INTRODUCTION

With increased understanding of the importance of trade and market considerations in developing and managing sustainable fisheries in the Mediterranean, the Sub-Committee on Economic and Social Sciences (SCESS) of the Scientific Advisory Committee (SAC) of the General Fisheries Commission for the Mediterranean (GFCM) has requested assistance in the presentation and analysis of such information in a coherent and consistent manner. This information should lead to a better understanding of the trade and market mechanisms underlying the fishing activities within the basin and influencing their effective management.

The purpose of the present document is to provide an overview of the most recent trends in the exchange of fish products in the Mediterranean basin, taking into account effects that market forces, together with legal provisions, can have on the sustainability of resources.

As stated in Malvarosa (2004), fish trade liberalization between the European Union (EU) and its Mediterranean partners has already had positive effects; these effects could continue in the future. In fact, EU imports of fish products from Mediterranean countries may see large increases due to increasing European demand for fish products *vis-à-vis* the number of limitations on "domestic" fish production (quotas, size restriction, etc.). In these circumstances, neighbouring Mediterranean countries play a key role, especially in the light of recent processes of liberalization, including the Euro-Mediterranean Partnership, or Barcelona Process, the Stabilization and Association Process in the western Balkans, and the most recent Union for the Mediterranean.

It should also be noted that FAO forecasts an increase in demand for fish products up to 2030 (Istituto di Servizi per il Mercato Agricolo Alimentare [ISMEA], 2004), especially from the southern side of the Mediterranean. This could cause a reversal of the exchange flows of fish products: from being net exporters of fish products, the southern Mediterranean countries could become importers. This change would have clear consequences on fishing pressure and, hence, on the fish stocks exploited by both the European and Mediterranean fisheries. In this context, it would be necessary to develop appropriate management measures capable of dealing with the increased fishing pressure and, thus, safeguarding the welfare of Mediterranean peoples and resources.

It is our aim that this document will serve as the basis for discussions within the GFCM and its subsidiary bodies, and will improve understanding of the role that market forces play within fisheries management, with regard to relevant trade agreements, socio-economic dimensions and historic-cultural ties, and with the ultimate goal of improving the use of socio-economic information in fisheries management.

In order to delineate more clearly the framework of trade in fish products among coastal Mediterranean countries, both EU and non-EU, nations have been classified into four groups:

- EU Mediterranean countries (EUMC): Cyprus, France, Greece, Italy, Malta, Slovenia and Spain;
- Candidate Mediterranean countries (CMC): Croatia and Turkey;[1]
- Potential candidate Mediterranean countries (PCMC): Albania, Bosnia and Herzegovina, Montenegro and Serbia;[2] and
- Third Mediterranean countries (TMC): Algeria, Egypt, Israel, Lebanon, the Libyan Arab Jamahiriya, Morocco, the Occupied Palestinian Territories, the Syrian Arab Republic and Tunisia.

[1] The former Yugoslav Republic of Macedonia is also a EU candidate country in the enlargement process, but it is not considered in this discussion because it is landlocked.

[2] Serbia is included in the present analysis, despite also being landlocked, for the sake of homogeneity with past data. As Serbia and Montenegro constituted a single legal entity until 2006, they have been put together in tables and figures in the present document.

The document is organized into four sections:

- Section 1 provides an overview of the legal framework governing relationships among Mediterranean countries (with particular attention to the Euro-Mediterranean Partnership and the Stabilization and Association Process), with special focus on the tariff schemes in force for the exchange of fish products;
- Section 2 provides a snapshot of the Mediterranean fishery sector by analysing the most recent trends in fishery production and consumption. FAO forecasts on fish consumption up to 2030 complete the analysis;
- Section 3 is the core of the document and focuses on the exchange of fishery products, based on data from UN-Comtrade and FAO (for international trade) and Eurostat data (for EU trade). First, the analysis tries to give a measure of the role that the Mediterranean basin plays in the world trade of fishery products. Subsequently, particular attention is paid to intra-Mediterranean trade by building and analysing the Mediterranean exchange matrix. Finally, in the third sub-section, through the analysis of Eurostat data, emphasis is put on trade in fish and fishery products among non-EU Mediterranean countries and EU countries, with particular attention to the EUMC. The analysis considers both the quantitative and qualitative aspects of trade; and
- Finally, Section 4 provides conclusions on the main trends of exchange, the effects of liberalization processes on the exchange of fishery products and product specialization.

1. REGIONAL TRADE AGREEMENTS AND THEIR EFFECTS ON FISH TRADE LIBERALIZATION WITHIN THE WTO FRAMEWORK

Trade relationships play a crucial role in a country's economy, not only in terms of development and trade exchanges: opening up to foreign markets can trigger a chain of benefits, including production specialization, international division of labour, greater efficiency and productivity of the labour force and a wider choice for consumers. In contrast, a closed economy resulting from protectionist policies creates a series of inefficiencies whose ultimate result is the slowdown of economic growth. These are the principles that inspired the creation of the General Agreement on Tariffs and Trade (GATT), and later, the World Trade Organization (WTO).

The present system of multilateral trade agreements was set up on the eve of the Second World War through the GATT. In the last 50 years, these agreements have greatly contributed to the growth of world trade exchanges and of the economy of countries involved in them. In 1997, world trade was at a level 14 times greater than that of the 1950s (WTO, 2003). The system has developed through a series of negotiations, or "rounds". The first rounds concerned the lowering of the tariff levels while, in most recent years, they have also dealt with anti-dumping and non-tariff barriers to trade.

The Uruguay Round, started in 1984 and finished in 1995, gave birth to the WTO. In Qatar in November 2001, important negotiations were held during the launch of the Doha Development Agenda (DDA). The original mandate has been subsequently revised in Cancùn in 2003, in Geneva in 2004 and in China, Hong Kong Special Administrative Region (China, Hong Kong SAR) in 2005. Beside negotiations related to market access for non-agricultural products (which in the WTO include fish and fishery products), agricultural products and services, the DDA also deals with relations between trade and the environment, the regulation of subsidies and of anti-dumping, trade facilities and other issues, such as those related to the difficulties of developing countries in the implementation of WTO rules.

The Doha Agenda includes a number of issues of particular importance to international trade in fish and fishery products, including improved market access through lower import tariffs, fisheries subsidies, environmental labelling, the relationship between WTO trade rules and environmental agreements, as well as technical assistance and capacity building (Lem, 2003).

The WTO was born during a period characterized by renewed interest in regional cooperation that began at the beginning of the 1990s.

In the last decade, a number of Regional Trade Agreements (RTAs) have been signed. As of October 2003, 285 RTAs, had been submitted to WTO.

The objectives of RTAs vary considerably: from the exchange of preferential treatment between two or more countries to wider provisions on trade relations, such as the reduction or elimination of tariffs. The new generation of RTAs tries to go beyond the reduction in tariff levels and often include rules on investment, competition, the environment and the workplace. Today the most widespread type of RTA is the Free Trade Agreement (FTA). In fact, of all the RTAs signed within the WTO, about 70 percent is made up of FTAs (WTO, 2003). In the period 1990–2005, 116 FTAs were submitted to the GATT/WTO (Melchior, 2006).

The world leader of regional integration is the EU. The highest number of RTAs is, indeed, registered in Europe. Among these, agreements between EU and Mediterranean countries, such as the Euro-Mediterranean Partnership (EMP) and the Stabilization and Association Process (SAP) have been of particular importance. The first is a process that the EU launched with the countries of the southeastern Mediterranean (from North Africa to the Middle East), while the second concerns the countries of southeastern Europe (the Balkans).

1.1 The Euro-Mediterranean partnership

EU interest in the Mediterranean region is not new: it began in the mid-1970s with a series of Cooperation Agreements between the European Community (EC) and Mediterranean countries. In fact, it can be claimed that, "it is in the Mediterranean that Europe finds its root" (Sadek, 2000).

It can be said, in a sense, that relations between the EU and TCMs originated in the Treaty of Rome (1957) establishing the European Community.[3]

This legal framework was initially the only reference in support of institutional arrangements in the Euro-Mediterranean area, characterized in this period by bilaterality, limited time duration and great heterogeneity. These agreements were lacking, however, any kind of coordination; they were characterized by high fragmentation that often created conditions of conflict between the countries involved and impeded, rather than encouraged cooperation within the Mediterranean basin.[4]

Finally, at the Paris summit of 1973, the "global Mediterranean policy" was launched. Its main objectives were the strengthening of the Euro–Arab dialogue and of the EC role in the Mediterranean area. Consequently, a first generation of agreements, called Association and Cooperation Agreements, was implemented. These agreements introduced some guidelines for the current EMP. With the launch of the "global Mediterranean policy", the idea of the creation of a free trade area was made explicit. Nevertheless, this project was not a great success because Mediterranean policy based on the first generation agreements limited it essentially to a "management" of relations with the TMC. From the 1970s until the end of the Gulf War, the inability of the EC to match its strong economic role with an equally strong political presence in the Mediterranean has become increasingly evident.

This realization process about the need for an EU commitment in the Mediterranean culminated, in 1995, with a Commission Communication that proposed a stability pact for the Mediterranean, similar to that already implemented for Central and Eastern Europe. The Communication was the last step towards the Barcelona Declaration, where, in 1995, at its first conference, the Euro-Mediterranean Partnership (EMP) was launched.

