land and water resources, it can also entail environmental damage such as pollution, the exhaustion of water resources, erosion and deterioration of the soil, as well as the extinction of plant and animal species. These effects occur when the cost/benefit ratio tends towards environmental exploitation rather than towards protection.

For some time now, both international and national political institutions have been launching intervention programmes involving not only repressive measures to crack down on abuse but also incentives aiming to develop farming practices which are productive and at the same time more environmentally friendly.

The European Union has introduced regulations for protecting and developing the environment which are applicable to the food sector, the organic farming system being the most obvious example. Organic farming in the Mediterranean region is paying for the delay and the organisational and representative deficiencies of the sector, even as regards the international standards which are taken as a basis and are geared excessively to the countries of Northern Europe.

In the light of the results of the numerous activities conducted by the IAM-B and the experience gained in the organic farming sector, the International Federation of Organic Agriculture Movements (IFOAM) therefore set up a regional Mediterranean group in 1997 known as IFOAM-AgriBioMediterraneo, whose Permanent Secretariat has been entrusted to the IAM-B.

And the IAM-B has itself developed its own activities in the organic farming sector so as to be able to respond to the numerous requests for

training and research submitted by most Mediterranean countries, and in particular those on the Southern shores, where the Institute has been active for many years.

At the same time, the IAM-B has also launched community projects at the local level, such as the BIOPUGLIA project, which is being run in the context of Action 3.5 of the Puglia Multi-fund Operational Programme and has been entitled “Demonstrative action for perfecting and disseminating organic farming methods”.

The Institute has also launched other specific training activities in the organic farming sector in parallel with the BIOPUGLIA project. An international course is run, for example, in the context of the training and research activities financed by the DGCS Directorate of the Ministry of Foreign Affairs, and there is also a project for producing a CD ROM on organic farming, in which training and information issues are broached. The IAM-B has furthermore launched research and experimentation programmes with the collaboration of Italian and international research institutes, and in particular with universities in Italy and other Mediterranean countries (Tunisia, Egypt, Albania, etc.).

And finally, the project entitled “Integrated farming systems and the definition, experimentation and demonstration of organic farming models” is due to commence very shortly within the context of the 2nd Italy-Albania Cross-Border Co-operation Programme, through which the IAM-B plans to step up research and training in the organic farming field with the collaboration of the Albanian institutions, which have specifically asked to cooperate along those lines.

7.3.5 - Conclusion

The IAM-B promotes agricultural development in developing countries on a permanent basis through a system of integrated intervention involving training activities, applied scientific research and development co-

operation. The measures carried out to strengthen local institutions through scientific collaboration as well as logistic instruments and assistance contribute towards rural development in the zones concerned and at the same time reduce the risk of “brain drain” and the uprooting of the population.

Through its action the IAM-B formulates and embarks on integrated rural development strategies in zones with either low or high potential, its aim being to promote the occupation of rural areas, vocational training, infrastructures and services for supporting rural development and the food security of family groups, but also to boost the production capacity of local farmers in order to ensure that their participation will be effective.

IAM-Chania

7.3.6 - Introduction

The integration of CIHEAM member states into the Euro-Mediterranean free trade zone will be initiated through a process of economic development aiming to achieve the cohesion and complementarity of domestic economies and the economy of the European Union in interrelated sectors. This process will lead to the reallocation of comparative advantage and social development bringing a new state of equilibrium amongst the partners involved.

The Agricultural Sector of CIHEAM member states is crucial in this process. It must be transformed in a way which not only meets the requirements of other sectors of the domestic economy but is also compatible *with the requirements of the major European trading partners of those states.*

Consequently, the concrete form of the European model for agricultural development must be properly perceived by decision-makers in the non-EU member states.

The EU has defined the foundations of an agricultural development model of this nature within the following framework:

1. A competitive agricultural sector, which can gradually contend with the world market without over-subsidisation, which is becoming less and less acceptable internationally.
2. Production methods which are sound, environmentally friendly and able to supply quality products of the kind the public wants.
3. Diverse forms of agriculture, rich in tradition, which are not merely output-oriented but seek to maintain the visual amenity of the countryside, as well as vibrant and active rural communities, which generate and maintain employment.
4. Sustainable rural development incorporating agriculture and other economic activities so as to create an economic and social environment conducive to prosperity.
5. An agricultural policy which makes it clear that the expenditure it involves is justified by the services which society at large expects farmers to provide.

In this model, the policy and decision-makers of the CIHEAM member states face serious challenges as well as major opportunities in the years that lie ahead. Those opportunities must be identified, appropriate agricultural policies must be promoted, and the projects which take advantage of the benefits deriving from the opportunities must be implemented and managed efficiently.

In view of the above, and considering the need for skilled personnel if an optimal development process is to be achieved, the Mediterranean Agronomic Institute in Chania, Greece, has been developing its MSc programmes over the last ten years with a view to training executive and academic personnel of high calibre who are able to define policies and

identify opportunities and are trained in state-of-the-art technology and know-how.

The post-graduate programmes focus on areas of knowledge and fields offering a wide range of opportunities, while the infrastructure, the latest technology laboratory equipment and the necessary teaching staff provide the skills needed in order to use those opportunities to best advantage. The course work which students are required to submit for their Advanced Post-Graduate Diploma and the intensive research training in selected relevant topics in their MSc year meet the conditions of convergence required for the development of human resources.

As a result, CIHEAM/IAM-Ch MSc graduates acquire the ability to transfer the necessary knowledge and technological developments to their homelands, thus enabling those countries to accelerate the process of their integration into the Euro-Mediterranean free trade zone in a way which is compatible and consistent with the European Agricultural Model and at the same time to achieve optimal allocation of resources and reap the benefits of this integration process.

7.3.7 - Brief description of the MSc programmes and support facilities

A. Master of Science (MSc) in Economic Science, Business Management and Marketing

This programme is designed to provide specialised knowledge and research findings concerning:

- economic theory, the econometric evaluation of production factors and their optimal allocation;
- the management of enterprises;
- the strategic development and modernisation of enterprises;

- the enhancement of the competitiveness of agricultural cooperatives;
- the marketing of agricultural products and products from the food industry;
- the designing, development and promotion of new products and services.

B. Master of Science (MSc) in Environmental Management and the Management of Natural Resources

The management of ecosystems requires scientists with the ability to use effectively statistical and other quantitative methods such as multivariate statistics, modern techniques such as geographic information systems and remote imaging as well as methods for assessing repercussions and risks due to human intervention on the basis of environmental impact assessment and related legislation studies. With time, the combination of the above knowledge leads to an integrated approach to environmental protection and the integrated management of natural resources.

Research topics involved:

- applications of geographic information systems and remote sensing techniques for the evaluation of both the management and the degradation of environmental resources;
- land-use systems and optimal utilisation of resources;
- protection against desertification;
- landscape ecology;
- forest fire modeling;
- protection against natural disasters.

C. Master of Science (MSc) in Horticultural Quality Management

Quality management of fruit and vegetables requires in-depth knowledge of the quality-determining indices which can be altered by variations in the biotic and abiotic factors encountered throughout the production period. Furthermore, the analytical methods for assessing these quality indices and the methodologies used for monitoring and improving them constitute the necessary conditions for a sound integrated approach to quality management at pre- and post-harvest level. In addition, the use of state-of-the-art technology and new innovative production protocols in Mediterranean agriculture are the sine qua non for the production of high-quality horticultural products.

Research topics involved:

- the micro-propagation of high-quality plants using tissue culture techniques;
- the use of integrated hydroponic systems with local, environmentally friendly substrates;
- organic agriculture applications;
- soil and plant tissue analysis to improve soil fertility and horticultural crop quality respectively;
- the use of genetic engineering to manipulate the ripening and nutritional properties of fruit and vegetables.

D. Master of Science (MSc) in Natural Products

The current approach to quality is to replace synthetic chemical substances with substances of natural origin.

The progress made in the areas of plant bio-diversity assessment, the isolation and characterisation of novel natural products, the manipulation of the secondary metabolic pathways in order to increase yield and quality,

and the selection and breeding of useful genotypes utilising molecular tools has enhanced effectiveness in addressing issues such as:

- the replacement of synthetic chemical compounds with natural antioxidants and bio-preservatives, essential oils, flavour enhancers and dyes, and the production of novel pharmaceutical products such as hormones, antibodies, anticancer agents and products with important industrial uses;
- the use of molecular markers in breeding;
- plant modification for increased resistance to environmental stresses;
- the satisfaction of the currently growing industrial and consumer demand for such substances.

