8 Trends in the agro-food economy in the Mediterranean region

The agro-food economy is a branch of economic science which developed at the end of the 1950s on the basis of the work on "agribusiness" carried out by Goldberg and Davis (1957) of Harvard University. Departing from the classical rural economy, which focused on farming, these authors showed that the dynamic of the agricultural sector could only be understood by analysis embracing all of the agro-support and downstream activities, since these activities were tending to become more significant and to act as a more powerful driving force than agriculture itself. In the 1960s, Louis Malassis (cf. Malassis, Ghersi, 1996) developed and theorised this concept adopting both a renewed approach to food consumption and national accounting tools which provided a basis for analysing inter-sectoral relations within the agro-industrial complex. And finally, more recent work has provided a means of defining the concept of food system more specifically (Rastoin, in Miclet, Thuyer, Sirieix, 1998).

Taking systems theory as a basis, a food system can be defined as an interdependent network of actors (undertakings, financial institutions, public and private bodies), which is located in a given geographic zone (region, State, multinational region) and which participates either directly or indirectly in the creation of flows of goods and services geared to satisfying the food needs of one or several groups of consumers either at the local level or outside the zone in question.

This definition is based on three systems of reference: morphology (the actors involved), area (the geographical zones of internal/external activity), and dynamics (origin and movement of the flows of foodstuffs and food services, including information).

To illustrate this, the table below gives a description of the food system in France and Morocco.

Table 8.1 - Outline of the food system in Morocco and France, 2000

Actor	Number of enterprises		Jobs (in thousands)		Turnover (billion €)	
	Morocco	France	Morocco	France	Morocco	France
Agro-supply and associated industries and services	50,000	42,000	570	1,200	8	47
Agriculture	1 400,000	600,000	4,500	1,000	7	64
IFA	1,700	60,000	110	600	8	120
Distribution	200,000	110,000	850	1,200	12	140
Non-domestic catering	40,000	130,000	130	600	1	50
TOTAL	1 691,700	942,000	6,160	4,600	36	421

Source: Our calculations according to INSEE (National Statistical Institute) figures (2001), national accounts.

In France, which has almost 1 million undertakings, 4.6 million jobs, and a cumulative turnover of € 420 billion, the food system is shown to be the leading economic sector in terms of consumption. In Morocco, the employment level in the food system is much higher due to the significance of agriculture and to the fact that activities are still highly fragmented: almost 1.7 million production units with a total workforce of over 6 million workers. The value of the goods produced remains limited, however, reflecting low labour productivity.

In both Morocco and France the food system is extraordinarily complex due to the vast number of actors involved and to the diversity of their status and size: in both countries multinationals cohabit with family units. This heterogeneity will prove to be a serious handicap for regulating the system but probably also a favourable factor for cyclical adjustments and innovation.

Since it is difficult to obtain access to the necessary information, it will not be possible to deal with all of the actors involved in the food system in the present chapter. However, we underline the fundamental significance of the food system in the performance of each of those actors (farmers, industrialists or shopkeepers) irrespective of the country concerned.

We shall thus approach the analysis of the Mediterranean agro-food economy from the angle of the food subsystem in effect, considering:

- the predominant trends in the system in recent years (1990-2000);
- food consumption;
- international trade in agro-food products;
- foreign direct investments in the Mediterranean region;
- the agro-food industries.

As will be seen, we have opted to emphasise the aspects related to the globalisation of food systems in the region.

8.1 - Trends in the agro-food economy in the Mediterranean region

The precise identification and assessment of the various components of the food subsystem in effect poses tricky problems regarding scope and method. For food production and distribution is not a "pure" activity in that it is carried out within undertakings and institutions which are not 100% "food-centred". This is the case with agriculture, which markets wood, the AFIs (agro-food industries), which produce biochemical substances, and the large-scale food retailing industry, where almost 50% of turnover is non-food-related. The national accounts for individual sectors provide a means of correcting this bias, although they do not eliminate it completely[32], since the major difficulty is caused by what are known as associated activities.

Three types of indicator can be selected in an initial approach to characterise the food system:

- macroeconomic aggregates
- the final value of food products
- openness to world markets.

8.1.1 - Macroeconomic aggregates

There are many such indicators, taken from national accounts. The statistical sources available generally provide a basis for considering production, value added (and thus intermediate consumption), investments, external flows (imports and exports), trade margins, taxes levied, and household consumption. The tool used here - and one which has now become classical - is the input-output tables of national accounts. Due to the inadequacies of this tool, social accounting matrices have been elaborated with which the sector known as the informal sector can be taken into account. Unfortunately, these tables are not available in the case of practically every Mediterranean country.

On the basis of a simple aggregate model, the value of food production in France purchased at the final stage (i.e., at the stage of household consumption) can be estimated at approximately € 180 billion for the year 2000. A turnover "cascade" in the food system can be demonstrated and is to be explained by the concept of value added:

- agro-support turnover: € 37 billion, in 2000
- agricultural turnover: € 74 billion
- AFI turnover: € 114 billion

32 A branch covers all establishments with the same main activity, but establishments are often multi-product establishments.