The Euro-Mediterranean Ministerial Conference held in Barcelona on 27–28 November, 1995 formally launched the Mediterranean Initiative or EMP, which involved 27 countries: the former 15 EU members plus 12 Mediterranean Partners, represented by Algeria, Morocco and Tunisia (Maghreb); Egypt, Israel, Jordan, Lebanon, the Occupied Palestinian Territories and the Syrian Arab Republic (Mashrek); Cyprus, Malta (since 2004 EU Member States) and Turkey.[5] As for the Libyan Arab Jamahiriya, following its participation at the conference in Stuttgart in 1999 as a special guest of the EU Presidency, this country has also taken part in a number of meetings regarding the Barcelona Process as an observer.[6]

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[3] Title IV of the Treaty establishing the European Community, dedicated to cooperation with developing countries, contained two articles that have governed relations and trade in the first phase of Mediterranean policy, before being joined by other multilateral instruments. Art. 113 provided for the conclusion of "tariff and trade agreements with third countries", while art. 238 concerned the possibility of concluding agreements that create an association involving reciprocal rights and obligations, joint actions and special procedures".

[4] It must be stressed that in this first phase, the agreements between the EU and TMC had different aims. In some cases, agreements were used to preserve existing links between individual Member States and former colonies (e.g. the agreements with Morocco and Tunisia of 1969), others represented a first step to strengthening ties with the Community from countries that asked for adhesion (e.g. Greece 1961, Turkey 1963, Spain 1970), and in still others were a response to pressure from traditional trading partners who feared the effects of discrimination arising from the formation of the Community itself (e.g. Israel 1970, Malta 1971, Yugoslavia 1970) (ISMEA-IAMB, 2003).

[5] Balkan countries and the Libyan Arab Jamahiriya are not members of the EMP.

[6] The Libyan Arab Jamahiriya will become a full member of the EMP only following the lifting of sanctions that the UN Security Council imposed as a consequence of the Lockerbie case of 1992. At the date of writing, the case is approaching resolution.

With the launch of the EMP, new approaches to trade, cooperation and financial support between the two shores of the Mediterranean basin have been strengthened with a view to a gradual alignment of the TMC to EU (Istituto Nazionale di Economia Agraria [INEA], 2002).

The main objectives of the Barcelona Declaration are:

(i) the establishment of a common Euro-Mediterranean area of peace and stability based on respect for human rights and democracy;
(ii) the progressive establishment of a free trade area between the EU and its Partners, and among the Mediterranean Partners themselves, accompanied by EU financial support for economic transition in the Partners; and
(iii) the development of human resources, promotion of cultural integration and rapprochement of the peoples in the Euro-Mediterranean area.

As a concrete step to implementing the Barcelona Declaration's objective of creating an area of shared prosperity, the Declaration aims to form a Euro-Mediterranean free trade area by 2010. Together with the European Free Trade Association, and with candidate countries at a later stage, this zone could include some 40 States and 600-800 million consumers, becoming one of the world's most important trade entities.[7]

The implementation of the Euro-Mediterranean free trade area is a two-step process. The first step consists of implementing bilateral or "vertical" integration, between the EU and each Mediterranean partner by means of a new generation of Euro-Mediterranean Association Agreements (EMAAs). To date, all TMC, except for the Syrian Arab Republic, have signed EMAAs with the EU (Table 1).

The EMAAs replace the previous generation of cooperation agreements in force in the 1970s, and constitute the foundation on which the free trade area in the Mediterranean region is developing. All EMAAs provide for the liberalization of trade in manufactured goods, with free access for exports from Mediterranean partners and a gradual dismantling of tariffs for exports from the EU.[8]

The second step consists of implementing a free trade area among the Mediterranean partners ("horizontal" or South–South integration), in order to develop the intraregional trade that is currently still limited (Hadhri, 2000; Malvarosa, 2002; ISMEA – Istituto Agronomico Mediterraneo di Bari [IAMB], 2003).

In order to promote bilateral trade through the EMAAs, the EMP promotes regional integration and implementation of FTAs between Mediterranean countries. Currently, regional integration agreements are being developed between various countries. The Agadir FTA between Egypt, Jordan, Morocco and Tunisia came into force in 2007 and remains open to other countries in the region. In addition to this agreement, Israel and Jordan have signed an FTA. Egypt, Israel, Morocco and Tunisia have signed bilateral agreements with Turkey, and other negotiations are underway between Mediterranean countries. South–South integration is a key element of the Euro policy and is strongly supported by the EU.

The EMP has been recently reinforced by the launch of a new European policy, the European Neighbourhood Policy (ENP), designed and adopted by the European Council on 19–20 June 2003.

[7] In a sense, EU enlargement to the east could be a negative factor in the context of the already weak competitive advantages of Arab countries compared with the EU. Indeed, many the Arab and Eastern European countries have the same type of industrial specialization, resulting, partly, from a common support policy pursued by the EU in recent decades (Tovias, 2000).

[8] To achieve the objectives of EMP, the EU has provided more financial assistance than previously. Most of the funds are allocated to the MEDA programme, the main financial instrument offered by the EU to support the economic transition of TMC so that an effective alignment of TMC to EU can be achieved. The MEDA programme has a predominantly bilateral orientation: 10 percent of funds for the period 2000-2006 were assigned to regional cooperation, while the remaining 90 percent went to bilateral cooperation, based on the considerable lack of capacity of TMC.

This new policy is directed at neighbouring countries to the east, like Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine; and to Mediterranean countries such as Algeria, Egypt, Israel, Jordan, Lebanon, the Libyan Arab Jamahiriya, Morocco, the Occupied Palestinian Territories, the Syrian Arab Republic and Tunisia. A key feature of the ENP is that it allows each country to address the EU individually, depending on its interests and its capacity, in the context of the regional framework established in the EMP (ISMEA-IAMB, 2007). The objective of the ENP is to define the primary objectives with each neighbour with whom an agreement of association or partnership or cooperation is already in force, and on the basis of these to develop an action plan. Between December 2004 and July 2005, the Commission proposed action plans concerning Israel, Jordan, Morocco, the Occupied Palestinian Territories and Tunisia. Egypt and Lebanon have since developed their action plan.

Table 1 – Status of Euro-Mediterranean agreements, updated June 2009[9]

Country	Country acronym	WTO status	EMAA status	Signing date	Entry into force date	Legal reference
Algeria	TMC	The process of accession to the WTO is ongoing (with strong support from the EU). Negotiations started in 1998	Signed	April 2002	September 2005	OJ L 265
Egypt	TMC	Founding member since June 1995	Signed	June 2001	June 2004	COM (2001) 184 final
Israel	TMC	Member since 21 April 1995	Signed	November 1995	June 2000	OJ L 147
Lebanon	TMC	The process of accession to the WTO is ongoing. Negotiations started in 1999	Signed	June 2002	Interim agreement, March 2003	COM (2002) 170 final
Morocco	TMC	Member since January 1995	Signed	February 1996	March 2000	OJ L 70/00
Occupied Palestinian Territories	TMC	Not member of the WTO. Observer status since the Ministerial Meeting in Hong Kong in December 2005	Signed	February 1997	Interim agreement, July 1997	OJ L 187/97
Syrian Arab Republic	TMC	Application for WTO membership in October 2001. As the country had made little accession progress, in 2005 Syria renewed its request to pursue WTO accession	Initiated (October 2008)			

[9] Limited to countries that are objects of the present paper. All the countries listed in Table 1 are GFCM members, except for the Palestinian Authority.

Country	Country acronym	WTO status	EMAA status	Signing date	Entry into force date	Legal reference
Tunisia	TMC	Member since 29 March 1995	Signed	July 1995	March 1998	OJ L 97/98
Turkey	CMC	Member since 26 March 1995	Custom Union, January 1996	Custom Union	Custom Union	OJ L 35/96

Source: European Commission, Trade Issues Website.

1.2 The Stabilization and Association Process in the Western Balkans

For obvious geographical, political and historical reasons, the EU has particular interests and responsibilities in the stabilization and development of the southeastern region of Europe. EU strategy for this region is based on the reconstruction model applied after the Second World War, on one hand, and on the EC policies adopted for the Central and Eastern Europe after the collapse of communism in 1989.

During the 1990s, the EU concluded a series of agreements, called "Europe Agreements", with the ten countries of Central and Eastern Europe,[10] while partnership and cooperation agreements were concluded with other countries that were created as a result of the break-up of the Soviet Union.[11]

Relations with southeastern Europe proved, however, to be much more complex.

The EU's first initiative to stabilize southeastern Europe was the Royaumont Process, launched in 1995. The objective of the process was the creation of an area of economic prosperity and political stability. In April 1997, the EU adopted the Regional Approach, establishing political and economic conditions for the development of bilateral relations with the five countries in the region: Albania, Bosnia and Herzegovina, Croatia, the Federal Republic of Yugoslavia and the former Yugoslav Republic of Macedonia. Conditions include respect for democratic principles, human rights, the rule of law, protection of minorities, market economy reforms and regional cooperation.