E. Master of Science (MSc) in Food Quality Management

Food Quality Management is the interdisciplinary approach which combines the specific knowledge from the sciences of chemistry, microbiology and food technology which is necessary for determining food quality. Furthermore, it requires the special ability to implement analytical methods of assessment and improvement of quality. In addition, particular emphasis is placed on understanding quality assurance and management at the industrial level. This involves fields such as Total Quality Management (TQM), ISO 9000, Auditing against ISO 9000, Quality Assurance Systems: ISO 9001-2000, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practices (GMP), Laboratory Accreditation (EN 45001), Statistical Process Control (SPC), and the European Model for Business Excellence (EMBE).

Research fields:

- improvement of the quality of food products;
- analysis of the chemical composition of foods of plant origin;

- the potential use of naturally occurring compounds as food ingredients (e.g. antioxidants, colourants);
- evaluation of the microbiological hazards in food products;
- the approach to HACCP implementation in food-manufacturing companies.

IAM-Montpellier

7.3.8 - Introduction

Activities for the analysing and managing the rural development process commenced in the Mediterranean Agronomic Institute in Montpellier (IAM-M) at a time when scientists were beginning to devote attention to this phenomenon in Europe. So it can be said that the work and tuition on rural development at the IAM-M have been continuing since the mid 1970s.

For it was at that time that the first analyses of rural development seen as a phenomenon distinct from agricultural development began to emerge. Analysis of that nature has become necessary because many rural areas in Europe are now devoid of their agricultural dimension as the result of the drift from the land. Other activities have gradually taken the place of farming, which has become a marginal activity, even in zones which cannot be termed disadvantaged. Agriculture and rural affairs have thus become two distinct issues in Europe, which the IAM-M – and other bodies – propose to study as such.

These studies have followed the disciplinary development of the scientists interested in the problem. The approach to rural development adopted at the IAM-M was thus primarily sociological and, secondly, geographical. It was not until the early 1980s, when local development, one

of the current major components of rural development, emerged that the approach also took on an economic dimension.

The operational content of the rural development processes studied has evolved along similar lines. The analysis of rural development began as the analysis of the social behaviour of rural populations in relation to the changes taking place in their environment. It was thus initially sociological, focusing more particularly on the institutions and organisations of the rural world. In that respect the IAM's work did not differ greatly from that of the faculties of agronomy of the Mediterranean region, where rural sociology and advisory services or, in the Anglo-Saxon system, "extension" services are often grouped in the same teaching and research department.

From the beginning of the 1980s, four new fields of interest emerged in the IAM-M, as was also the case in the other institutes in the field:

- the connections between agriculture and rural development;
- the engineering, and thus the evaluation, of projects
- a more regional approach to the economic development of rural areas,
- methods for analysing multisectoral activities and, more specifically, for expressing them in pluriactive terms.

To begin with, these four more "economic" approaches took shape around a nucleus dealing with "family farming", a line of work which became a major activity in 1984 with the creation of the "*Réseau Agriculture Familiale Comparée*" (RAFAC – *Comparative Family Farming Network*). This network was set up at a seminar organised by the IAM-M and is run by the Institute. In 15 years it has published 5 works on subjects concerning both the internal operation of farming units (pluriactive farming, technological choices) or their economic environment (price policy, agricultural policies or rural development).

At the same time, studies of institutional and organisational processes began to focus on the emergence of a new type of organisation, which was more rural than agricultural. These organisations emerged as the consequence of *the institutionalisation of local development* in the countries in the Northern Mediterranean, whereas in the countries in the Southern and Eastern Mediterranean they were the result of State withdrawal.

This new orientation marked the various events on *agricultural advisory services* which CIHEAM organised in several Mediterranean countries between 1990 and 1995. The IAM-M played an important part in the organisation of these various seminars and also organised similar activities in several countries in the Near East in collaboration with the Fondation pour le Progrès de l'Homme.

The work carried out and the tuition provided on rural development were also encouraged because the phenomenon became a matter of concern and indeed a priority for political leaders in the South and East after being localised initially in the countries of the Northern Mediterranean.

7.3.9 - The transformation of rural activities: rural development project engineering

Different phenomena were the origin of the diversification of rural activities. In the North, the decline of agriculture which was virtually general on over 80% of rural areas gave rise to processes of social organisation which led to the creation of new activities based essentially on the development of local resources. In the South and East new organisations took over, often with NGO support, when the State pulled out. They often gave rise to new activities, which were frequently tertiary and sometimes secondary, also promoting agricultural diversification where possible.

These phenomena often began as individual or collective initiatives although within the framework of long and medium-term development

programmes elaborated by local actors. Thus, a new type of project had emerged.

Whereas the projects run before the 1980s had been on a huge scale, the new projects were on a smaller scale in both North and South. They were still multisectoral activities, in which it was necessary to place emphasis on co-ordinating initiative rather than on setting up coherent activities on which the decisions had been taken at a higher level. The “bottom-up” now replaced the “top-down” approach, and it was up to the local actors to elaborate and manage these new processes.

This triple phenomenon gave rise to a completely new demand for expertise in project planning and assessment, requiring specific training in project engineering that was geared towards “*rural development and projects*”. The IAM-M thus created such training 11 years ago in the form of a Specialised Master’s Degree, which is accredited both as a CIHEAM MSc and as a Master’s Degree of the French Grandes Ecoles. The course is still being run in Montpellier, and the Institute has now been asked to run it in the Middle East and the Maghreb, where it has already been tested in the context of special courses. The training runs for 15 months and comprises eight 4-week units plus practical training in a development organisation, which forms the basis of the student’s final thesis. Some 15 students from both North and South are accepted each year.

The perpetuation of this training course and the stringent requirements with regard to level of content prompted the Rural Development Team to elaborate teaching material in the form of multimedia textbooks. This was made possible by the implementation of the *NECTAR Programme*, a programme for the creation of teaching material, which is funded by the European Union and implemented in the context of North-South inter-university networks. Five units have been created through this programme, each of a volume of some 300-400 pages. They have been drawn up in

French, are currently being translated into Arabic and are also due to be translated into English.

In parallel with these less conventional activities, the IAM-M continues to train executives in both the rural development and other fields through research in the context of the *Research MSc Programme*. The institute develops at least two *special courses* each year, one in the Middle East and the other in the Maghreb, on subjects discussed in advance with the co-organising institution. Some subjects are in high demand, such as the analysis of the needs of rural societies and sustainable rural development.

The *training activities* are permanently linked to *network research activities*, which help to develop the content of the training. *The research activities are carried out in two networks, the RAFAC and the LEADER European Observatory.*

Initially, the *RAFAC* focused exclusively on family farming, analysing how it operated in the reality of the Mediterranean region as well as its connection with agricultural policies. After these first two phases, the team of some 30 researchers from 17 institutions in 12 Mediterranean countries who form the *RAFAC* felt that it was necessary to study the connections between family farming and rural development. For the Mediterranean constitutes a series of widely varying realities, so that the ways in which agriculture and rural development can be related also very widely. The comparative research which the members of the team have been conducting for the past two years is now for the first time being carried out on the basis of absolutely identical problems and methods. This work will comprise 11 analyses per country plus a summary which will endeavour to highlight the invariants and the differences in the rural development processes evolving in the Mediterranean countries. It will result in a work of over 500 pages, which will be presented at the seminar in Marrakech.

The IAM-M's participation in the *LEADER European Observatory* is the result of the numerous activities which the Institute has developed in the

local development field. For over 10 years now, groups of local organisers have been asking the Institute to run training and further training courses for them. Thus, when the European Union launched the LEADER Programme, its local development support scheme, the IAM-M was called in to take part in the support group backing the programme.