- "consumer" turnover: € 180 billion

Household consumption turnover is equivalent to agricultural turnover multiplied by a factor of 2.4, which indicates a very marked "cascade of value added". It is observed furthermore that the food function is being satisfied more and more directly and globally with growing externalisation: domestic catering, which involves purchasing, preparing and serving food, is in decline, whereas non-domestic catering is progressing. We have used this observation to complement a historical typology which was built up by L. Malassis on the basis of the relative shares of value added within the agro-industrial production complex (AIPC) (AIPC = agriculture + AFIs), by also taking account of the distribution of household expenditure between domestic catering and non-domestic catering. This type of typology can be used either for observing the stages of development of the food systems in a given country or for comparing the situation of the food systems in various countries in a given year. It can be seen at the world level that the various categories of food systems now coexist.

Table 8.2 - The stages of food system development

Stage	Characteristics	Value added of the production complex		Consumption mode (%)	
		Agriculture	AFI	Domestic catering	Non-domestic catering
Agricultural	Self-subsistence, poverty	80	20	100	
Artisanal	Differenciation, urbanisation	60	40	90	10
Agro-industrial	Mass production/ distri bution	50	50	70	30
Agro-tertiary	Services, segmentation	< 50	> 50	50	50

Source : Malassis (1979), Rastoin (1998).

This historical model gives a clear picture of the structural changes that have taken place in the food system over a long period. When one examines the indicators for 2000 by country it will be seen that the member countries of the EU have all entered the agro-industrial stage, whereas the Mediterranean partner countries are still at the artisanal stage on the whole, although they nevertheless do have some sectors which can indeed be termed agro-industrial - most of these being geared to exports.

Box 8.1 - The 4 stages of the food system in Mediterranean countries

- The "agricultural" stage is that of a short-circuit self-subsistence economy. The very large majority of consumers also produce their own food. The processing and marketing of agricultural commodities are limited, and the AFI and distribution sectors, where they exist at all, are marginal. This stage was characteristic of Europe for many centuries after the fall of the Roman Empire. It is now still typically the case of what are known in World Bank terminology as the least developed countries. These countries are very poor (with a per capita GDP of less than 700 US$ per annum) and are essentially rural. Due to the development of industry and trade, none of the Mediterranean countries - taken as a whole - is now in this category (Morocco and Syria, the poorest countries in the region, had a per capita GDP of just under 1,200 US$ in 2001). The Mediterranean economies have very asymmetrical internal structures, however, and the majority of the food systems in the Mediterranean partner countries can be considered to be still at the "agricultural" stage.

- The "transition" stage is the stage where a craft industry processing raw materials external to agriculture and/or an agro-industry related to export crops develops. A commercial sector (shops, markets) and street catering or catering related to the accommodation of travellers develop as "cities" emerge. This phase is typical of the division of labour observed in the prosperous societies of antiquity and then from the emergence of the Renaissance onwards in Europe. It is very closely connected with growth in trade and financial flows. Today it concerns most of the so-called "low-income" developing countries (700 to 2,800 US$ per capita per annum) and most of the Mediterranean partner countries.

- The "agro-industrial" stage is reached whenever AFI value added reaches the level of that of agriculture in the food production complex (agriculture + AFIs). This situation means that due to the industrialisation of agriculture (increase in intermediate consumption) and to consumer preference for processed products (less time spent on preparing meals - a factor connected with the employment of women and the non-stop working day) the AFIs have engaged in mass production, including the value of their activity in the price of food products. There is also a high rate of growth in non-domestic catering due to the acceleration of urbanisation[33] as well as changes in lifestyle related to increasing incomes[34]. All high-income countries have now entered the agro-industrial stage. In France, AFI value added was equivalent to the gross agricultural product in 1993, and in 2000 the share of non-domestic catering in the household food budget was almost 20%. All of the countries in the European Union are currently at this stage.

33 The urban population will probably account for 60% of the world population by 2025.

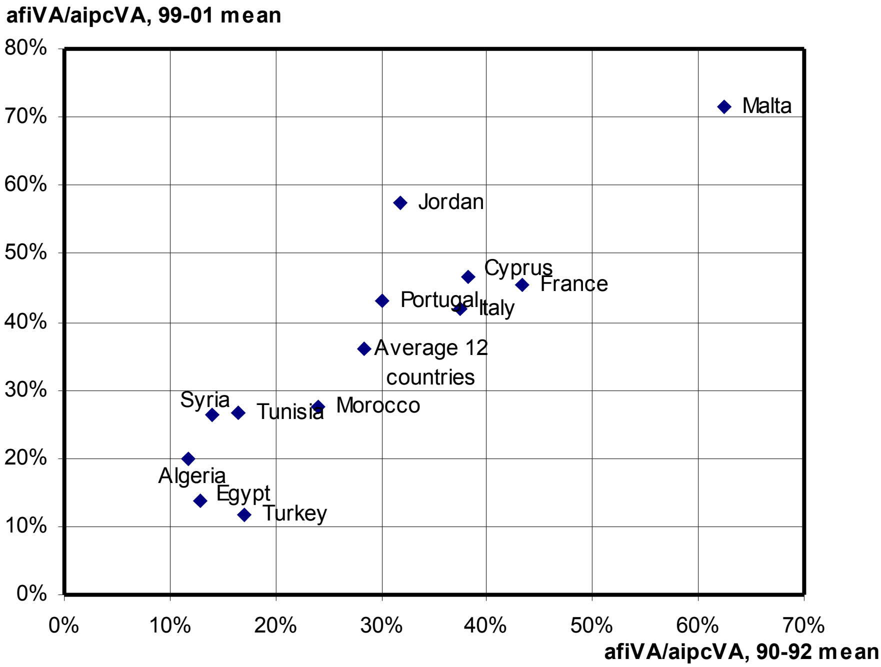
34 The French devoted 16.1% of their budget to food in 2000, to which almost 4% must be added in the form of restaurant expenditure.