Despite all the efforts towards stabilizing the region, the progress was very fragile, as the Kosovo crisis demonstrated further in 1999. The need for a stronger approach became more and more obvious and necessary. This brought the EU to an innovative initiative: the introduction of the Stabilization and Association Process (SAP), launched in May 1999. The SAP set up a new framework for the development of the relations between the EU and the southeastern European countries.

The aim of the SAP is to contribute to the stability and prosperity of the region after a very long period of conflict. The SAP is based on three main elements:

(i) the awareness that adhesion of the southeastern European countries to the EU could enhance reforms in the Balkan area;
(ii) the need for the implementation of relationships among the southeastern European countries themselves, *conditio sine qua non* for economic growth and political stability in the region; and
(iii) the need for EU assistance and cooperation with these countries at economic, political and technological levels in order to reduce the gap with respect to western Europe.

[10] Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.
[11] Union of Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Ukraine and Uzbekistan.

The Zagreb Summit in November 2000 represented a fundamental step in the SAP, when countries involved in the process committed themselves to reach a series of objectives that are fundamental for the success of the SAP itself.

As for the EMP, the SAP is based on the gradual development of a free trade market and of political and institutional reforms in order to bring southeastern European Countries closer to western European standards. Furthermore, the SAP is conceived in such a way as to be ad hoc for each country. Again, as in the EMP, the SAP is not only a bilateral process between the EU and each country. As mentioned above, the Zagreb Summit outlined the importance of regional cooperation.

The main instruments of the SAP are the Stabilization and Association Agreements (SAAs) that the EU intends to conclude, on a bilateral basis, with each country. The SAAs represent a new type of contractual relationship offered by the EU to these countries in exchange for the respect of the main conditions established by the SAP. The SAAs offer, for the first time, a clear prospect of integration in the EU system.

In 2001, an SAA, together with an Interim agreement, was signed with Croatia and came into force on 1 March 2002.[12] As a concrete step towards the strengthening of the relationships with the EU, Croatia applied for adhesion to the EU in February 2003. In the same way an SAA and an Interim agreement were signed with Albania in June 2006 and with Montenegro in 2007. Generally, the Interim agreement applies until the entry into force of the SAA. In the meantime, advisory-working groups have been created to carry out negotiations with Bosnia-Herzegovina, Kosovo, Montenegro and Serbia. Furthermore, in 2008 a proposal for a Council and Commission Decision on the conclusion of the Stabilization and Association Agreement between the EU and Bosnia and Herzegovina was signed (see Table 2).

These negotiations have been preceded by some attempts to strengthen exchange between the EU and this region. The most important measure is the adoption, by the EU, of EC Reg. No. 2007/2000 of the Council in September 2000. This regulation provides that all the products having origin in Albania, Bosnia and Herzegovina, Croatia and the Federal Republic of Yugoslavia (Kosovo, Montenegro and Serbia)[13] can enter the Community area without quantitative restrictions and exempted from custom duties or by other duties having equivalent effect. This preferential treatment will be in force until 31 December 2010.

[12] The first SAA was, in fact, concluded in April 2001, with the former Yugoslav Republic of Macedonia.
[13] And the Former Republic of Macedonia; see previous note.

Table 2 – Status of Stabilization and Association Agreements in the context of the SAP updated June 2009[14]

Country	Country acronym	WTO status	SAA status	Signing date	Entry into force date	Legal reference
Albania	PCMC	Member since 8 September 2000	Signed	12 June 2006	Interim agreement, 12 June 2006	OJ L 239 of 1.9.2006
Bosnia and Herzegovina	PCMC	Observer	Proposal for Interim agreement and SAA			COM/2008/0182 and 183 (not published in the OJ
Croatia	CMC	Member since 30 November 2000	Signed	2001		OJ L 26 of 28.01.2005
Montenegro	PCMC	Observer	Signed	15 October 2007	Interim agreement, 15 October 2007	OJ L 345 of 28.12.2007
Serbia	PCMC	Observer				

Source: European Commission

1.3 Recent developments in agreements concerning Mediterranean countries

The most recent development, for both eastern and southern Mediterranean countries, was the relaunch of the Euro-Mediterranean Partnership at the Paris Summit in July 2008 under a new name, Union for the Mediterranean. The new network of relations was endorsed at the Marseille Meeting of the Euro-Mediterranean Ministers of Foreign Affairs in November.

After welcoming Bosnia and Herzegovina, Croatia, Monaco and Montenegro, which have accepted the *acquis* of the Barcelona Process, the Partnership now includes all 27 member states of the European Union, together with 16 partners across the southern Mediterranean and the Middle East, namely: Algeria, Croatia, Egypt, Israel, Jordan, Lebanon, Mauritania, Monaco, Morocco, the Occupied Palestinian Territories, the Syrian Arab Republic, Tunisia and Turkey (negotiating candidate countries to the EU); Albania, Bosnia and Herzegovina and Montenegro (potential candidates to the EU); with the presence of the Libyan Arab Jamahiriya, invited by the Presidency since the Euromed Stuttgart ministerial meeting of 1999.

This relaunch aimed to infuse a new vitality into the Partnership and to raise the political level of the strategic relationship between the EU and its southern neighbours. While maintaining the *acquis* of its predecessor, the Barcelona Process, the Union for the Mediterranean offers more balanced governance, increased visibility to its citizens and a commitment to tangible, regional and transnational projects.

Some of the most important innovations of the Union for the Mediterranean include a rotating co-presidency with one EU president and one president representing the Mediterranean partners, and a Secretariat based in Barcelona that is responsible for identifying and promoting projects of regional, subregional and transnational value across different sectors.

It is important to stress that the Barcelona Process: Union for the Mediterranean will be complementary to EU bilateral relations with the countries involved, which will continue under existing policy frameworks, such as the Association Agreements and the European Neighbourhood Policy action plans. While complementing activities concerning its regional dimension, the Barcelona Process: Union for the Mediterranean will be independent from the EU enlargement policy, accession negotiations and the pre-accession process.

[14] Limited to countries object of the present paper.

1.4 The tariff scheme governing the exchange of fish products between Mediterranean countries and the EU

More than half of the Mediterranean countries outside the EU are developing countries. In recent decades, various instruments have been implemented to support the development of these countries and promote trade between developed economies and those in the developing world. Trade relationships represent the main engine for the development of a country. In this context, the EU adopted in 1971, the first Generalized System of Preferences (GSP). The GSP, born after years of discussions at the United Nations Conference on Trade and Development (UNCTAD), is a tool that allows industrialized countries to ensure independent and non-reciprocal trade preferences to all developing countries. For the implementation of this system, a special authorization, called an enabling clause, is required under the rules of GATT. That clause allows an exception to the principle of the "most-favoured nation" (MFN). Under this rule, established in Article 1 of GATT, any member of the WTO grants to the products of another member a treatment no less favourable than that granted to similar products of any other country (the concept of non-discrimination). Under the general provisions of the GSP, the preference for a given product (represented by a percentage by which the MFN tariff is reduced) is the same for all developing countries. The percentage depends on the sensitivity of the product, defined according to the economic situation, within the Community, of the sector that produces that particular product. The preference is adjusted in the sense that the higher the sensitivity, the lower the preference given to the product.

The GSP is implemented on the basis of ten-year cycles, for which guidelines are set. The guidelines for the period 2006–2015 were adopted in 2004. In practice, each GSP is adopted on the basis of regulations of the Council. The current GSP, based on guidelines in 2004, was adopted by the Reg. Council (EC) No. 980/2005. This regulation provides for the application for the period 1.1.2006–31.12.2008.

For the purposes of preferential tariff arrangements, the rules of origin or concept of originating apply.[15] The rules of origin may be preferential and non-preferential. The non-preferential rules apply if the products are not traded in the preferential tariff regime. The preferential rules of origin vary, however, depending on the preferential treatment provided by the bilateral or multilateral context in which trade takes place. An example is the rules of origin granted by the GSP, which regulates trade between the EU and developing countries.

Beneficiaries of the preferential regime among the Mediterranean partners concerned in the present paper include, Algeria, Egypt, Lebanon, the Libyan Arab Jamahiriya, Morocco, the Syrian Arab Republic and Tunisia.

As specified by Reg. Council (EC) No. 980/2005,[16] the general arrangement ensures that:

(i) the common tariff duties on non-sensitive products are suspended;
(ii) ad valorem duties of the Common Customs Tariff on sensitive products are reduced by 3.5 percentage points;
(iii) the specific duties of the Common Customs Tariff on sensitive products are reduced by 30 percent;[17] and
(iv) the minimum duty, if any, is not applied.

[15] There are many definitions of origin of a product, but the most complete is, perhaps, that of non-preferential origin contained in art. 24, Customs Code, which reads: "*When production involves two or more countries, the product origins are attributed to the country where the last processing phase happened, economically justified and made in a company equipped for that purpose, and which was the conclusion of the manufacture of a new product or represented an important stage of the manufacturing process.*"

[16] These requirements are almost unchanged compared with the provisions of the GSP in 2001.

[17] If the Common Customs Tariff provides both specific and ad valorem duties, specific duties will not be reduced.

As anticipated, preferential GSP rates apply initially to the common tariff scheme, in which the MFN tariff is specified for each product.