7.3.10 - The transformation of rural societies and the IAM-M's training and advisory services

The changes taking place in rural societies whose components have been set out above concern essentially the local actors who either bring them about or are subjected to them. In order to accompany these changes the IAM-M has set up operations known as “training and advisory services” for these actors, which have the following features:

- The “training and advisory services” is first of all an *approach to a series of problems*. How can rural communities and young graduates be given a taste for creativity and enterprise and the ability to adapt and to become the actors of their own development in the face of the breaks and opportunities that already exist in rural zones but which are now intensified by the globalisation of trade and the penetration of new technologies? This is the crucial question.
- This “training and advisory services” is also a *specific approach* based on the socio-economics of human development. This is a primarily systemic approach, which includes learning participatory rural development planning. It goes through the classical stages of any form of planning and is based essentially on three tools: action-training, organisation and negotiation. The fields in which this approach can be applied are many and varied, focusing both on dynamising systems of advisory services and on support for traditional organisations, the management of small loans or small projects, and/or action to strengthen associative life.

- The “training and advisory services” complex is also a *network* composed of :
 - training and research institutions (INA Tunis, ENA Meknès, ENFA Toulouse, the Madrid Polytechnic, CNEARC Montpellier) within which partnership training programmes are also organised.
 - Other training–action institutions such as the Centre of REUS in Spain, Etcharry in France and the Centre for People and Cultures in Montpellier this allow also a cross-border co-operation (Agreement with the Catalonian Government).
- The “Training and advisory services” complex furthermore comprises *training programmes* :
 - it is *one of the two options of the IAM-M ‘rural development’ course of studies*, which leads to two types of MSc – a professional MSc and a research MSc;
 - international courses, which focused on two subjects this year:
 - ✓ « Development engineering and support for agricultural producers’ organisations », run at the ENA in Meknès with the support of the Moroccan public authorities;
 - ✓ « Institutions and regionalised rural development », run in Reus in Spain with the support of the Catalonian Government.

These training courses are interactive on several scores: there is interaction between North and South, amongst the participants themselves, and between the participants and the local area. But they are also an arena for scientific work and the interchange of experiences, which can lead to actions where experience and efforts are combined.

And lastly, the “training and advisory services” complex leads to combined research and action programmes, the latter being run mainly by

individuals on the basis of their individual research projects, which sometimes take the concrete form of a job which is created on the basis of the emergence of new needs brought about by these rural development processes.

In view of the risks of over-diversification for what is in the final analysis a small team, the IAM-M has been endeavouring for some time to implement integrative programmes which combine training, research and international co-operation. It is with that ambition of integration that the Rural Development Team will be running the programme entitled “*Globalisation, family farming and rural areas – the effects of globalisation on the transformation of 12 Mediterranean rural zones*” over the next 3 years.

This programme is:

- a “*doctoral Mediterranean programme*” designed for training 10 doctoral candidates from 9 Mediterranean countries. The theses they will write will be on the same subject but in different fields in each country;
- a *research programme*, in which all of the doctoral candidates and their supervisors from 10 Mediterranean universities take part;
- a *programme of comparative analysis*, in which common theoretical and methodological approaches are used;
- an *analysis* with a view to developing *recommendations* on rural development policies in Mediterranean countries.

The IAM-M activities supporting rural development thus take place in three fields which constitute CIHEAM’s very vocation: training research and support for development actors. They also endeavour to implement the three strategic objectives of the establishment of the Institute, which see itself as a centre supporting the training of executives, a centre of scientific resources and an arena for scientific and educational information.

IAM-Zaragoza

7.3.11 – Introduction

Traditionally, rural areas were identified as agricultural zones, since until very recently the majority of rural societies depended on agricultural commodities – at least in certain countries. Nowadays these zones are seen as open multifunctional systems, which are shaped by dynamic human activities. However, given the combination of the various elements which form these zones, the typology is very wide-ranging and diversified, depending on the economic development and ecological conditions of the various regions in the world.

The rural zones in the Mediterranean region vary widely, a fact which is accentuated by the differences between North and South. But they all face the same challenge, which comprises three fundamental factors for sustainable development:

- that of guaranteeing rural families decent living conditions and a decent income in order to prevent depopulation;
- that of contributing to food production;
- that of contributing to the appropriate management of natural resources and to maintaining an ecological balance.

The rural development activities of the IAM in Zaragoza (IAM-Z) have developed accordingly. In the 1970s, the activities, which had hitherto focused essentially on agricultural development, were oriented towards integrated rural development with emphasis on the environmental dimension. The first version of the Advanced Course in Countryside Management in Keeping with the Environment was created in 1976.

7.3.12 – Action Lines

The lines of action currently pursued by the IAM-Z in the rural development field are to improve the technical and methodological knowledge necessary for the successful management of integrated rural development projects (or parts of projects) which are based primarily on the utilisation of the endogenous resources of the Mediterranean regions in conformity with the principles of sustainable development. These lines of action are as follows:

Countryside management. Development and management of local resources.

This embraces the entire process necessary to the allocation of soil uses and to the sustainable exploitation of natural resources in a rural area. This process comprises the determination of objectives, an inventory, diagnosis, proposal and assessment of alternatives, and the execution of projects. The IAM-Z offers an MSc programme in this speciality as well as a series of special courses in rural tourism, special commodities, hunting or landscape.

Development of technologies for tapping local resources. Identifying resources does not in itself suffice for promoting their effective utilisation in development programmes. The success of programmes presupposes that technologies be adapted and incorporated which improve the economic efficiency and environmental compatibility of production processes. In this line of thought the IAM-Z carries out noteworthy work through specialised training programmes and in the context of various co-operative research networks.

Economic policies and marketing strategies. The success of rural development programmes depends on the opportunities offered by the economico-institutional context and the market. The IAM-Z training programmes therefore enhance knowledge of that context and of the most suitable economic techniques for developing commodities.

Models and policies for managing natural resources with a view to sustainable regional development. In order to ensure the sustainability of rural areas and rural activities it is imperative to implement appropriate environmental management of natural resources. This objective forms the basis of a major line of action of the IAM-Z, particularly with regard to water resources management, soil utilisation and the use of natural landscapes.

7.3.13 - Activities

A. Training

In quantitative terms, training is the most important activity of the IAM-Z in the rural development field. The training programme comprises specialisation courses which run for 9 months (10% of the total training offered), the writing of the Master's thesis over a 10 to 12 month period (5% of the total) and specialised courses which run for 1 or 2 weeks and are designed for professionals with experience (85% of the total).

Specialising courses

The Countryside Management in Keeping with the Environment course is designed to train specialists qualified in disciplines related to natural and agricultural resources in the characteristics of various agricultural and natural ecosystems in the Mediterranean region. Its objective is also to enable them to understand the fundamental problems of natural resource management through the systems analysis technique. Countryside management problems are considered in the present socio-economic context at the regional, national and international level. The course has a practical orientation and gives participants direct experience in resolving the specific problems encountered by environmental management experts in rural areas in multidisciplinary teams. Since 1976, 400 university graduates from the CIHEAM member countries have

successfully completed this course and are now working either in administrative departments in their countries or in consultancy firms.

The IAM-Z also offers a course of specialisation in agri-food marketing, which is a strategic component of every rural development scheme.

Master's theses

Approximately one-third of the Master's theses written at the IAM-Z (a total of 350 theses have been presented) relate to the lines of action set out above. Most of them deal with the development of technologies for tapping local resources (production systems, typical commodities, etc.) and the sustainable management of natural resources (pollution control, proposals for managing natural landscapes, etc.). Some 20 theses focus specifically on planning and rural development (countryside management in several countries, analysis of disadvantaged zones, proposals for regional development, etc.).

Specialised courses

These courses, which form the greater part of the training offered, are designed to meet a double objective: that of updating the knowledge of professionals with responsibilities in their field of action and that of encouraging collaborative relations amongst the participants. The subjects deal with the current most topical problems, and it is rare that a course is offered more than 3 or 4 times. As is the case with the other training activities of the IAM-Z, the success of these courses is guaranteed by the participation of highly qualified lecturers from various countries, who present complementary approaches (scientific, managerial and economic). English-French-Spanish simultaneous interpreting services enable the participants, who come from all over the Mediterranean region, to interact to a greater extent.