Box 8.1 (contd.)

- The "agro-tertiary" stage, which is marked by the predominance of services within the food system: non-domestic catering expenditure becomes comparable to domestic catering expenditure. However, the final price of catering is made up of approximately 2/3 services and 1/3 goods. Furthermore, in the food production chain as a whole material inputs are decreasing to the advantage of non-material inputs (advertising costs account for more than 15% of the final price of breakfast cereals, for example, and for 10% in the case of confectionery[35]). The United States has been at the "agro-tertiary" stage since the beginning of the 1990s, and France, Italy, Spain and Israel are close to that stage.

When one selects the first indicator of the distribution of value added within the AFPC, one observes wide diversity in the food system development stages in the Mediterranean region.

Figure 8.1 - Typology of food systems in the Mediterranean area



Source : Our calculations based on UNIDO and World Bank data (2003).

35 Nestlé spent more than 1.8 billion US$ (3.7% of turnover) on advertising throughout the world in 1998.

In Fig. 1 we show the development of the share of AFI value added in the total value added of the AIPC in the last 10 years. It will be observed that that share progressed in every case - with the exception of Turkey[36] - in the period between 1990-1992 and 1999-2001, a fact which confirms the theory that food products are being upgraded increasingly through industrial processing and the inclusion of services (preservation, practicability). Furthermore, attention can be drawn to a relation between living standards (per capita GDP) and the significance of the AFIs in the AIPC on the basis of the 3 Mediterranean countries in the European Union included in the figure (Italy, Portugal and France had a ratio of above 40% in the period from 1999 to 2001). The cases of Malta and Jordan are to be explained by industrial activities on imported raw materials. The 6 countries that are below the average in the region can be described as having an emerging AFI (transition stage).

8.1.2 - Analysis of the final value of food products

The so-called "food value" analysis consists of breaking down the value paid by the final consumer of a foodstuff or beverage into elements corresponding to each of the production and distribution subsystems (agro-supply, agriculture, AFIs, distribution). We have chosen to compare it to Mediterranean countries with contrasting situations: France (23,990 US$ in purchasing power parity in 2001) and Morocco (3,600 US$).

Table 8.3 - Creation of value in the food system by industry and the services (sectoral contributions to the final price of agro-food products)

Actor	France 1999 (%)	Morocco 1998 (%)	Development 93-99, France
Suppliers-agriculture	18	40	-3 %
Suppliers-industry	22	26	8 %
Suppliers-services	8	1	35 %
V.A. food industry	21	16	10 %
Trade margins	19	11	12 %
State	11	6	39 %
Total	160 billion €	9 billion €	12 %

Sources: INSEE and Moroccan Directorate for Statistics.

This diagram shows that Morocco is in a situation of "transition" from a strictly agricultural system to an agro-industrial system, with an emerging food industry, a high share of agricultural inputs in the final value, and a very low share of services. In France, on the other hand, the services have become predominant (almost 40% of the final value when administration costs are included). It must furthermore be

[36] The indicator used can be influenced by relative variations in prices and/or volumes.

mentioned that in Morocco agro-food products account for only 56% of household food consumption, as against 72% in France. The margins for growth of the food system through industrialisation and services are thus very wide in Morocco, as is the case in most of the Mediterranean partner countries.

8.1.3 - Openness of the Mediterranean systems to international trade still limited

The degree of commercial integration into the world economy can be measured through the following coefficient:
fX + fI / AIPC value added
where fX = food exports[37]
fI = food imports
aipcVA = value added of the agro-industrial production complex
(agriculture and AFIs)

A coefficient of 100 is considered to represent a relatively open economy. Table 4 shows that the Mediterranean countries have not yet attained a level of international trade in the food sector. There are in fact only 5 countries which attain or exceed this value of 100, including 2 insular economies (Cyprus and Malta) and 1 land-locked country (Jordan). Portugal and France are in this category with flows varying widely in volume (France is the world's second-largest exporter of foodstuffs (€ 34 billion in 2001) and Portugal achieved a level of just under € 1.7 billion in the same year.

[37] "Food" is understood to mean the following sections of the Standard International Trade Classification (CITC): Sections 0 (food and live animals, 1 (beverages and tobacco), 4 (animal and vegetable oils) and division 22 (oilseeds and oleaginous fruits).

Table 8.4 - Openness of the food systems of the 14 Mediterranean countries to international trade (%)

Rank	Country	(fX+fI)/aipcVA Average 1999-2001	Variation 1991-2000*	fX/aipcVA Average 1999-2001	fI/ aipcVA Average 1999-2001
1	Jordan	312	73	83	229
2	Cyprus	147	8	50	97
3	Malta	140	7	22	119
4	Portugal	100	73	26	74
5	France	99	18	57	42
6	Spain	86		45	41
7	Italy	73	25	30	42
8	Greece	53		22	31
9	Morocco	43	42	22	21
10	Algeria	43	12	1	42
11	Tunisia	38	5	17	21
12	Syrian Arab Rep.	22	-16	8	14
13	Egypt, Arab Rep.	22	-44	2	20
14	Turkey	22	27	15	7

* Variation of the ratio (fX+fI)/aipcVA between the averages for the 1990-92 et 1999-2001 3-year periods

Source: World Bank, WDI, 2003.