Tariffs for fishery products

Most fishery products (both fresh and processed) are included in the preferential regime. All fishery products included in the preferential scheme (with the exception of ornamental fish) are considered sensitive products. In accordance with the requirements of Reg. Council (EC) No. 980/2005, the ad valorem duties of the Common Customs Tariff for fisheries products are reduced by 3.5 percentage points. An exception to this rule is set for products of CN code 0306 13 (frozen shrimp), in which case the duty will be 3.6 percent (instead of 11.5 percent, post reduction) under the special incentive arrangements for sustainable development and good governance.

Annex A shows the common tariff scheme for fishery products, which entered into force on 1 January 2004 (extracted from Reg. EC 1789/2003).

Melchior (2003) estimated that, on average, the rate provided by the GSP for fishery products imported by EU from developing countries is equal to 9 percent, compared with an MFN tariff of 11.8 percent (lower than the MFN tariff calculated on average for WTO members, equal to around 14 percent). Furthermore, Melchior (2003) estimated that on average, MFN tariffs for fishery products are, in the WTO, higher than for other products included in the so-called Non-Agricultural Market Access (NAMA), the group that discusses, in the WTO framework, any issues concerning tariffs on fishery products together with those of manufactured products.

Beyond the GSP, it must be kept in mind, however, that relations between EU and Mediterranean countries, regardless of whether they are candidates for EU membership, should be considered in the more complex context of the Euro-Mediterranean Partnership relations, for countries of north Africa and the Middle East, and the Association and Stabilization relations for the countries of southeastern Europe. It has previously seen how the main objective of both processes is the establishment of a free trade area where products, including those of fisheries, circulate freely without imposing any kind of barrier, tariff and non tariff. This is to say, in some cases, this situation is already wholly or partially achieved.

As seen above, the Reg. No EC 2007/2000 of 18 September 2000,[18] which introduces exceptional trade measures in favour of countries participating in or linked to the SAP (Balkan countries), and grants free access Community territory to products coming from these countries. The regulation points out, among other things, that for some fisheries products, customs duties should be suspended during periods and within the limits of tariff quotas set out in Annex I to Council Regulation (the content of these provisions relative to fishery products is reported in Annex B).

That regulation has been replaced by the provisions of the SAA in the case of Albania, Croatia and Montenegro. The SAAs provide for the establishment of a free trade area in a period during which, consistent with the provisions of GATT/WTO, tariffs will be gradually reduced. The main provisions applied to fishery products are those contained in Chapter II of the three SAAs. This chapter provides, in all three different SAAs: a) the abolition by the Community of all quantitative restrictions on imports of fishery products originating in Albania, Croatia and Montenegro and vice versa; b) the elimination by the Community of all customs duties on imports of fish and fishery products coming from Albania, Croatia and Montenegro (with the exception contained, respectively, in Annex III, V and IV of the SAAs with Albania, Croatia and Montenegro, reported, respectively, in Annex C, D.1 and E.1 to this document); c) the elimination by Albania, Croatia and Montenegro (in the SAA for Albania the text says that "Albania avoids to apply") of all charges having equivalent effect to custom duties and completely abolish custom duties on fish and fishery products coming from the Community

[18] Amended by the following acts: Reg. No EC 2563/2000 of 20 November 2000 [OJ L 295, 23.11.2000] and Reg. No EC 2487/2001 of 18 December 2001 [OJ L 335, 19.12.2001].

(with some exception for fish and fishery products originating in Croatia and Montenegro entering EU – see Annex D.2 and E.2).

Similarly, the tariff preferences to some of the TMC provided by the GSP, should be considered in the light of the EMP. The EMAAs concluded by the EU with the Mediterranean countries have, in principle, the same structure. They are composed of several sections (or headings) including those relating to political dialogue, economic cooperation, financial cooperation, and social and cultural cooperation. One of the most important, for the achievement of free trade, is the title on the free movement of goods, where the conditions and steps for the establishment of privileged relations between the EU, on the one hand, and individual Mediterranean countries on the other are established. In this section the gradual reduction of tariffs on trade in products originating in third countries is, in general, provided. The fish products are normally considered next to the agricultural ones and in some cases specific provisions are planned for them. An example are the protocols of EMAAs concluded by the EU with Algeria, Morocco and Tunisia, which guarantee free access to the Community to almost all fishery products originating in those countries (except for processed and preserved sardines subject to tariff quota for Morocco – in 1996–98 – and Tunisia) see annexes F, G and H.1. In the case of Algeria, the EMAA also provides a particular protocol for fishery products originating in the Community imported from that country (Annex H.2). In most cases, tariffs are reduced by 100 percent. In the remaining cases, the rate is reduced by 25 percent (e.g. sole, albacore, yellowfin tuna, bluefin tuna, mackerel, sardines, fresh, frozen and chilled; fresh, frozen and chilled fish fillets; dried, smoked and salted fish and fish fillets; crustaceans such as shrimps, crabs and lobsters; fresh and frozen octopuses and cuttlefish; fishmeal and products derived from the manufacture of fish unfit for human consumption).

2. OVERVIEW OF MEDITERRANEAN FISHERY PRODUCTION AND CONSUMPTION

The countries bordering the southeastern Mediterranean (CMC, PCMC and TMC) host a population of over 230 million people and are characterized by a wide gap in terms of development. The structure of the economy and the resulting pattern of international specialization in production of goods are also quite different between the Mediterranean countries outside the EU.

The presence of countries belonging to the EU with high levels of socio-economic welfare and development, accentuates the differences between countries in the Mediterranean basin, thus making it more difficult to give a unique profile of the Mediterranean area.

In particular, EUMC contribute more than 84 percent to the gross domestic product (GDP) of the Mediterranean. In practice, less than half of the Mediterranean population produces almost the total income produced every year in the Mediterranean basin.

The imbalances in the level of contribution to GDP are particularly striking within some economic sectors. In EUMC, for example, agriculture contributes an average of 2.9 percent to the total GDP, while in TMC, the contribution to national GDP is 11.7 percent (Table 3). Indeed, despite the social and political differences and a high heterogeneity in the production and trade systems, the common element of TMC is the crucial role of the agrifood sector, in terms of contribution to employment and to the GDP, and in trade with the EU (IREPA, 2004).

Table 3 – GDP, Value added (agriculture and fishery) for the Mediterranean country groups in million euros, year 2000

	GDP	*Value added (V.A.) agriculture*	*Value added fishery*
EUMC	3 347 076	95 986	6 437
TMC	628 995	73 872	4 207
Total Mediterranean	**3 976 071**	**169 858**	**10 644**

	V.A. agriculture/ GDP	*V.A. fishery/ GDP*	*V.A. fishery/ V.A. agriculture*
EUMC	2.9%	0.2%	6.7%
TMC	11.7%	0.7%	5.7%
Total Mediterranean	**4.3%**	**0.3%**	**6.3%**

Source: International Monetary Fund, Statistical, Economic and Social Research and Training Centre for Islamic countries, Eurostat and FAO data.

The cultural heterogeneity and the economic differences that exist among Mediterranean countries are only partially apparent in the production structure of their fisheries sector. In fact, an analysis of several indicators reveals a strong homogeneity among Mediterranean fisheries. The fragmentation of resources and the restricted continental shelf greatly affect the production structure of fisheries operating in the basin. These are multispecies fisheries in which coastal fishing activities usually involve very small boats. Only a few fleets typically move to distant fishing grounds to fish specific target species (for example, red shrimp, tuna, or swordfish). Many Mediterranean fisheries are of ancient origin and are characterized by a great variety of gear used and target species, with the presence of many species characterized by a high commercial value.

Mediterranean fisheries are therefore labour-intensive, artisanal fisheries, and quite different from north European with their higher average productivity.

Fishing is an important source of income in many TMC. The occurrence of added value of the fishing sector on the agriculture sector is on average 5.7 percent, with a peak of 27.9 percent in Morocco. A high incidence is also recorded in Egypt (7.5 percent), Tunisia (5.5 percent) and Turkey (3.4 percent). In EUMC, the figure is 6.7 percent (ranging between 3.9 percent in France and 12.5 percent in Spain) – these indicators are based on 2000 data.

Of the total labour force employed in agriculture, those employed in the Mediterranean fisheries amounted to 0.6 percent. This level is very low in TMC, while it is above average in the EUMC.[19]

In 2007, the total fishery production (capture and aquaculture) of Mediterranean countries was 5.6 million tonnes (3.6 percent of the total world fishery production). The production from Mediterranean waters, 2 million tonnes, amounted to 35 percent of the total (40 percent for capture and 23 percent for aquaculture production) – see Table 4.

Table 4 – Fishery production of Mediterranean countries by countries and country groups (production volume, tonnes, 2007)

Country groups	**Countries**	**Mediterranean waters**		**Total**	
		Capture	*Aquaculture*	*Capture (including inland)*	*Aquaculture*
EUMC	Cyprus	2 426	2 418	2 446	2 504
	France	37 396	30 194	550 069	237 653
	Greece	91 363	109 551	96 098	113 258
	Italy	274 666	138 965	288 059	178 992
	Malta	1 235	2 548	1 235	2 548
	Slovenia	917	316	1 113	1 352

[19] More detailed information on the socio-economic aspects of the Mediterranean and Black Sea basin fisheries can be found in Martone and De Young, in preparation.