Over the last 8 years more than 2000 experts have attended 77 courses covering 34 subjects related to rural development. These courses covered various aspects of the following major areas:

- countryside management and local resource management. This course deals with both methodological aspects (use of dynamic models for resource management, systemic approach to support the development of regional policies and soil utilisation) and sectoral aspects (management of fishing resources in connection with the development of coastal zones, pastoral farming and rural development, etc.);
- development of technologies for developing local resources. The technologies dealt with concern the predominant farming systems (sustainable farming in arid and semi-arid conditions, pastoral systems, olive-growing), marginal commodities with outlet possibilities (dry fruit, goats, bees, rabbits), the processing of typical commodities (sheep and goat dairy products, olives and olive oil) or the development of new opportunities (game and fish resources);
- economic policies and marketing strategies. The subjects covered in the economic policy field include the following in particular: the WTO and its market impact, economisation of natural resources, the allocation of water uses and price-fixing machinery. The field of marketing strategies, on the other hand, provides the opportunity to deal with quality, the development of new commodities, distribution and international marketing; these topics are the subjects of special courses covering specifically typical Mediterranean products which are of major significance for the economic development of rural zones in the region;
- Environmental management models and policies. This field of problems comprises general topics on the one hand such as the environment policies of marginal agricultural zones, animal husbandry and environmental management or the assessment of the

environmental impact of farming and forestry activities. In addition to these, it also includes topics relating specifically to the management of certain resources or ecosystems: reforestation strategies, protection against forest fires, groundwater management, Mediterranean watercourse management, humid zones and their use for pollution control, soil reclamation, etc.

B. Research networks

IAM-Z encourages and co-ordinates the activities of several research networks, whose purpose is to promote collaboration between research teams in the CIHEAM member countries in order to carry out joint work on problems of importance for the agri-food sector and environment sector in the Mediterranean region. In terms of rural development, the activities of these networks focus mainly on the development of technologies which develop local resources and improve environmental management.

The following networks are concerned:

Plant resources adapted to Mediterranean arid conditions: study, conservation and utilisation. The objectives of this network are to prospect, establish the main features of and produce plant material suited to the Mediterranean zone of non-irrigated agriculture. Special emphasis is placed on the use of local varieties as the basic material for plant improvement. The activity concerns fruit-tree species (dry fruit, apricots and under-utilised fruit-tree species such as figs, medlars, kakis, pomegranates and cactus pears), cereals and legume fodder plants. Part of the work also concerns plant resources which can be used for revegetating marginal zones.

Improvement of sheep and goat production systems adapted to the Mediterranean dry zones. This programme is structured around three major themes:

- improving the use and valorisation of local Mediterranean forage crops used in sheep and goat feeding;
- conserving, using and improving genetic resources in Mediterranean sheep and goats, for their preservation and to improve their competitiveness in order to find an appropriate place for them in present and future production systems;
- studying sheep and goat production systems so as to overcome the difficulties that arise as a result of the Mediterranean climate and its uncertainty.

Genetic management of local rabbit populations

Apiculture

Evaluation and management of fishing and aquaculture resources.

The objective in the case of fish resources is to gain better knowledge of fish stocks and their development, which is of capital importance for sustainable rural development in Mediterranean coastal zones. Fish-farming, whether marine or continental, is an expanding sector, which offers a very advantageous economic option for developing rural zones with water resources.

7.3.14 - Future trends

The changes which globalisation and the liberalisation of the economies of Mediterranean countries are bringing will intensify the trend towards urban concentration, agricultural decline in rural zones (because of the lack of competitiveness) and the abandonment of the natural environment. All countries will probably promote the establishment of integrated development policies in order to limit these effects. It will thus

be necessary in the medium term to maintain a supply of activities which can meet the needs of planners as well as experts who can integrate their work into a regional perspective which is not exclusively agricultural. The activities of the IAM-Z are constantly adapted according to the needs identified in the member countries, and it would thus seem justified to pursue them further.

Furthermore, the conclusions of the seminar on rural development which CIHEAM will be organising in Marrakech in the year 2000 will provide an opportunity to reassess the lines of action of the four CIHEAM Institutes and to structure the programme they are currently developing more satisfactorily.

PART IV

*Main indicators of
agricultural and food
development in Mediterranean
and Arab countries*

8 *Statistical indicators*

8.1 - Introduction

This statistical section contains a short presentation of the main indicators of agricultural and food development in Mediterranean and Arab countries.

The data relate to demographic and economic aspects, resources and production means, consumption, and international trade.

In view of the fact that few data are available in several countries in the region, in order to ensure comparability we have deliberately limited our data to the indicators most frequently used for population growth, urbanisation, aggregate economic growth and growth in agriculture, food consumption and international trade.

8.2 - Notes on methodology

8.2.1 - Data source

The agricultural statistics (land use, production, trade) have been drawn from the United Nations Food and Agriculture Organisation (FAO). They are collected from the official bodies in the various countries and completed where necessary by estimates made by the FAO on the basis of provisional or unofficial information.

The macroeconomic information concerning population, national accounts, world trade, etc. have been drawn either from the United Nations series of statistics which are published in various yearbooks (statistical yearbooks, yearbooks of national accounts, population yearbooks, yearbooks of international trade) or from World Bank or IMF publications.

8.2.2 - Geographical groups

We have grouped the countries as follows for convenience in our analysis. They are used in the various tables so that the flows analysed for the Mediterranean, the Northern zone, the Southern zone and the Arab countries can be compared.

- **Mediterranean:** Spain, France, Greece, Italy, Portugal, Albania, Bosnia-Herzegovina, Cyprus, Croatia, Malta, former YR Macedonia, Slovenia, Turkey, Yugoslavia, Algeria, Libya, Morocco, Tunisia, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Syria and Yemen.
- **Northern Mediterranean:** Spain, France, Greece, Italy, Portugal, Albania, Bosnia-Herzegovina, Cyprus, Croatia, Malta, Macedonia, Slovenia, Turkey and Yugoslavia.
- **Southern Mediterranean:** Algeria, Libya, Morocco, Tunisia, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Syria and Yemen.
- **Arab countries:** all of the Southern Mediterranean with the exception of Israel, plus four non-Mediterranean countries: Djibouti, Mauritania, Somalia and Sudan.

8.2.3 - Classification of countries in the tables

- **Geographical groups:** World, Mediterranean, Northern Mediterranean, Southern Mediterranean and Arab countries.
- **Mediterranean countries belonging to the European Union** (in alphabetical order): Spain, France, Greece, Italy and Portugal.
- **Other Northern Mediterranean countries** (in alphabetical order) : Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Syria and Yemen.

- **Countries of the Maghreb** (in alphabetical order): Algeria, Libya, Morocco and Tunisia.
- **Other non-Mediterranean Arab countries** (in alphabetical order): Djibouti, Mauritania, Somalia and Sudan.
- **Share of the Mediterranean in the world.**

Table 1. Population, demographic growth, urbanisation, agriculture ratio to the employment, 1998

Country	Total population 1000 htt	Growth rate 1965-98 %	Urban population/ Total population %	Rural population/ Total population %	Agricultural pop./ Total population %	Agricult. labour force/ Total labour force %	Inhabitants/ agricult. employees
World	5.901.053	1,74	46,58	53,42	43,47	45,64	5
Mediterranean C.	479.762	1,59	67,46	37,08	21,46	21,91	11
North Med.	267.685	0,83	68,95	31,05	13,96	18,23	12
South Med.	212.077	2,79	65,58	44,70	30,93	27,40	9
Arab Countries	304.200	2,79	61,16	46,00	31,09	28,37	9
France	58.683	0,56	75,21	24,79	3,70	3,70	60
Greece	10.600	0,65	59,75	40,25	14,37	17,88	13
Italy	57.369	0,29	66,85	33,15	5,86	5,86	39
Portugal	9.869	0,24	37,01	62,99	15,28	13,66	14
Spain	39.628	0,64	77,15	22,84	8,28	8,11	28
Albania	3.119	1,56	38,35	61,65	49,50	49,55	4
Bosnia H.	3.675		42,31	57,69	6,07	6,09	35
Croatia	4.481		56,93	43,05	9,66	9,68	22
Cyprus	771	0,86	55,64	44,36	9,47	9,31	22
Ex-Macedonia Y.R.	1.999		61,13	38,87	14,31	14,30	15
Malta	384	0,70	89,84	10,16	1,82	2,05	128
Slovenia	1.993		52,08	47,92	2,36	2,45	80
Turkey	64.479	2,23	72,84	27,17	31,96	47,66	4
Yugoslavia F.R.	10.635					21,68	10
(...)							