Another type of analysis can be conducted on the basis of Table 4 by considering the structure of the trade flows of each country, i.e. the ratio of exports to imports. One can then find agro-exporting countries with a net contribution to the international balance of trade (exports exceeding imports) and countries which depend on foreign countries for their food supplies. There are only 3 countries in the first category: France, Spain and Turkey, which distinguish themselves on account of their considerable agricultural basis (AAU) and a powerful food industry. Most Mediterranean countries are agro-importers. It is to be observed in particular that Algeria, Egypt, Jordan, Portugal, Malta and Cyprus are highly dependent on international markets. These countries are marked by low agro-climatic potential and a weak agro-industry as well as strong population pressure. Between these two categories there are countries where the food trade is virtually balanced: Morocco, Tunisia, Greece, and Italy. And finally, it is to be observed that the dynamics of integration into international trade vary widely from one country to another. Jordan and Portugal obtained the highest score with a food trade growth rate of 73% over the period from 1990 to 2001. Jordan attained this level by developing exports, and Portugal by developing imports. Only 3 other Mediterranean countries - Italy, Malta and Spain - have managed to improve their international trade balance.

To sum up, as an initial approximation, it can be considered that the Mediterranean area is only participating to a minor extent in the globalisation of agro-food markets (cf. Chapter 3.3 below). In order to confirm this hypothesis, a further indicator, foreign direct investments (FDI) in the region, must be considered (cf. Chapter 3.4 below)[38].

8.2 - Food consumption and food habits: a market undergoing profound changes and extremely heterogeneous despite the use of common sources

With its 500 million consumers[39], the Mediterranean market offers the commercial farmers and food industries in the region a large and attractive potential market, since it accounts for almost 1/10 of the world population. The specific customs, cuisines and food consumption habits that have evolved over the centuries in this region are now considered by experts to be very healthy. Due to the rapid development of consumer behaviour, the globalisation of markets, and economic and demographic parameters are together bringing about profound changes in food consumption patterns in Mediterranean countries.

8.2.1 - Consumers divided by an economic gulf which is a matter of serious concern

If one takes per capita income as an initial indicator of the "average level of wealth" of a country, one observes that that level is now 3 1/2 times as high in the North as it is in the South (it was only 1 1/2 times higher in 1980). As the result of this two-track growth, the material resources of the region have become concentrated over time in the rich countries of the North, in which development dynamics have been faster and which account for over 4/5 of production in the region (Medistat). In more recent years it has been observed that the project for creating an "area of shared prosperity" that was launched in Barcelona in 1995 has been a failure: per capita GDP expressed in purchasing power parities decreased in all of the southern Mediterranean countries - with the exception of Tunisia, Cyprus and Malta - in the period from 1995 to 2001 (cf. Annex 1).

When one adds to this the considerable disparities observed in the distribution of wealth within individual countries in both North and South plus the problems of poverty which are caused by this "backwardness", we have one of the key problems at Europe's door at the beginning of the 21st century: the fight against poverty and efforts to seek more balanced development for mankind.

38 The globalisation process can be evaluated in terms of growth in the flows of goods and services, capital (particularly FDI), information, and technologies, human migration for occupational or tourist purposes, and production location movements (GEREFF G., KORZENIEWICZ M., (1994)). Only trade and agro-food FDI will be analysed within the limited framework of the present report.

39 The exact figure was 522 million inhabitants for the Mediterranean in the broad sense of the term in 2001 according to Medagri compilations. And, according to FAO forecasts, this figure should come close to 700 million by 2025.

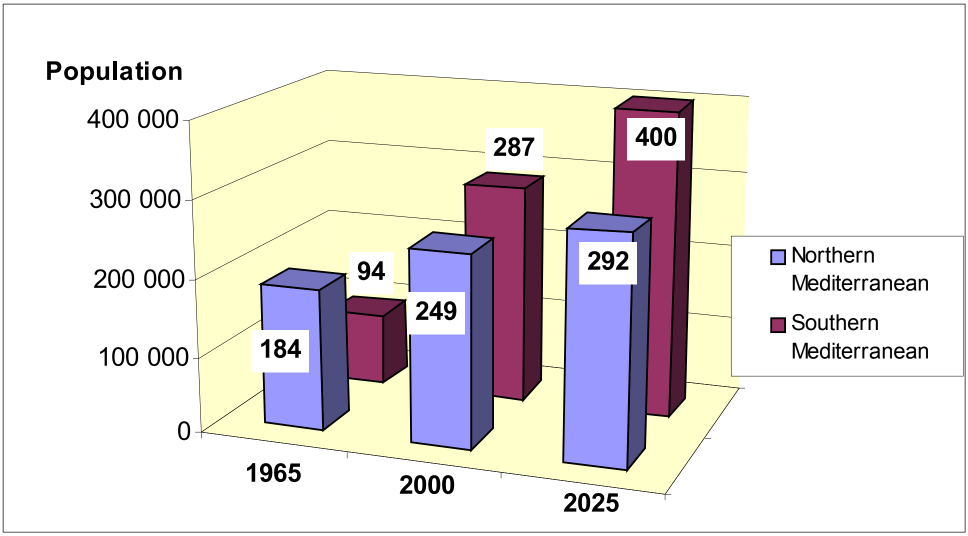
Over and above the problems of equity which it poses, the high degree of heterogeneity of demand explains the wide - and growing - diversity of the agro-food industries, which, by virtue of their resilience, manage to meet extremely variable consumer demand. It also explains the coexistence of very heterogeneous subsystems in the same region and period of time ranging from self-supplier consumption to the survival of short circuits, the consolidation of the informal sector, and the development of hypermarkets. This multi-tier development of the agro-food sector is without a doubt a problem to which we must devote attention, since it calls for diversified strategies on the part of both public and private actors.