Country groups	Countries	Mediterranean waters		Total	
		Capture	*Aquaculture*	*Capture (including inland)*	*Aquaculture*
	Spain[20]	119 448	918	808 800	281 266
CMC	Croatia	40 145	8 489	40 208	12 884
	Turkey	589 129	80 988	632 450	140 021
PCMC	Albania	2 899	1 765	5 497	2 008
	Bosnia and Herzegovina	5	260	2 005	7 620
	Serbia and Montenegro	501	11	901	11
TMC	Algeria	148 437	45	148 437	405
	Egypt	83 763		372 492	635 516
	Israel	2 145	2 796	3 820	22 416
	Lebanon	3 541		3 811	803
	Libyan Arab Jamahiriya	31 924	230	31 924	240
	Morocco	42 440	79	892 820	1 636
	Palestine, Occupied Territories	2 702		2 702	
	Syrian Arab Republic	3 381		9 456	8 425
	Tunisia	102 110	2 283	103 194	3 367
Total Mediterranean		**1 580 572**	**381 856**	**3 997 535**	**1 652 925**

Source: FAO Fishstat

The largest aquaculture production among Mediterranean countries is from African inland waters (39 percent), in particular from Egypt, which is by far the biggest aquaculture producer in the region (in 2007, the top species were Nile tilapia and Flathead grey mullet).

Marine farming along the northeast Atlantic and Mediterranean waters have almost the same level of production (if the data discrepancy mentioned above is taken into account) – Figure 1. The top species, in terms of volume, are mussels and oysters for the northeast Atlantic; mussels, sea bass and sea bream for the Mediterranean.

[20]It should be noted that there is a discrepancy in Fishstat data concerning Spanish aquaculture. Official FAO data attribute the main (almost total) aquaculture production to the northeast Atlantic. It is, in fact, well known that most, if not all, of the seabass and seabream production (about 30 000 tonnes) and a portion of mussel production that are attributed to the northeast Atlantic actually occur in Mediterranean waters (APROMAR, 2008). This discrepancy is probably due to a misreporting species production by area.

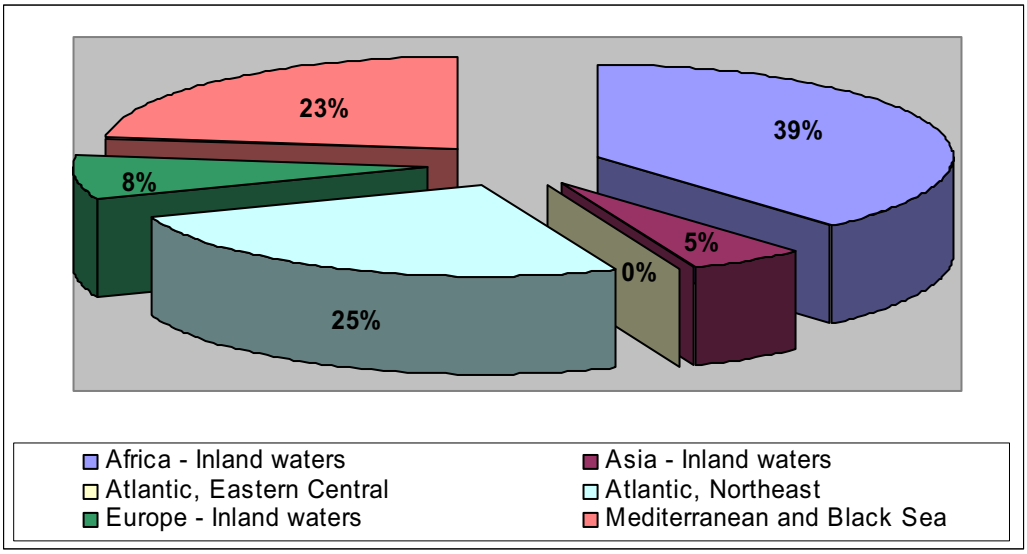


Figure 1 – Mediterranean countries aquaculture production by fishing area (production volume, 2007). *Source*: FAO Fishstat

In recent years, aquaculture has been the fastest growth activity in global food production, and this trend is also confirmed in the Mediterranean basin.

In the period 1990–2007, aquaculture production in Mediterranean shows a growth rate of 130 percent (149 percent from Mediterranean waters; 126 percent from non-Mediterranean fishing areas) – see Table 5. During the period in question, higher growth is recorded in aquaculture production of both CMC and TMC. In the first case (CMC), the growth rate is largely due to developments in Turkey, which has witnessed an aquaculture "explosion", especially in marine waters (production rose from 5 700 to 140 000 tonnes). As far as TMC are concerned, Egypt is the country group leader with an increase in aquaculture production of 926 percent during 1990–2007 (from 62 000 to 635 000 tonnes, from inland waters alone). Egypt's aquaculture production alone currently accounts for almost 40 percent of the total for Mediterranean countries (Figure 1).

Table 5 – Evolution of the aquaculture production of Mediterranean countries by country groups and fishing area (production volume, tonnes, 1990, 2000 and 2007)

Country groups	Fishing area	1990	2000	2007	*% Var. 1990–2007*
EUMC	Mediterranean and Black Sea	146 284	285 489	284 910	95
	Other fishing areas	477 530	607 096	532 663	12
CMC	Mediterranean and Black Sea	1 434	39 131	89 477	6 140
	Other fishing areas	4 348	46 776	63 428	1 359
PCMC	Mediterranean and Black Sea	4 443	210	2 036	-54
	Other fishing areas	518	3 811	7 603	1 368
TMC	Mediterranean and Black Sea	1 209	4 377	5 433	349
	Other fishing areas	80 069	366 904	667 375	733
Total	**Mediterranean and Black Sea**	**153 370**	**329 207**	**381 856**	**149**
	Other fishing areas	**562 465**	**1 024 587**	**1 271 069**	**126**

Source: FAO Fishstat

Regarding capture production, 39 percent of harvests come from Mediterranean waters. The second fishing area in terms of harvest volume is the Eastern Atlantic which is mainly exploited by Moroccan fleets; third is the Northeast Atlantic, principally exploited by the Spanish and French. The Western Indian Ocean, whose fishing grounds are exploited by Egyptian, French and Spanish vessels, and

Africa inland waters, which are almost totally exploited by Egyptian vessels, each account for 6 percent of total capture fishery production (Figure 2).

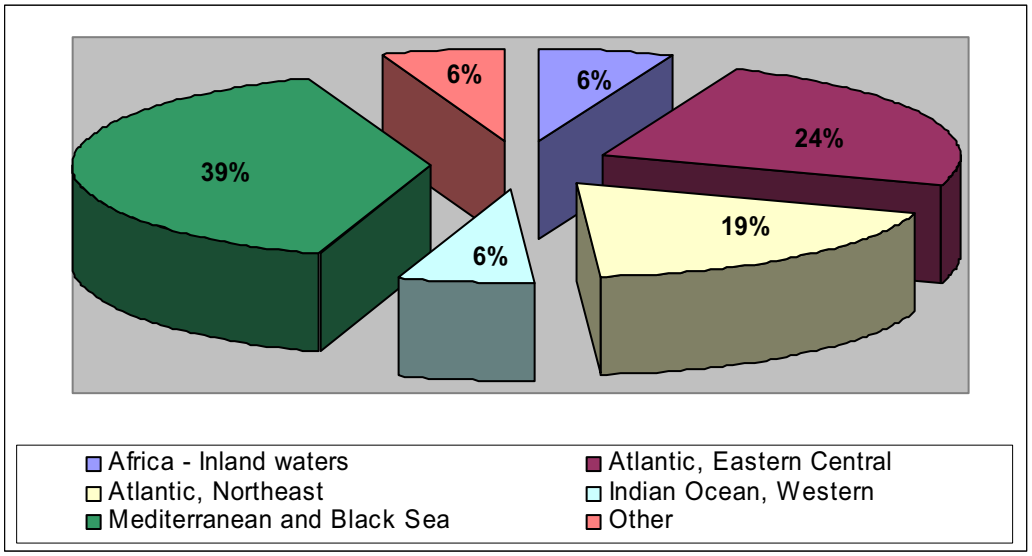


Figure 2 – Mediterranean countries capture production by fishing area (production volume, 2007). *Source*: FAO Fishstat

Capture production also shows a growth trend, albeit more restrained than that of aquaculture production (Table 6). The global capture production of Mediterranean countries showed a growth rate of 6 percent for the period 1990–2007 (-8 percent in the last seven years). However, there are significant differences between country groups and fishing areas. To make these differences clearer, fishing areas have been split into Mediterranean and non-Mediterranean. At first glance, harvests in the Mediterranean waters show an increase of 28 percent compared with a 5 percent decrease in non-Mediterranean captures. A more detailed breakdown of the differences between country groups for the period reveals the extent of the differences:

- a decreasing trend in capture production is evident for EUMC, more influenced by other fishing area harvest (-30 percent) than those from the Mediterranean (-13 percent). The general decrease is a result of EU limits on harvests;
- an increasing trend for CMC (Croatia and Turkey), especially for harvests taking place in Mediterranean waters (84 percent);
- a two-sided trend for PCMC (Albania, Bosnia and Herzegovina, Serbia and Montenegro): decreasing for Mediterranean harvests (-59 percent) and increasing for non-Mediterranean harvests (+195 percent), in this case represented by inland capture fisheries; and
- an increasing trend is recorded for TMC in all fishing areas. Capture production shows an increase of about 50 percent in the period 1990–2007.