Country	Total population 1000 htt	Growth rate 1965-98 %	Urban population/ Total population %	Rural population/ Total population %	Agricultural pop./ Total population %	Agricult. labour force/ Total labour force %	Inhabitants/ agricult. employees
Algeria	30.081	2,84	57,80	42,20	24,31	24,81	12
Libyan A.J.	5.339	3,67	86,72	13,28	6,72	6,69	48
Morocco	27.377	2,21	53,91	46,09	38,61	37,72	7
Tunisia	9.335	2,15	64,07	35,94	25,37	25,37	10
Bahrain	595	3,50	91,43	8,57	1,18	1,12	198
Egypt	65.978	2,26	45,41	54,59	37,95	34,66	8
Iraq	21.800	3,09	75,89	24,11	11,10	11,11	33
Israel	5.984	2,60	90,99	9,01	2,94	2,94	80
Jordan	4.671	4,75	73,05	26,95	12,14	12,02	28
Kuwait	1.811	4,17	97,35	2,65	0,99	0,97	259
Lebanon	3.191	1,20	88,81	11,19	4,26	4,29	68
Oman	2.382	4,11	80,52	19,48	37,62	37,56	9
Qatar	579	6,61	92,06	7,94	1,55	1,58	116
Saudi Arabia	20.181	4,45	84,54	15,46	11,44	11,44	27
Syrian A.R.	15.333	3,26	53,56	46,44	28,76	28,77	11
U.A. Emirats	2.353	8,83	85,08	14,92	5,31	5,30	38
Yemen	16.887	3,27	36,13	63,87	52,58	52,59	6
Djibouti	623	5,45	82,66	17,17	-		
Mauritania	2.529	2,57	55,00	44,96	53,34	53,35	4
Somalia	9.237	3,29	26,73	73,26	72,04	72,03	3
Sudan	28.292	2,54	34,13	65,87	62,86	62,86	4
Med./World %	8,13						

Source : Medagri 2000, based on FAO data

Country	Year	GDP	Gross rate	GDP/caput	GDP	Agricultural	Agricultural	Exchange
		1990-1997	1990-1997		agricultural/ GDP	GDP/ agricult. employee	GDP/ inhabitant	rate *
		millions \$	%	\$	%	\$	\$	MU p 1 \$
Tunisia	1998	19.956	4,80	2.138	14	3.050	302	1,14
Bahrain	1997	6.097	4,93	10.247	1	24.388	123	0,38
Egypt	1998	82.710	3,90	1.254	16	1.547	201	3,39
Iraq								
Israel	1998	97.480	6,40	16.290	3	38.992	489	3,80
Jordan	1997	7.051	7,20	1.510	6	2.393	85	0,71
Kuwait	1997	30.369	12,20	16.769	1	34.707	134	0,30
Lebanon	1995	11.143	8,30	3.703	12	28.449	444	1.621,40
Oman	1997	16.153	6,00	6.728	3	1.923	202	0,38
Saudi Arabia	1998	128.881	1,70	6.386	6	9.315	351	3,75
Qatar	1995	7.515	0,84	13.714	1	15.030	137	3,64
Syrian A.R.	1997	64.926	6,90	4.234	15	7.109	635	11,23
U.A. Emirates	1996	44.620	3,40	19.743	2	14.394	395	3,67
Yemen	1995	4.790		319	17	293	54	
Djibouti	1995	495		824	3		26	1,00
Mauritania	1995	904	4,30	398	25	374	99	151,85
Somalia								
Sudan					10			

* MU p 1 \$ = ... national Monetary Unit per 1 US \$

Source : Medagri 2000, based on IMF, World Bank, FAO and national data.

Table 3. Cultivated areas, irrigated areas, means of production, 1997

Country	Arable land & permanent crops	Cultivated areas per 1000 inhht	Cultivated areas par agricultural employee	Irrigated areas/ cultivated areas	Cultivated areas per tractor	Fertilizers per cultivated areas
	1000 ha	ha	ha	%	ha/tract.	kg/ha
World	1.510.442	258	1,2	17,73	57	91
Mediterranean C.	135.133	281	3,1	20,68	24	92
North Med.	89.429	355	4,2	16,36	17	122
South Med.	45.704	199	2,1	29,12	95	32
Arab Countries	63.730	241	2,0	24,02	135	23
France	19.468	333	19,1	8,58	15	261
Greece	3.915	372	4,7	35,38	17	129
Italy	10.927	191	7,0	24,69	7	168
Portugal	2.900	296	4,2	21,79	19	82
Spain	19.164	483	13,2	18,80	23	108
Albania	702	205	0,8	48,43	89	7
Bosnia H.	650		5,7	0,31	22	14
Croatia	1.442	321	6,6	0,21	483	16
Cyprus	145	189	3,9	27,59	9	140
Ex-Macedonia Y.R.	658	300	4,3	8,36	12	71
Malta	11	30	3,7	18,18	22	91
Slovenia	285	148	11,0	0,70	3	260
Turkey	29.162	465	2,1	14,40	33	63
Yugoslavia F.R.						
Algeria	8.040	273	3,4	6,97	87	12
Libyan A.J.	2.115	366	18,1	22,22	62	29
(...)						

Country	Arable land & permanent crops 1000 ha	Cultivated areas per 1000 inhht ha	Cultivated areas par agricultural employee ha	Irrigated areas/ cultivated areas %	Cultivated areas per tractor ha/tract.	Fertilizers per cultivated areas kg/ha
Morocco	9.595	349	2,3	13,04	222	32
Tunisia	4.900	525	5,4	7,76	140	19
Bahrain	5	9	1,7	100,00	417	120
Egypt	3.300	51	0,4	100,00	37	306
Iraq	5.540	262	8,3	63,63	112	61
Israel	437	76	5,8	45,54	18	274
Jordan	390	86	2,4	19,23	82	58
Kuwait	7	4	1,0	71,43	70	171
Lebanon	308	98	6,3	37,99	55	195
Oman	63	26	0,3	98,41	420	113
Qatar	17	30	3,4	76,47	283	69
Saudi Arabia	3.830	196	4,9	42,30	403	85
Syrian A.R.	5.521	369	4,1	21,16	63	67
U.A. Emirates	81	35		88,89	298	381
Yemen	1.555	95	0,6	31,19	268	8
Djibouti						
Mauritania	502	210	0,9	9,76	1.321	8
Somalia	1.061	104	0,7	18,85	575	5
Sudan	16.900	606	2,4	11,54	1.610	5
Med./World %	8,95					

Source : Medagri 2000, based on FAO data.

Table 4. Main agricultural products, 1998 (1000 T) (1000 T)

Country	Cereals	Vegetables	Fruit	Milk	Meat	Sugar	Olive oil
World	2.054.368	606.053	434.703	545.467	216.201	123.864	2.141
Mediterranean C.	195.696	98.466	78.814	71.420	22.436	12.715	2.002
North Med.	155.099	64.262	58.976	60.092	17.878	10.917	1.674
South Med.	40.597	34.204	19.838	11.328	4.558	1.798	328
Arab Countries	47.296	33.919	19.609	17.299	5.079	2.450	328
France	67.706	7.808	10.863	25.223	6.512	4.712	2
Greece	4.568	4.101	3.508	1.880	513	260	397
Italy	20.636	14.501	17.676	11.929	4.025	1.696	462
Portugal	1.258	2.168	1.546	1.889	706	76	40
Spain	22.196	11.496	13.323	6.750	4.373	1.291	718
Albania	637	616	126	870	63	7	1
Bosnia H.	297	566	86	205	25	-	
Croatia	3.210	442	646	291	96	80	3
Cyprus	148	126	299	178	95		1
Ex-Macedonia Y.R.	660	526	358	187	27	40	
Malta	6	59	16	46	18		0
Slovenia	596	110	267	568	172	55	0
Turkey	33.182	21.743	10.263	10.077	1.255	2.700	50
Yugoslavia F.R.							
Algeria	3.031	2.425	1.260	1.181	534		46
(...)							