8.2.2 - Disrupted population equilibrium and growing urbanisation

The aggregate population development in the Mediterranean region in the broad sense of the term, that is to say, including all Arab countries in the region, should lead to marked population growth from 500 million to 700 million inhabitants over the next 25 years (Fig. 2). This constitutes a considerable local market potential for those countries in the region that are able to seize such opportunities.

In the northern Mediterranean, birth rate has stabilised and the population is ageing considerably (more than half of the population will be over 50 years of age by 2025). In the eastern Mediterranean, on the other hand, the population is entering a phase of appreciable rejuvenation. Birth rate should begin to level off noticeably as of 2010, however, and this stabilisation should be confirmed by 2025. The stabilisation dynamic has been slower in the southern Mediterranean, so that the demographic transition is unlikely to begin before 2025. As the result of this dual development, almost 60% of the Mediterranean population will be living in the countries of the South by 2025, whereas it was the countries in the North which accounted for almost 70% of Mediterranean consumers in 1950.

Figure 8.2 - Population development in the Mediterranean: comparison between North and South in million inhabitants

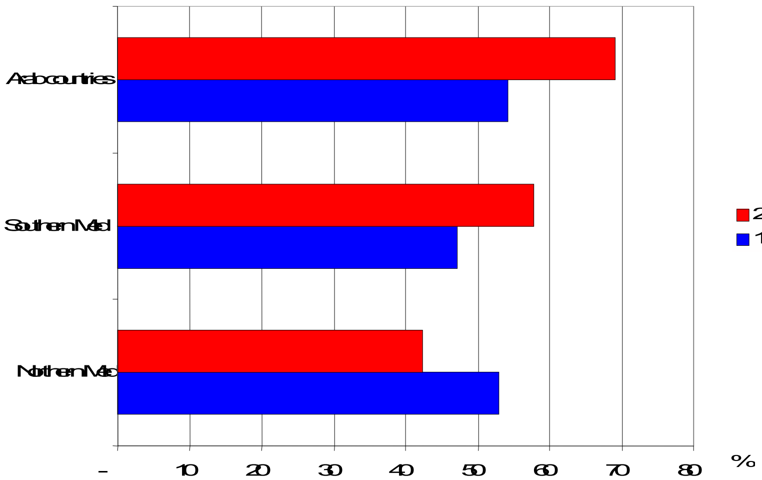


Source: World Bank 1994, UNDP 1995 and MAP/MEDIT.

This new population equilibrium goes hand-in-hand with an urbanisation phenomenon which is accelerating, particularly in the southern Mediterranean. Figure 3 below gives a good idea of the sustained urbanisation rate which will mark the countries of the eastern and southern Mediterranean until 2025[40], whereas the urban populations in the North will tend to become stabilised and, in certain cases, will even decrease.

[40] In the eastern Mediterranean countries Istanbul is the urban centre with the most marked development; the growth rate since the 1950s has achieved a spectacular 500%, and the population will increase by a further 50% in the next 15 years. The urban population in countries such as Lebanon, Libya and Turkey has more than doubled since 1960.

Figure 8.3 - Development of the percentage of the urban population in the Mediterranean by major zone



Source: World Bank1994, UNDP 1995 and MAP/MEDIT.

Combined with the problem of poverty and the inability of certain agro-food industries to cope with demand, this extremely rapid urban growth raises many questions.

8.2.3 - The impact of these changes on food consumption

This population dynamic, openness to world markets, the massive migration of rural populations to the cities, and economic growth are causing major changes on the food markets in the Mediterranean region.

Several of the major features of these changes will be examined below.

- First of all, population dynamics affect the age structure of the extremely young populations in the South and the ageing populations in the North. In Morocco, for example, 61% of the population is under 30 years of age[41], and in Egypt 40% of the population is under 15 years of age.

- Secondly, due to women's participation in economic life, Mediterranean women, who, traditionally, have been tied to domestic life and have been responsible, inter alia, for providing high-quality food, are now devoting more

[41] CERED projections for 2002, in CERED, 1997; Situation et perspectives démographiques du Maroc. Centre d'Etudes de Recherches Démographiques, Rabat, Maroc. *(Population situation and outlook in Morocco, Centre for Demographic studies and research, Rabat, Morocco.)*

and more time to occupational activities. An increasing number of women are thus working outside the home (7% in Jordan, 17% in Algeria, 24% in Tunisia, 29% in Morocco, 43% in both Turkey and Croatia[42], and the 'time' constraint can become as significant as, if not more significant than, the 'income' constraint in explaining the change in domestic consumption.