It is widely acknowledged that in recent decades the world consumption of fishery products has recorded a marked growth as a result of (i) population growth;[21] (ii) increased urbanization, which enhances access to different type of markets and food, among which fish markets and products; and (iii) higher income levels, which mean people can afford more expensive protein sources, once more basic food needs have been met (Delgado *et al.*, 2003).

[21] In 2000, the population of the Mediterranean coastal region was approximately 143 million and is estimated to grow to 174 million inhabitants by 2025 (Benoit and Comeau, 2005).

Table 6 – Evolution of capture production of Mediterranean countries by country groups and fishing area (production volume, tonnes, 1990, 2000 and 2007)

Country groups	Fishing area	1990	2000	2007	*Var. % 2007–1990*
EUMC	Mediterranean and Black Sea	603 469	576 887	527 450	-13
	Other fishing areas	1 734 419	1 649 904	1 220 369	-30
CMC	Mediterranean and Black Sea	341 889	481 579	629 274	84
	Other fishing areas	37 315	42 841	43 384	16
PCMC	Mediterranean and Black Sea	8 359	2 812	3 405	-59
	Other fishing areas	1 696	3 793	4 998	195
TMC	Mediterranean and Black Sea	280 325	359 580	420 443	50
	Other fishing areas	762 648	1 221 470	1 148 212	51
Total	**Mediterranean and Black Sea**	**1 234 042**	**1 420 859**	**1 580 572**	**28**
	Other fishing areas	**2 536 078**	**2 918 008**	**2 416 963**	**-5**

Source: FAO Fishstat

These changes are largely reflected in the Mediterranean basin, where, for example, the fish per capita consumption (i.e. the apparent human consumption[22]) has shown constant growth, reaching, in 2005, 18.43 kg/year, a 70 percent increase on the figure from 1961. As shown in Table 7, large differences exist among country groups. The greatest growth rate in the fish per capita consumption is shown in CMC, among which Turkey plays a key role. In fact, across the EU, Turkey has the largest growth in all key factors impacting fish consumption: GDP (ISMEA, 2004), population and fish production. Table 7 also highlights the large differences between EUMC and TMC. For the latter group, fish per capita consumption has grown, in the period 1961–2005, by 216 percent compared with 87 percent for EUMC. The difference is substantially due to a very different increase in the population growth (176 percent for TMC compared with 28 percent for EUMC) and income levels.[23]

Table 7 – Fish per capita consumption of Mediterranean countries by country groups (consumption volume, kg/year, 1976–2002)

Country groups	1961	2005	*Var. % 1961–2005*
EUMC[1]	17.13	32.00	*87*
CMC[1]	2.39	7.63	*220*
PCMC[1]	1.47	4.47	*204*
TMC	3.46	10.91	*216*
Mediterranean	**10.81**	**18.43**	***70***
World	***9.0***	***16.43***	***83***

Source: FAO Food balance sheets
[1]: statistics for Croatia, Montenegro and Slovenia are for 1992.

Changes in fish consumption patterns in the Mediterranean basin (due mostly to a growing population, urbanization and income level) is supported by FAO forecasts on total fish consumption (ISMEA, 2004). The forecast model focuses on two different scenarios for the period 1999–2030. The first takes into account an increase in consumption based on the rate registered for the period 1976–1999. The second scenario is based on the hypothesis of stability in the consumption level (assuming that consumption has reached the maximum level). Even if the first scenario is considered to be more

[22] Apparent human consumption, or total food supply, is equal to production less reduction to meal and other non-food uses, plus imports, less exports and re-exports, plus or less variations in stocks (FAO, 2007).
[23] In the period 1970–2000, population growth in the Mediterranean costal regions was higher in the southern and eastern Mediterranean countries (Algeria, Egypt, Israel, Lebanon, Libyan Arab Jamahiriya, Morocco, Occupied Palestinian Territories, Syrian Arab Republic, Tunisia and Turkey) than for northern countries (Albania, Bosnia and Herzegovina, Croatia, Cyprus, France, Greece, Italy, Malta, Monaco, Serbia and Montenegro, Slovenia and Spain) (Martone and De Young, 2008).

likely (assumptions are based on past experience), results are shown for both scenarios and for the Mediterranean country groups in Table 8.

Table 8 – Fish consumption forecasts for the Mediterranean basin based on (i) a growth and (ii) a stabilized scenario (consumption volume, thousand tonnes, 1999–2030)

Country groups	Scenario 1			Scenario 2		
	1999	2030	Var.% 1999–2030	1999	2030	Var.% 1999–2030
EUMC	5 206	5 908	13.5%	5 206	5 194	-0.2%
CMC	615	960	56.1%	615	847	37.7%
PCMC	32	33	2.8%	32	33	1.6%
TMC	1 518	2 656	74.9%	1 518	2 396	57.8%
Mediterranean	7 371	9 556	29.6%	7 371	8 469	14.9%
World	95 533	245 433	156.9%	95 533	123 375	29.1%

Source: FAO

The model output shows that, in both scenarios, total consumption in the Mediterranean basin is forecast to grow. In the case of continuous growth of the fish per capita consumption, the total Mediterranean consumption of fish products will reach about 9.5 million tonnes, showing an increase of 30 percent based on the 1999 figure (the world rate is an increase of 157 percent). In the case of stabilized consumption, growth is predicted to be lower (up 15 percent). Again, in both the scenarios, very large differences exist among Mediterranean country groups. Lower growth is recorded for PCMC, characterized by a general low level of fish per capita consumption (3kg/year; see Table 5). Even clearer is the difference in growth rate between EUMC and TMC: 13 percent and 75 percent, respectively, in the first scenario; and -0.2 percent and +58 percent, respectively, in the stabilized consumption hypothesis. In both cases, the difference can again be attributed to population growth. As in the past, it is estimated that for the period 2002–2015, the population growth rate will be higher for TMC (1.6 percent) than EUMC (0.06 percent) (ISMEA, 2004).

3. TRADE FLOWS OF FISHERY PRODUCTS IN THE MEDITERRANEAN BASIN

This chapter analyses trade in fishery products involving Mediterranean countries in three sections. The first section examines the position of the Mediterranean basin in world fishery trade. The second section focuses on trade flows among the Mediterranean countries. By analysing UN-Comtrade data, this section aims to outline the structure of an intra-Mediterranean matrix of fishery trade. In the third section, an analysis of Eurostat data highlights trade in fishery products among non-EU Mediterranean countries and the EU, paying particular attention to EUMC.

3.1 Fish trade of Mediterranean countries as part of world trade

As part of agrifood trade of Mediterranean countries (both EU and non-EU) with the rest of the world, fishery products (fresh and processed fish) play a completely different role in EUMC compared with TMC (here reference is made to ISMEA-IAMB [2007] where only these two country groups were considered). Whereas prepared fish are the top imported fishery products by EUMC (approximately 10.5 percent of total food imports), imports of fresh fish are classified 14th (about 3.8 percent on food imports). For TMC, the situation is quite different: imports of fish do not exceed 3 percent of food imports, with prepared fish in 16th place and fresh fish ranked last (less than 0.5 percent). The situation is also significantly different as regards EUMC food exports with the rest of the world. EUMC exports of fresh and prepared fish are, respectively, in 12th and 18th place in terms of percentage of total export of food products (with figures of 3.5 percent and 1.8 percent, respectively). In contrast, TMC exports of prepared fish represent more than 7 percent of total food and agricultural products, and are in 4th place in the food export rank. Exports of fresh fish represent 2 percent and are in 15th place.

In addition to the role of the fisheries sector in the context of the Mediterranean agrifood trade with the rest of the world, it may be interesting to highlight the role of the Mediterranean basin in the context of the world fish trade (Table 9).

In 1990, Mediterranean countries represented, with more than 1 million tonnes, 6 percent of world exports of fishery products, while imports of 2.8 million tonnes accounted for 16 percent of world fish imports. What emerges is a framework where the Mediterranean countries depend heavily on imports of fish products. The same analysis conducted on the volume exchange in 2005 indicates a small improvement in this situation. It should be noted, in particular, that there has been an increase in Mediterranean fish exports in favour of a decrease in imports of fishery products in the context of the world trade scale.

Table 9 – The role of the Mediterranean basin within the world trade of fishery products (volume, tonnes, 1990 and 2005)

Trade flow	1990			2005		
	World	Mediterranean	% Mediterranean/ World	World	Mediterranean	% Mediterranean/ World
Export	17 098 573	1 038 898	6	31 185 020	2 064 437	7
Import	17 398 967	2 803 713	16	31 588 204	4 592 370	14

Source: FAO Fishstat

3.2 Intra-Mediterranean fish trade

This section aims to sketch a framework of intra-Mediterranean exchange of fishery products. The only data available on this issue are from the UN-Comtrade database. This database provides data in value (in some cases also on quantity) of international trade. For the purposes of this discussion, data on trade for all Mediterranean countries (EUMC, CMC, PCMC and TMC) for the year 2006 were extracted (the only exceptions are Lebanon and the Libyan Arab Jamahiriya for which figures are from 2004; for Tunisia and the Occupied Palestinian Territories data refer to 2005).