Country	Cereals	Vegetables	Fruit	Milk	Meat	Sugar	Olive oil
Libyan A.J.	208	790	341	157	172		9
Morocco	6.633	3.731	2.729	1.076	522	490	60
Tunisia	1.663	1.839	847	700	179	18	190
Bahrain		12	21	14	13		
Egypt	17.950	12.379	5.908	3.348	1.282	1.253	
Iraq	2.280	3.017	1.608	544	119	2	
Israel	121	1.507	1.409	1.151	311		
Jordan	102	1.246	389	171	111		17
Kuwait	3	118	8	34	76		
Lebanon	94	1.339	1.294	271	107	35	6
Oman	6	173	210	83	27		
Qatar	4	43	16	35	20		
Saudi Arabia	2.440	2.377	1.045	699	593		
Syrian A.R.	5.227	1.827	1.894	1.600	258		
U.A. Emirates	1	840	309	64	88		
Yemen	833	541	551	200	146		
Djibouti		22	-	12	8	0	
Mauritania	152	12	15	288	58		
Somalia	0	68	206	2.190	166	19	
Sudan	6.668	1.120	961	4.632	599	633	
Med./World %	9,53	16,25	18,13	13,09	10,38	10,27	93,51

Source : Medagri 2000, based on FAO data.

Table 5. Growth rate of agricultural products, 1998 (%)

Country	Cereals	Vegetables	Fruit	Milk	Meat	Sugar	Olive oil
World	-1,38	1,96	1,84	-0,03	-1,83	-0,26	-2,94
Mediterranean C.	4,69	3,37	2,58	-1,34	0,08	-1,80	-8,02
North Med.	1,60	2,20	1,74	-4,08	-2,52	-1,58	-12,01
South Med.	18,43	5,63	5,18	16,31	11,76	-3,15	19,75
Arab Countries	20,38	7,08	6,85	13,80	13,05	1,09	19,76
France	6,64	-0,99	6,58	-1,59	3,02	-8,47	
Greece	-4,56	1,04	-1,95	5,02	-2,39	-9,72	36,89
Italy	3,64	6,15	16,73	7,26	0,72	2,77	-22,98
Portugal	-22,06	3,12	-21,39	2,66	-0,03	184,70	-11,11
Spain	15,17	7,94	-4,90	1,50	9,70	11,49	-6,66
Albania	1,37	37,35	19,96	-13,00	-47,03	164,00	-75,32
Bosnia H.	-8,34				-13,69		
Croatia	8,74	39,56	8,75	-51,10	-12,75	-11,11	37,37
Cyprus	4,90	-4,59	9,83	2,30	0,02		-14,29
Ex-Macedonia Y.R.	11,22	8,14	3,24	-2,72	-44,86	404,87	
Malta	-14,29	-26,48	-6,53	-7,11	6,74		
Slovenia	8,83	2,07	-12,05	-4,28	-3,77	-8,33	-78,83
Turkey	11,81	3,41	7,21	-6,36	6,07	18,58	-73,68
Yugoslavia F.R.							
Algeria	180,49	1,16	7,89	34,17	11,39		155,56
(...)							

Country	Cereals	Vegetables	Fruit	Milk	Meat	Sugar	Olive oil
Libyan A.J.	-35,18	27,84	38,13	30,39	31,43		-12,00
Morocco	61,41	15,44	14,38	6,01	1,65	11,87	33,33
Tunisia	50,53	2,45	1,53	10,76	-2,24	-50,68	90,00
Bahrain		-6,39	-15,62	-29,41	0,63		
Egypt	1,70	7,60	2,18	21,24	30,93	1,87	
Iraq	3,13	3,48	9,09	61,69	-0,55		
Israel	-20,48	-16,18	-11,03	-1,63	9,05		
Jordan	3,53	5,04	-1,17	11,76	-0,72		22,75
Kuwait	55,74	37,06	293,75	-9,37	22,09		
Lebanon	28,12	38,51	4,00	44,41	33,63	59,09	-14,32
Oman	3,67	3,96	3,85	-0,60	0,65		
Qatar	0,00	0,71	17,44	28,60	1,34		
Saudi Arabia	-3,55	-0,75	0,43	18,78	0,66		
Syrian A.R.	22,07	-6,95	11,97	9,15	0,18		
U. A. Emirates	-89,44	8,33	1,93	6,38	6,38		
Yemen	28,96	2,84	16,92		1,12		
Djibouti							
Mauritania	-1,82	27,78	-62,23	-3,76	0,53		
Somalia	-99,92	-6,85	-0,29	-1,35	7,55	5,56	
Sudan	41,68	13,13	15,58	12,95	25,18	15,30	

Source : Medagri 2000, based on FAO data.

Table 6. Food consumption, 1997

(kg/year/person)

Country	Cereals (except beer)	Roots and tubers	Sweeteners	Pulses	Vegetable	Fruit
France	112,0	67,0	38,0	2,0	118,0	88,0
Greece	152,0	68,0	32,0	5,0	230,0	188,0
Italy	158,0	38,0	30,0	5,0	169,0	133,0
Portugal	128,0	127,0	37,0	5,0	147,0	113,0
Spain	103,0	90,0	31,0	8,0	122,0	127,0
Albania	206,0	30,0	22,0	5,0	121,0	104,0
Croatia	98,0	112,0	35,0	5,0	90,0	86,0
Cyprus	116,0	44,0	41,0	4,0	109,0	168,0
Ex-Macedonia Y.R.	153,0	47,0	37,0	6,0	126,0	97,0
Malta	160,0	62,0	55,0	5,0	136,0	116,0
Slovenia	137,0	155,0	19,0	3,0	81,0	80,0
Turkey	221,0	62,0	32,0	11,0	171,0	147,0
Yugoslavia F.R.						
Algeria	228,0	29,0	19,0	5,0	65,0	47,0
Libyan A.J.	196,0	35,0	40,0	5,0	143,0	97,0
Morocco	241,0	35,0	40,0	7,0	84,0	86,0
Tunisia	219,0	32,0	30,0	7,0	124,0	108,0
Egypt	246,0	25,0	31,0	8,0	135,0	114,0
Iraq	180,0	13,0	17,0	2,0	100,0	84,0
(...)						

Country	Cereals (except beer)	Roots and tubers	Sweeteners	Pulses	Vegetable	Fruit
Israel						
Jordan	177,0	19,0	37,0	6,0	196,0	100,0
Kuwait	128,0	34,0	40,0	9,0	168,0	130,0
Lebanon	138,0	62,0	29,0	14,0	288,0	280,0
Saudi Arabia	160,0	13,0	29,0	3,0	105,0	118,0
Syrian A.R.	229,0	20,0	38,0	4,0	68,0	121,0
U.A. Emirates	127,0	30,0	34,0	9,0	206,0	203,0
Yemen	166,0	11,0	27,0	5,0	30,0	31,0
Djibouti	127,0	3,0	36,0	1,0	38,0	5,0
Mauritania	158,0	6,0	33,0	11,0	9,0	18,0
Somalia						
Sudan	160,0	5,0	16,0	6,0	29,0	35,0

Source : Medagri 2000, based on FAO data.

Table 6 continued. Food consumption, 1997

(kg/year/person)

Country	Meat	Fish and sea fruit	Milk (except butter)	Oil and fat	Alcoholic beverages
France	101,0	28,0	251,0	37,0	105,0
Greece	84,0	25,0	248,0	33,0	60,0
Italy	83,0	23,0	252,0	35,0	81,0
Portugal	87,0	58,0	192,0	29,0	137,0
Spain	103,0	37,0	164,0	31,0	107,0
Albania	28,0	2,0	278,0	10,0	11,0
Croatia	33,0	3,0	139,0	14,0	126,0
Cyprus	115,0	25,0	196,0	23,0	56,0
Ex-Macedonia Y.R.	35,0	5,0	94,0	15,0	49,0
Malta	78,0	35,0	197,0	17,0	57,0
Slovenia	101,0	7,0	213,0	22,0	138,0
Turkey	21,0	9,0	130,0	24,0	12,0
Yugoslavia F.R.					
Algeria	17,0	4,0	94,0	18,0	2,0
Libyan A.J.	28,0	6,0	83,0	26,0	-
Morocco	20,0	8,0	32,0	14,0	4,0
Tunisia	20,3	9,0	69,0	21,0	8,0
Egypt	20,0	7,0	42,0	9,0	1,0
Iraq	6,0	1,0	25,0	24,0	4,0
(...)					