- Urbanisation and the fact that people are engaging in several activities, often because they have no other choice if they want to have a decent standard of living, explains why nuclear families are forming in which the number of children is steadily decreasing. The size of households is consequently declining rapidly. In Egypt, for example, the number of persons per household dropped from 5.2 in 1990 to 4.3 in 1996 (Soliman, 2002). In Turkey, the average number of persons per family is 3.6 (Dogruel, 2002); in Morocco, the number of persons per household is still high: 5.6 in urban areas as against 6.4 in rural areas (Directorate for Statistics, 2000).

- And finally, new patterns of working time: the non-stop working day, which is now widespread, and the fact that people are engaging in several activities have resulted in the growing use of institutional, fast-food or street catering. And even if these "time-saving" meals that are taken outside the home are still often traditional, changes of this nature have considerably influenced the transformation of Mediterranean consumption patterns, which, traditionally, have been based essentially on the lengthy and complex preparation of dishes for meals eaten at home and at a more leisurely pace as an important feature of family life.

- These phenomena of non-domestic catering, which concern mainly adults, are compounded by the impact which the general application of compulsory schooling has had on the lives of the younger generation. It is to be observed practically everywhere in the Mediterranean region that the institutional environment is gradually replacing the traditional family environment, and that this is happening at an increasingly early stage in people's lives. In this context it is not surprising that the tastes of both young and not so young, which are being influenced more and more by the development of institutional catering and by the effects of advertising, are tending to become westernised.

8.2.4 - Highly heterogeneous and rapidly changing food markets

Even if the "Cretan model" tends to be presented rather simplistically as typical of the entire region, it is now essential to examine the "Mediterranean consumption pattern" from the point of view of its diversity, given the degree of intermixing of

42 Sources: Department of Statistics, Jordan, 2001; National Statistical Office, Algeria, 1998; National Statistical Institute, Tunisia, 2002; Directorate for Statistics, Morocco, 2001; State Institute of Statistics, Turkey, 1990; Central Bureau of Statistics, Croatia, 2001.

the populations and civilisations of the Mediterranean, which has contributed to a large extent to the differentiation of Mediterranean diets.

A diet marked by its diversity and intercultural nature:

A simple comparison of the foods available in the Mediterranean region reveals a marked contrast between the North, the Balkans and the South.

- In the South, cereals still constitute the basic diet. They are complemented by legumes, whereas animal products are rare and expensive (10%, and often less, of the calories ingested are of animal origin).
- Food intake in the riparian countries in the North, on the other hand, is characterised by its rich animal product content (Table 5). Since the 1990s the structure of this food intake has been very close to the western model, the only difference being more fish and legumes and less sugar (Fig. 4).
- The Balkan countries have an intermediate food intake structure situated between the structures of the North and the South: intake is richer in animal products compared to the South and contains more cereals and legumes than in the North, with a lower calorie count.

Table 8.5 - Regional comparisons of food intake per capita per day 2000

Regions	Final calories available	% of animal calories	Equivalent vegetable intake*
Northern Mediterranean	3563	28	9550
Balkans	2913	22	6760
Southern Mediterranean	3222	10	5155

* Number of plant calories + Number of animal calories x 7
Northern Mediterranean : Spain, France, Greece, Italy, Portugal
Southern Mediterranean : Algeria, Cyprus, Egypt, Israel, Lebanon, Libya, Morocco, Syria, Tunisia, Turkey
Balkans : Bosnia-Herzegovina, Croatia, Albania, Serbia-Montenegro, Slovenia

Source: Our calculations based on FAO data.

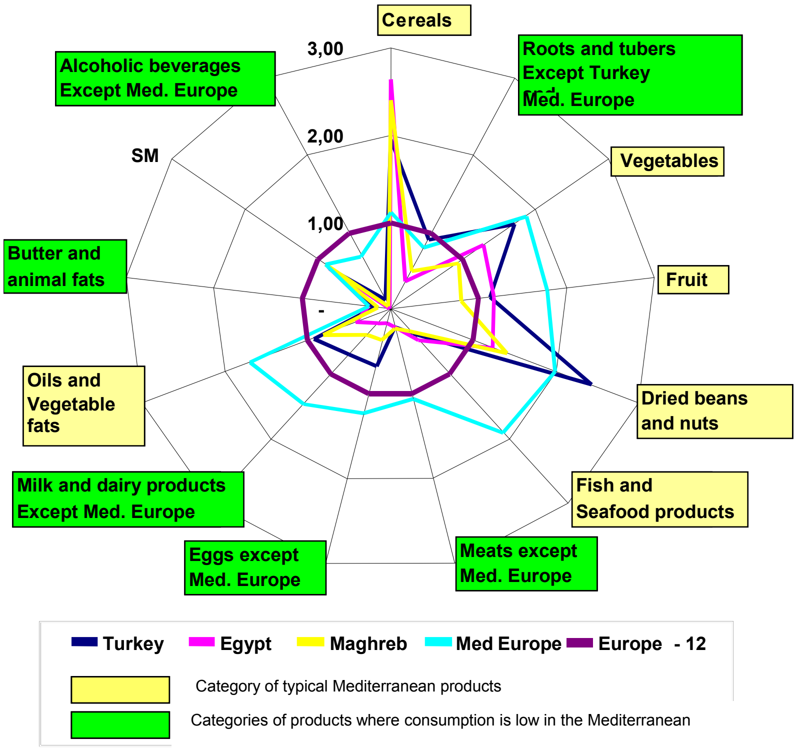
In addition to the interregional diversity of the Mediterranean zone there are also substantial differences in diet within the subregions.