The data extracted and analysed relate to product categories included in item 03 of the Standard International Trade Classification (SITC) Rev. classification 3 (fats and other products derived from fishery products are, therefore, excluded) – see Appendix I.

These data can be used to outline a framework for exports and imports for each country considered in the present analysis in relation to the rest of the world; the difference with Eurostat data is that the latter produces information only on trade between EU countries and the rest of the world. With the new analysis it is to create a matrix of intra-Mediterranean exchange. This section focuses specifically on intra-Mediterranean imports (Table 10).

Table 10 reveals that, of the total fishery products imported by Mediterranean countries from the rest of the world, on average, 23 percent comes from within the Mediterranean basin. Together, EUMC supply 69 percent of the total Mediterranean imports of fish products. They are followed by TMC, supplying 26 percent of total fish imports; together, CMC and PCMC account for 6 percent. The largest supplier in the region is Spain, where 31 percent of imported products originate. Morocco and France follow, respectively, supplying 21 percent and 19 percent of total imports.

Taking into account the four country groups, the TMC are those that make least use of intra-Mediterranean imports of fish products (20 percent of total fish imports). EUMC match the Mediterranean average, importing about 23 percent of fish products from inside the Mediterranean. The situation is quite different for the CMC and, in particular, for the PCMC, for whom this share reaches 45 percent and 93 percent, respectively. Countries that make greater use of fishery products of Mediterranean origin are Albania (about 93 percent of imports originate in the countries of the basin),

Malta, the Occupied Palestinian Territories, Slovenia, Tunisia and Turkey, with the share of supply by Mediterranean partners ranges between 51 percent and 72 percent of total imports.

Table 10 – Intra-Mediterranean imports of fishery products (exchange value, million US$, 2006)[1]

Mediterranean country groups	EUMC	CMC	PCMC	TMC	Total Mediterranean	*World*
absolute values						
EUMC	2 656 448	190 010	22 384	992 559	**3 861 401**	***16 689 609***
CMC	55 135	111	118	12 540	**67 903**	***152 243***
PCMC	6 696	7 690	-	678	**15 064**	***16 264***
TMC	60 130	6 060	-	44 601	**110 790**	***556 568***
Total Mediterranean	**2 778 408**	**203 871**	**22 502**	**1 050 377**	**4 055 159**	***17 414 684***
percentage values						
EUMC	69	5	1	26	**100**	***23***
CMC	81	0	0	18	**100**	***45***
PCMC	44	51	0	4	**100**	***93***
TMC	54	5	0	40	**100**	***20***
Total Mediterranean	**69**	**5**	**1**	**26**	**100**	***23***

Source: UN-Comtrade

1. Data for Lebanon and the Libyan Aran Jamahiriya refer to 2004, while for the Occupied Palestinian Territories the data refer to 2005.

3.3 Fish trade between Mediterranean countries and the EU

Despite the considerable differences in economic, social and cultural terms that, at first sight, seem to separate the two sides of the "mare nostrum", the countries that border the Mediterranean Sea share a common history of trade and cultural exchanges. Today, as explained in Chapter 2, the potential for partnerships and exchange is stronger than in the past. In the light of the stabilization processes currently in force between EU and Mediterranean countries in the south east and the Balkans, it is necessary analyse trade in fishery products between the EU on the one hand (with a particular reference to EUMC) and the remaining Mediterranean countries on the other (CMC, PCMC and TMC).

In 2007, the total trade of Mediterranean countries[24] with the EU was €127bn – some 5 percent of total EU external trade. Since 1990, the total trade between the EU and Mediterranean countries has greatly intensified. Total exports of Mediterranean countries to the EU increased by about 50 percent in the period 1990–2000 (ISMEA-IAMB, 2003) and by an average of 10 percent per year since 2000. In 2007, total exports from Mediterranean countries to the EU were worth €67 billion.

In contrast, total imports of Mediterranean countries from the EU increased by about 60 percent in the same period and by 4 percent since 2000. In 2007, total imports from the EU were worth €60 billion, according to the EU trade/external relations web site.

In the period 1990–2000, the food and agriculture sector saw an increase of 6.4 percent in total trade. The standardized balance[25] of the sector is significantly more favourable to the Mediterranean

[24] Only countries involved in the Barcelona Process, excluding Turkey, because of the customs union with the EU.

[25] The standardized balance is the percentage ratio between the simple balance (exports minus imports) and the total volume of trade (exports plus imports). The value of this indicator ranges between -100, where the country only imports, and + 100, where the country only exports. If exports equal imports, the standardized balance is zero.

countries, both at the beginning and at the end of the period, with a stable value of +2.8 percent (ISMEA-IAMB, 2003).[26]

A more favourable situation can be noted for the fisheries sector. Many of the Mediterranean countries, especially the Maghreb countries and Turkey, benefit from a favourable position with the EU. The exchange of fish products between EU and Mediterranean countries is enhanced by a number of factors, among which a) disparities in terms of productive specialization; b) a different demand composition among European consumers and those living in the southeastern countries of the Mediterranean and, finally; c) the price level of imports and exports of fish products play a key role.

As explained below, the non-European Mediterranean countries tend to import products from EU countries characterized by a smaller commercial value, while they export to the EU molluscs, fresh and chilled fish and crustaceans, characterized by a higher commercial value.

To meet high and still increasing domestic needs, EU-27 imports of fish and fishery products from the rest of the world were 4.8 million tonnes in 2006 (up 8.1 percent compared with 2005), while exports fell to 1.5 million tonnes (down 8.8 percent). The deficit in the volume of the fish trade balance has therefore worsened by 18.3 percent, reaching 3.3 million tonnes (ISMEA, 2007).

It is interesting to observe the role that non-EU Mediterranean countries (CMC, PCMC and TMC) play in the import-export of fishery products of the EU-25 from the rest of the world (Figure 3).

The greater weight of non-EU Mediterranean countries is observed in the context of exports: as a whole, these countries are, in fact, recipients of slightly less than 10 percent of the total fishery products exported by the EU-25. The main users are the TMC with 6.15 percent. In contrast, the analysis of import data reveals that the Mediterranean countries' partners of the EU-25 provide less than 6.5 percent of fishery products imported from the rest of the world (UN-Comtrade data based on the 2006 value, in $US millions, of all products that fall within code 03 of SITC Rev. 3 classification, i.e. all fish, crustaceans and molluscs, fresh and subjected to any kind of processing, except flour, oils and fish fats – see Annex I).

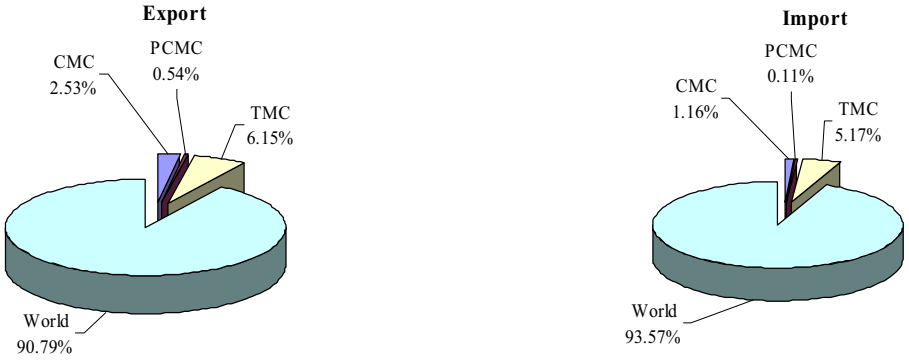


Figure 3 – Role of non-EU Mediterranean countries in the trade of fish products of EU-25 with the rest of the world (exchange value, 2006). *Source*: UN-Comtrade

When analysing only the import–export of fishery products of EUMC, the situation is almost identical to that recorded for the EU-25 as a whole in the case of imports (Figure 4). The role of Mediterranean partners decreases in importance, in contrast, regarding exports: only 2.6 percent of fisheries products exported by EUMC are destined for CMC, PCMC and TMC taken together.

[26] In ISMEA-IAMB, 2003 and 2007, countries in the Balkans (Albania, Bosnia and Herzegovina, Croatia, Serbia and Montenegro) and the Occupied Palestinian Territories are excluded from the analysis; in contrast, Jordan, not considered in this discussion, is included. All the non-EU Mediterranean countries are classified, in this analysis, as TMC.