Country	Meat	Fish and sea fruit	Milk (except butter)	Oil and fat	Alcoholic beverages
Israel					
Jordan	30,0	6,0	44,0	19,0	2,0
Kuwait	74,9	13,0	181,0	14,0	-
Lebanon	33,0	8,0	94,0	22,0	16,0
Saudi Arabia	46,0	5,0	87,0	15,0	1,0
Syrian A.R.	23,0	1,0	97,0	19,0	1,0
U.A. Emirates	75,0	26,0	155,0	16,0	
Yemen	12,0	7,0	26,0	8,0	1,0
Djibouti	17,0	2,0	55,0	16,0	4,0
Mauritania	19,0	16,0	139,0	12,0	-
Somalia					
Sudan	17,9	2,0	160,0	9,0	-

Source : Medagri 2000, based on FAO data.

Table 7. International exchanges of agricultural products ratios to the total exchanges, 1997

Country	Total imports IT	Total exports ET	Agricultural imports IA	Agricultural exports AE	(ET-IT)/ (ET+IT)	ET / IT	(AE-AI)/ (AE+AI)	AE / AI	AI / TI	AE / TE
	millions \$	millions \$	millions \$	millions \$	%	%	%	%	%	%
Mediterranean C.	913.734	917.934	104.622	87.294	0,23	100,46	-9,03	83,44	11,45	9,51
North Med.	742.530	717.763	77.554	81.168	-1,70	96,66	2,28	104,66	10,44	11,31
South Med.	171.204	200.172	27.068	6.126	7,80	116,92	-63,09	22,63	15,81	3,06
Arab Countries	144.720	180.500	25.744	5.469	11,00	124,72	-64,96	21,24	17,79	3,03
France	284.803	301.838	25.904	38.502	2,90	105,98	19,56	148,63	9,10	12,76
Greece	25.614	11.196	3.712	3.039	-39,17	43,71	-9,96	81,89	14,49	27,15
Italy	208.287	238.405	24.137	15.735	6,74	114,46	-21,07	65,19	11,59	6,60
Portugal	33.560	23.164	3.939	1.464	-18,33	69,02	-45,81	37,17	11,74	6,32
Albania	600	150	174	27	-60,00	25,00	-72,78	15,76	28,93	18,23
Spain	114.556	100.274	11.859	15.119	-6,65	87,53	12,08	127,49	10,35	15,08
Bosnia H.			429	3			-98,45	0,78		
Croatia	9.104	4.171	831	452	-37,16	45,81	-29,49	54,45	9,12	10,84
Cyprus	3.700	1.247	975	740	-49,59	33,70	-13,73	75,85	26,35	59,33
Ex-Macedonia Y.R.	1.740	1.201	421	490	-18,32	69,03	7,62	116,49	24,17	40,78
Malta	2.552	1.464	290	39	-27,09	57,37	-76,28	13,45	11,36	2,66
Slovenia	9.358	8.407	791	350	-5,35	89,84	-38,66	44,24	8,45	4,16
Turkey	48.656	26.246	4.093	5.206	-29,92	53,94	11,97	127,20	8,41	19,84
Yugoslavia F.R.										
Algeria	8.688	13.894	2.854	45	23,05	159,92	-96,87	1,59	32,85	0,33
Libyan A.J.	5.597	9.320	1.245	48	24,96	166,52	-92,63	3,82	22,24	0,51
(...)										
Morocco	7.851	4.585	1.431	832	-26,27	58,40	-26,50	58,11	18,23	18,14

Country	Total imports IT	Total exports ET	Agricultural imports IA	Agricultural exports AE	(ET-IT)/ (ET+IT)	ET / IT	(AE-AI)/ (AE+AI)	AE / AI	AI / TI	AE / TE
	millions \$	millions \$	millions \$	millions \$	%	%	%	%	%	%
Tunisia	7.959	5.564	910	530	-17,71	69,91	-26,35	58,29	11,43	9,53
Bahrain	3.925	4.348	326	12	5,12	110,80	-92,79	3,74	8,30	0,28
Egypt	13.210	3.921	3.438	442	-54,22	29,68	-77,20	12,87	26,02	11,28
Iraq	2.300	500	1.487	20	-64,29	21,74	-97,32	1,36	64,67	4,05
Israel	28.614	20.737	1.898	1.258	-15,96	72,47	-20,26	66,30	6,63	6,07
Jordan	4.098	1.835	827	139	-38,14	44,78	-71,20	16,83	20,19	7,59
Kuwait	8.248	14.224	1.265	49	26,59	172,46	-92,47	3,91	15,33	0,35
Lebanon	7.460	717	1.116	144	-82,47	9,61	-77,09	12,94	14,96	20,14
Oman	5.026	7.630	862	270	20,58	151,81	-52,34	31,29	17,16	3,54
Saudi Arabia	27.000	60.000	4.766	440	37,93	222,22	-83,11	9,22	17,65	0,73
Qatar	3.300	4.500	300	15	15,38	136,36	-90,21	5,15	9,09	0,34
Syrian A.R.	4.028	3.916	847	1.037	-1,41	97,22	10,06	122,37	21,03	26,47
U.A. Emirates	32.000	42.000	2.322	801	13,51	131,25	-48,70	34,50	7,26	1,91
Yemen	1.901	2.481	1.174	43	13,23	130,49	-92,97	3,64	61,75	1,72
Djibouti	310	23	91	5	-86,19	7,42	-89,91	5,31	29,26	20,96
Mauritania	240	448	157	40	30,22	186,62	-59,17	25,65	65,58	9,01
Somalia	180	150	88	76	-9,09	83,33	-7,32	86,36	48,89	50,67
Sudan	1.580	594	326	556	-45,33	37,61	26,10	170,64	20,62	93,55

Source : Medagri 2000, based on FAO data.

Standardized total balance = (total exports - total imports) (total exports + total imports) * 100

Standardized total balance = (agricultural exports - agricultural imports) (agricultural exports + agricultural imports) * 100

Table 8. Import structure per main region of origin, 1996

Country	World millions \$	Europ. Union %	USA-Canada %	Japan %	OPEC %
Méditerranéan C.	860.385,00				
North Med.	731.640,00				
South Med.	128.745,00				
Arab Countries	99.149,00				
France	274.088,00	63,60	8,70	3,30	3,40
Greece **	25.882,00	69,00	3,60	2,60	4,00
Italy	204.087,00	62,20	5,80	1,90	6,20
Portugal	33.979,00	75,60	3,50	2,20	4,50
Spain	122.842,00	66,30	6,60	2,80	6,40
Albania					
Bosnia H.					
Croatia	7.788,00	59,40	2,90	1,30	5,40
Cyprus	3.957,00	48,30	17,30	6,00	1,10
Ex-Macedonia Y.R.					
Malta	2.771,00	68,50	7,10	3,20	4,50
Slovenia	9.412,00	67,50	3,90	1,70	1,40
Turkey	42.733,00	53,10	8,40	3,30	9,60
Yugoslavia R.F.	4.101,00	42,00	3,10	1,40	3,10
Algeria	9.102,00	62,50	14,10	2,60	1,40
(...)					