- In the group of European Mediterranean countries, Spain and Portugal are characterised by high potato, fish and seafood consumption. Consumption in Italy is based mainly on cereals and dairy products. In Greece it focuses more on cereals, legumes, fruits and "feta" cheese. France is without a doubt the most "westernised" Mediterranean country, with a comparatively high level of meat and milk consumption. The Mediterranean diets are the product of a history which has not always taken account of geographical frontiers. Greece, for example is still very influenced by oriental and Ottoman cuisine, whereas Spain is marked by the influence of the Moors, and Sicily and Provence are very similar to Italy.
- There is also great diversity of diets in the Balkans. Although consumption of legumes, fish, sugar, and fats is low throughout the region, consumption of the other foodstuffs varies widely from one country to another. In Albania animal products (milk, meat) and legumes play an important role in the diet, whereas in Yugoslavia and Slovenia milk and its derivates, cereals and fruit are predominant. In Bosnia the main items are legumes and meats, in Croatia root vegetables, tubers and fruit, and in Macedonia essentially legumes.
- Food patterns in the South are fairly homogenous. Fruit and legumes and root vegetables and tubers differentiate Turkey and Lebanon from the other dietary patterns. Milk and dairy products are typical of countries with a pastoral tradition such as Turkey, Syria and Algeria.

Rapidly changing behaviour:

In addition to the wide diversity observed in diets, all Mediterranean consumers are affected in their food habits by the opening of their economies and markets to the world market.

Figure 8.4 - Comparison between the average consumption model of the Europe of the 12 and several typical Mediterranean models



Here again there are of course wide variations between individuals and regions, but despite the resistance of certain food habits and the preference for certain local products, the same trend is observed throughout the region, as is illustrated in Fig. 4.

- In the southern Mediterranean the average food model seems to depart from the western model, since the consumption of products such as cereals and legumes was higher in 2000 than it was in 1963, whereas no progression is visible in the consumption of animal products.

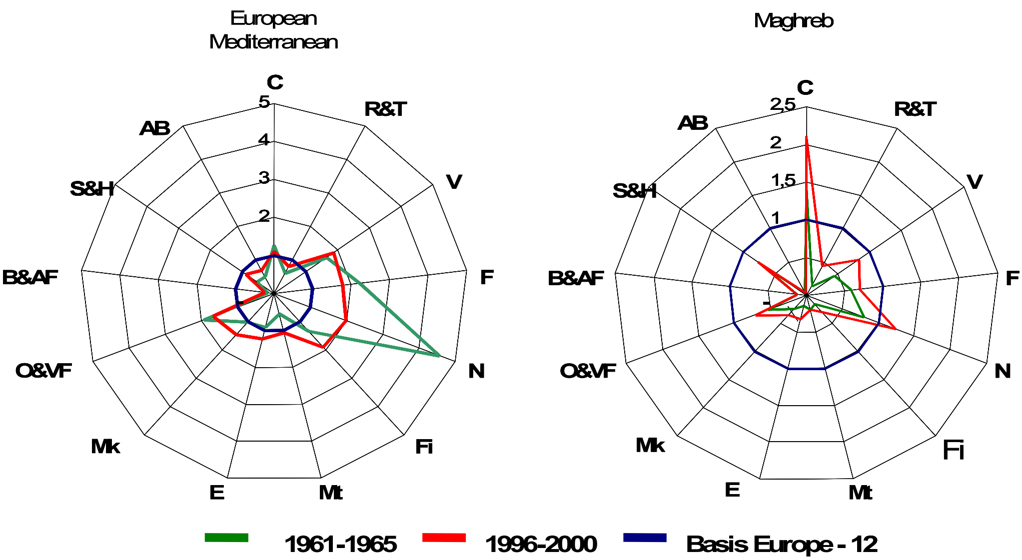
- Taken as a whole, the calorie count of average food intake has progressed appreciably in all of the countries in the region, but the resulting nutritional structure and quality of food intake[43] have not progressed to the same extent. Jordan seems to be the only country where the situation has improved

[43] The international nutritional standards are as follows: food intake must have a protein content of 8% - 12%, a carbohydrate content of 50% - 58%, and a fat content of 30% - 33%.

appreciably over the last 35 years, whereas it seems to have even deteriorated in other countries.

- Comparison of the food situation in the Balkans in 2000 with the situation in 1963 shows marked deterioration: the availability of all products seems to be reduced with the exception of animal products. The nutritional balance in Bosnia, and in particular in Croatia, has also deteriorated considerably, whereas Yugoslavia and Slovenia show a relative balance, and there is slight improvement in Albania and Macedonia - but at levels far below a nutritional balance.

Figure 8.5 - Development of the food profiles of the Mediterranean countries in Europe and the Maghreb - 1961/1965, 1996/2000

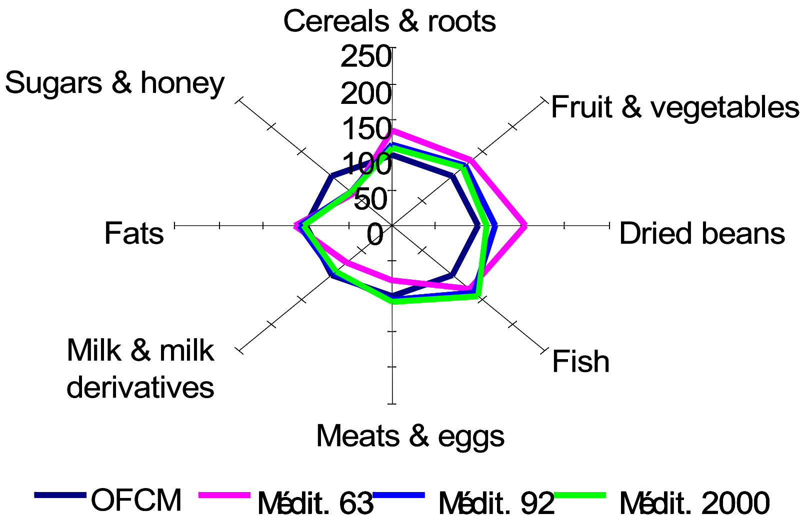


C: Cereals - **B&AF**: Butter and animal fats - **O&VF**: Oils and vegetable fats - **Mk**: Milk and dairy products except Med. Europe - **E**: Eggs except Med. Europe - **Mt**: Meats except Med. Europe – **Fi**: Fish and seafood products - **N**: Dried beans and nuts - **F**: Fruit - **V**: Vegetables - **R&T**: Roots and tubers except Turkey and Med. Europe – **S&H** : Sugar and honey – **AB** : Alcoholic beverages

- And finally, in the northern Mediterranean the health model which has developed over hundreds and even thousands of years is in the process of changing to a Western model whose excesses are constantly emphasised (Fig. 5).

Taken as a whole, the nutritional balance has been upset in this region (Fig. 6): there has been an increase in the quantities consumed and levels considered excessive have now been attained (3,300 - 3,600 Kcal per capita per day in average food availability in 2000 as against 2,600 - 3,200 Kcal in the 1960s), a very high level of animal product consumption accounting for 22% to 38% of the calorie intake in 2000 as against 13% to 30% in the 1960s. There has also been a marked increase in the proportion of fats added to intake evaluated in terms of energy: it has risen from 20% - 30% of intake in 1963 to 32% - 40% 30 years later. The type of fats consumed has changed in particular in Portugal, Spain and Italy (marked increase in animal fats), whereas in France and Greece it is vegetable fat consumption which is progressing more rapidly. Even if the Mediterranean model has still retained several of its basic characteristics despite these changes, one might well ask how long this will continue.

Figure 8.6 - Development of the food profiles of the Euro-Mediterranean countries - 1960/2000



OFCM: Occidental Food Consumption Model

The hedonic aspect is still very significant:

Mediterranean consumers are still particularly concerned about product quality. They are very aware of the risks of faulty preservation and hygiene and sometimes of certain cases of fraud. But "quality" is not limited to health aspects for Mediterranean consumers. Taste, flavour and perfume still influence consumer behaviour to a large extent, since they are perceived as factors determining the product quality sought and for many people are the main factors of confidence in products and distribution networks.

Mediterranean consumers thus trust the brands and products they know, and they tend to trust local shopkeepers with whom they have neighbourly relations.

In Egypt, since the cold storage chain has not been adequately complied with, consumers have lost confidence in shopkeepers and higher-income consumers have turned to the large-scale retail trade, although the "békala" (local shopkeeper) culture is still very widespread in the lowest income brackets due to the relational aspect that has developed over many years (Soliman, 2002).

The modification of commercial structures in the various countries has undoubtedly changed purchasing habits, particularly with the advent of modern distribution: Carrefour in Tunisia and Egypt, and Marjane/Auchan in Morocco. However the change has not been the same for all population groups; some consumers have taken to the new forms of distribution more rapidly, whereas others keep to the traditional forms, and a third category has developed a behaviour pattern patronising the various sales outlets. The choice of shop is in fact very closely linked to purchasing power.

In Morocco, an important factor in choosing the local grocer's shop for buying most food products is the credit facility granted by the grocer to local residents. Furthermore, the local grocer's shop is also more accessible since supermarkets are generally situated at some distance from working-class districts, whereas most households do not have a car and bus services are unsuitable.

However, the boundaries between the various types of shop are not always clearly defined. Irrespective of their income, households patronise all types of shops depending on the products they want to buy and consumption situations.

For a strategy for enhancing the value of Mediterranean products:

The consumption pattern presented by Mediterranean diets is far from homogeneous; these diets involve a wealth of products with their own very typical features and are extremely varied. According to nutritionists, it is that diversity which provides a certain level of nutritional and social well-being for the various populations. Mediterranean producers should put their food knowledge and know-how to better advantage and structure the image of Mediterranean food around four main aspects, which are closely related to identity:

- combining pleasure and health: they should revive the concept of nourishing food, distance themselves from the "health emphasis" of American food culture, emphasise the sensual aspect, and relax the dichotomy between what is enjoyable and what is good for the health;
- emphasising the value of Mediterranean culture with its diverse flavours and colours and establishing a Mediterranean identity; it should no longer be a question of "eating other people's food" but of "providing and eating one's own food";

- mobilising a desire for renewal and "reassurance" by returning to traditional foods;
- guaranteeing consumers an appropriate solution to their concern for "health" and "food safety"; the new medical angle on Mediterranean food will help to create new foods with traditional ingredients and to make the Mediterranean diet part of a movement of reconciliation with tradition, in which the ancestral knowledge of the people is acknowledged by the elite.