Country	World millions \$	Europ. Union %	USA-Canada %	Japan %	OPEC %
Libyan A.J.					
Morocco	8.253,00	54,10	9,60	1,80	12,90
Tunisia	7.681,00	72,50	4,70	2,10	5,60
Bahrain *	3.757,50	20,40	11,10	5,60	8,80
Egypt	13.020,00	36,20	20,80	2,60	4,00
Iraq					
Israel	29.596,00	51,20	20,60	3,70	-
Jordan **	3.664,00	33,20	9,70	3,60	18,70
Kuwait	8.298,00	32,10	18,50	12,20	10,80
Lebanon #	4.835,50	46,20	9,20	2,90	3,70
Oman	4.443,00	26,10	8,00	17,70	2,00
Qatar *	1.927,00	33,90	11,10	13,40	14,60
Saudi Arabia	26.651,00	35,70	24,10	7,30	3,90
Syrian A.R. **	4.709,00	34,50	7,00	4,40	3,50
U.A. Emirates					
Yemen	2.808,00	24,70	5,50	5,10	0,70
Djibouti					
Mauritania					
Somalia					
Sudan					

* 1994 ; ** 1995 ; # 1993

Source: Handbook of international trade and development statistics, UNCTAD, 1996/1997

Table 9. Export structure per main region of destination, 1996

Country	World millions \$	Europ. Union %	USA-Canada %	Japan %	OPEC %
Mediterranean C.	842.915,00				
North Med.	710.639,00				
South Med.	132.276,00				
Arab Countries	111.772,00				
Spain	101.417,00	71,20	4,60	1,20	2,70
France	283.318,00	63,70	6,80	1,90	3,20
Greece ***	10.948,00	60,60	3,50	0,80	2,40
Italy	251.994,00	55,70	8,00	2,20	3,40
Portugal	23.184,00	79,50	5,20	0,80	0,60
Albania					
Bosnia H.					
Cyprus	489,00	55,50	1,60	0,30	6,60
Croatia	4.512,00	51,00	2,20	-	0,60
Ex-Macedonia					
Malta	1.581,00	58,20	16,00	3,20	3,80
Slovenia	8.309,00	64,60	3,40	0,20	0,90
Turkey	23.045,00	49,80	7,40	0,70	8,00
Yugoslavia R.F.	1.842,00	31,80	2,00	-	0,40
Algeria	11.099,00	60,00	19,00	0,50	0,20
(...)					

Country	World millions \$	Europ. Union %	USA-Canada %	Japan %	OPEC %
Libyan A.J.					
Morocco	4.742,00	61,50	4,20	6,90	6,60
Tunisia	5.517,00	80,10	1,40	0,30	6,80
Saudi Arabia	55.892,00	15,60	17,30	12,40	2,50
Bahrain					
Egypt	3.534,00	45,60	13,10	1,20	7,40
U.A. Emirates					
Iraq					
Israel	20.504,00	32,10	31,20	5,90	0,20
Jordania ***	1.432,00	6,30	1,50	1,30	37,90
Koweït	14.855,00	0,20	0,30	0,10	1,90
Lebanon #	527,00	7,00	3,60	0,20	43,60
Oman	7.215,00	0,70	1,00	0,40	11,70
Qatar					
Syria ***	3.970,00	57,00	1,60	0,20	10,90
Yemen ***	2.989,00	0,60	0,10	12,70	2,20
Djibouti					
Mauritania					
Somalia					
Sudan					

* 1994 ; # 1992 ; ***1995

Source: Handbook of international trade and development statistics, UNCTAD, 1996/1997

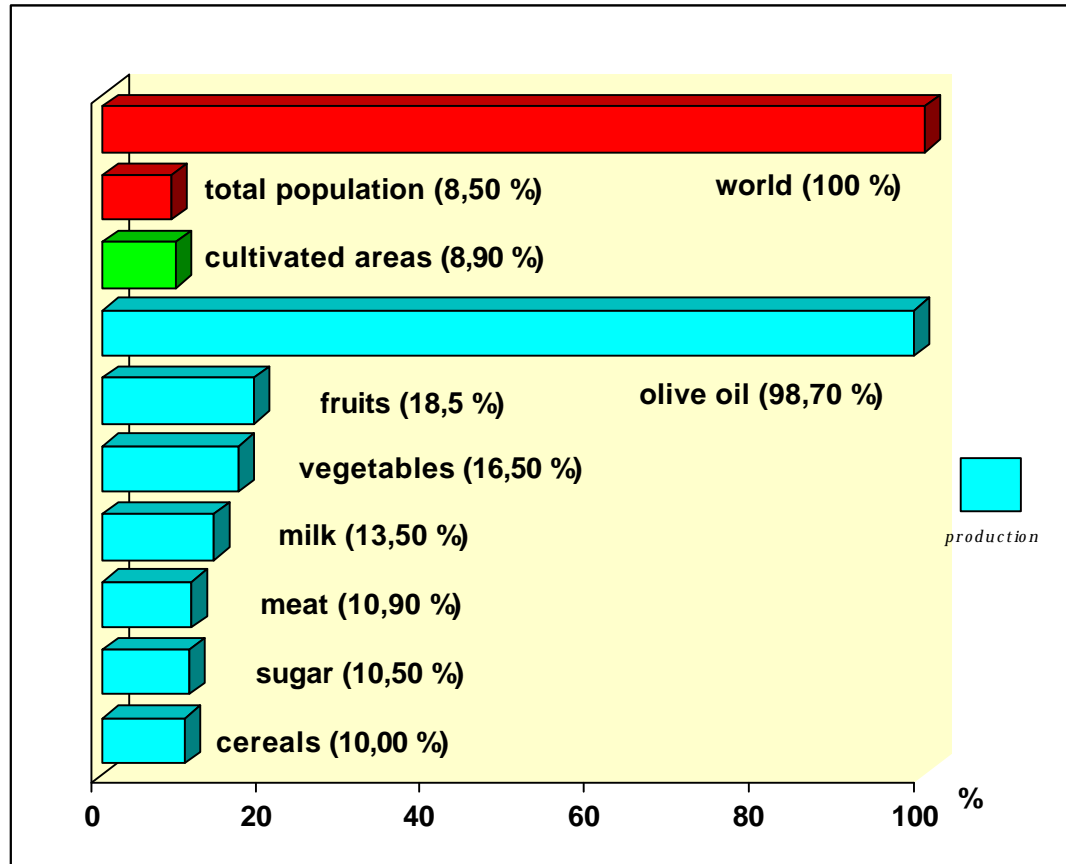
Table 10. Self-sufficiency ratios for the main food products, 1997 (%)*

Country	Cereals	Sugar	Milk	Oil	Meat
Mediterranean C.	86,61	80,25	96,96	87,61	97,92
North Med.	105,81	124,31	96,46	104,87	101,27
South Med.	51,15	25,46	99,66	40,28	86,66
Arab Countries	54,08	31,43	99,74	43,90	87,64
France	165,48	241,87	100,69	116,42	110,18
Greece	89,60	92,52	97,52	118,88	79,21
Italy	77,54	93,83	84,81	76,09	95,77
Portugal	33,05	21,80	100,31	108,94	94,36
Spain	83,07	90,58	97,15	168,96	100,25
Albania	68,44	14,56	99,93	7,05	88,81
Bosnia H.	43,56	-	96,88	2,75	49,41
Croatia	95,05	95,44	89,99	89,43	101,12
Cyprus	18,96	-	99,60	9,54	99,11
Ex-Macedonia Y.R.	54,39	72,03	94,41	28,69	53,70
Malta	3,41	-	99,44	0,07	92,41
Slovenia	57,82	58,38	109,59	0,13	109,90
Turkey	94,15	104,48	100,00	69,38	100,66
Yugoslavia R.F.					
Algeria	32,86	-	99,86	17,21	99,96
Libyan A.J.	8,28	-	99,78	24,72	97,26
(...)					

Country	Cereals	Sugar	Milk	Oil	Meat
Morocco	71,07	45,52	99,74	45,41	98,54
Tunisia	47,01	6,68	98,21	109,25	96,23
Bahrain		-	69,88	-	42,39
Egypt	64,53	47,62	100,00	12,27	100,01
Iraq	44,98	0,55	100,00	20,27	98,07
Israel	4,95	-	99,98	86,33	101,83
Jordan	5,70	-	99,64	45,88	85,61
Kuwait	0,55	-	73,54	4,42	54,91
Lebanon	10,99	25,80	99,49	21,30	92,82
Oman	1,93	-	97,09	-	37,46
Qatar	3,11	-	87,45	-	54,72
Saudi Arabia	25,99	-	103,15		60,61
Syrian A.R.	114,59	-	100,09	80,86	99,18
U.A. Emirates	0,09	-	80,04	-	40,49
Yemen	24,55	-	99,97	-	86,14
Djibouti	-	0,04	93,43	-	91,19
Mauritania	32,15	-	98,13	4,38	99,79
Somalia	0,21	13,19	100,00	-	100,00
Sudan	91,00	114,22	100,00	159,45	102,63

* Self-sufficiency ratio = production (1000 T) / (production - exports + imports) *100 (1000 T)

Source : Medagri 2000, based on FAO data



Source: Medagri 2000, based on FAO data.

Graph 1. Place of the Mediterranean in the world, 1998

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