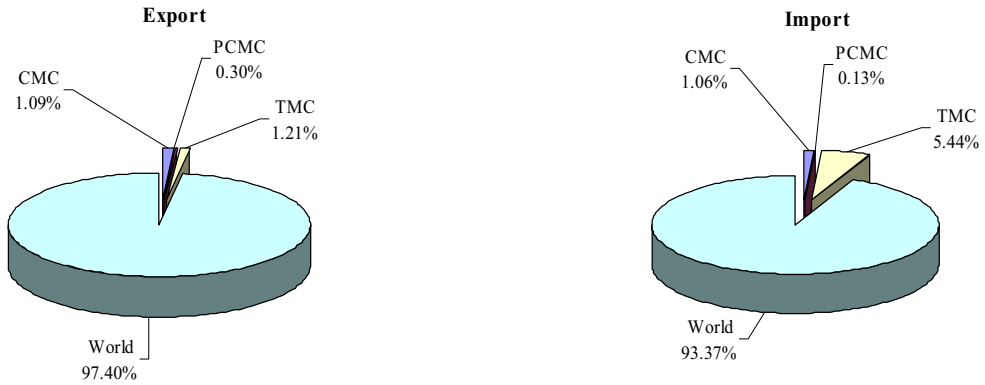


Figure 4 – Role of non-EU Mediterranean countries in the trade of EUMC fishery products with the rest of the world (exchange value, 2006). *Source*: UN-Comtrade

It should be stressed, *inter alia*, that in the context of EU trade with the rest of the world and with Mediterranean partners, the role played by fishery products seems to be substantially different. Where fishery products represent, in the 2003–04 biennium, 9 percent of total food imports of the EU-25 from the rest of the world, the same products account for 14 percent of imports of food products from TMC, where prepared fish alone represent 10.7 percent (third after fruit and vegetables). In contrast, when considering EU-25 food exports to the rest of the world, fishery products represent 6 percent; this figure drops to 3 percent of food exports to TMC.

The place of fishery products in agro-food exchange between the EU-25 and its Mediterranean partners appears, however, to have increased significantly when comparing data from the 2003–04 biennium with those of the 1999–00 biennium (ISMEA-IAMB, 2003 and 2007) – see Table 11.

Table 11 – Position of fishery products in the agro-food exchange: import–export of EU-25 from/to TMC in value

Trade flow	**Import**		**Export**	
Period	**99–00**	**03–04**	**99–00**	**03–04**
Fishery products	11.6%	14%	0.9%	3%
Agro-food products	100%	100%	100%	100%

Source: ISMEA-IAMB, 2003 and 2007

In Figures 5 and 6, the impact of partnerships between the EU and its neighbouring Mediterranean countries on trade in fishery products is clearly visible. All the Mediterranean countries partners of the EU[27] (CMC: Croatia and Turkey; PCMC: Albania, Bosnia and Herzegovina, Serbia and Montenegro; TMC: Algeria, Egypt, Israel, Lebanon, the Libyan Aran Jamahiriya, Morocco, the Occupied Palestinian Territories, the Syrian Arab Republic and Tunisia) are considered in the following analysis. Eurostat data relative to fishery products, in volume and value for the period 1995–2007, as codified in the classification SITC Rev. 3 and listed in Annex I have been used (in addition to fishery products destined for human consumption, some other products – flour and agglomerations – not fit for human consumption have also been included[28]).

27 Eurostat data refer to the latest EU enlargement, i.e. EU-27.
28 SITC Rev. 3 codes 081.42, 291.96, 411.01.00, 411.11.00-13 (see Annex I).

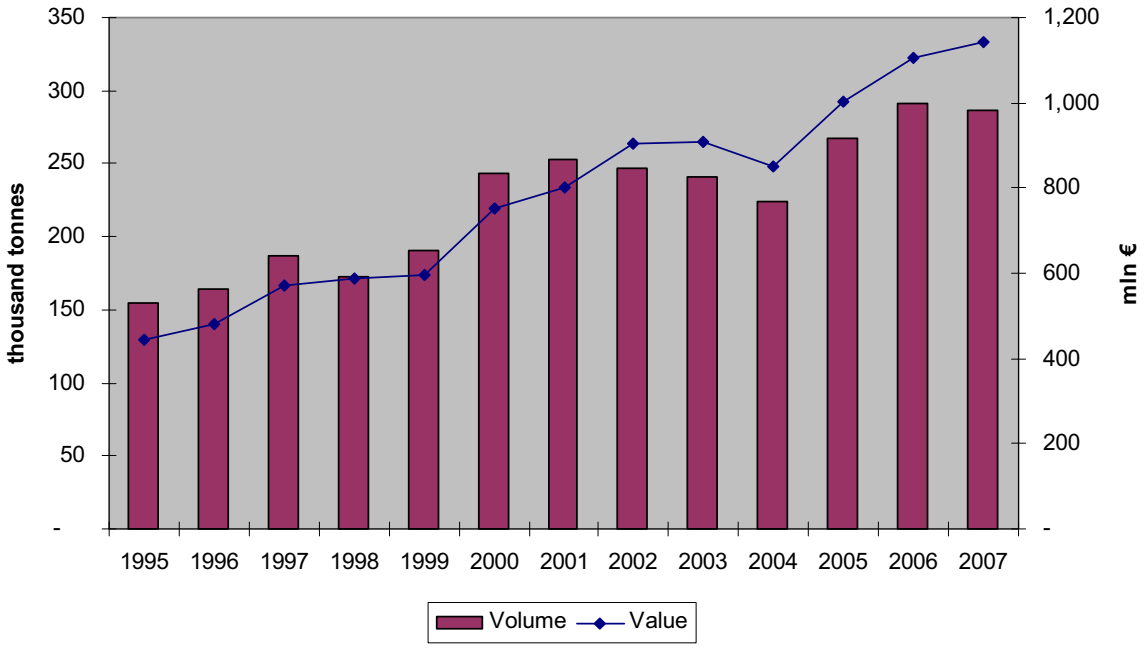


Figure 5 – Trend of imports of fishery products by EU-27 from Mediterranean countries (exchange volume, thousand tonnes, and value, mln €, 1995–2007). *Source*: Eurostat

During the period 1995–2007, imports of fishery products by EU-27 from Mediterranean countries rose from 154 to 287 000 tonnes (+86 percent) – Figure 5. The increase in the average import price (from 2.87 to 3.89 €/kg of imported product) gave rise to a more than proportional increase in the value of imports in 2007, up to 1,141 million € (+158 percent).

To a more limited extent, a growth trend for exports of fishery products from EU-27 countries towards Mediterranean partners can be observed in Figure 6.

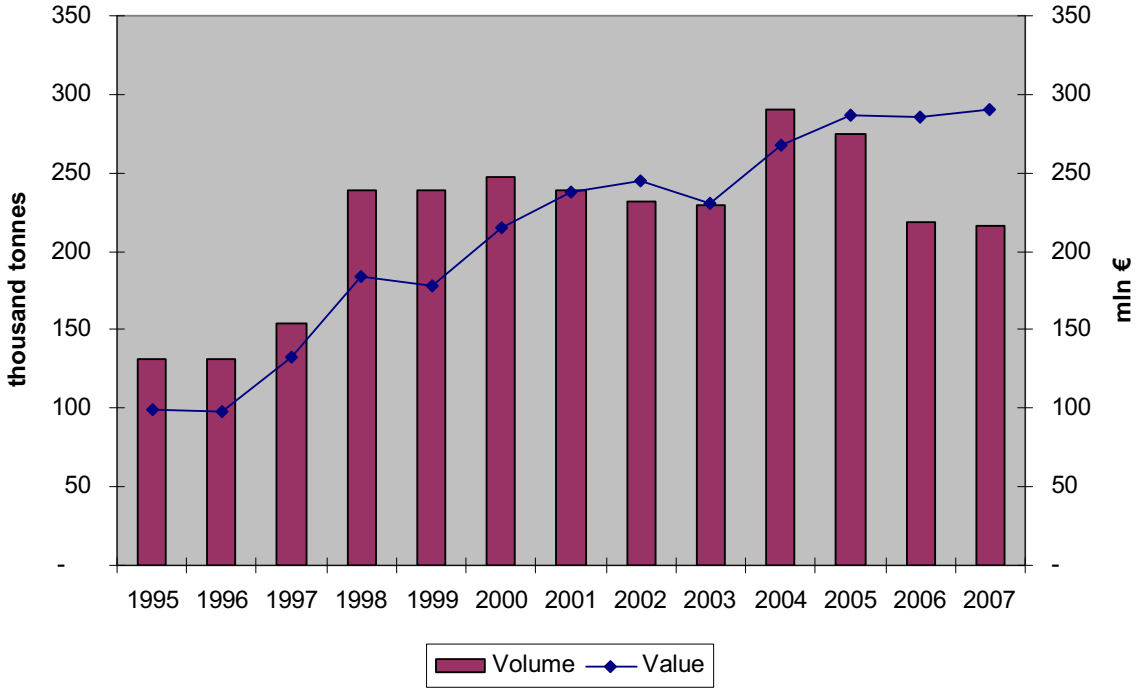


Figure 6 – Trend of exports of fish products from EU-27 to Mediterranean countries (exchange volume, thousand tonnes, and value, mln €, 1995–2007). *Source*: Eurostat

In 1995, fishery products originating in the EU-27 and destined for Mediterranean countries amounted to 132 000 tonnes. After more than a decade, in 2007, that level had risen to around 216 000 tonnes, an increase of 64 percent. The value of exports saw an even higher increase, from €99 million to €290 million for the same period (+192 percent).

Among Mediterranean countries, the main suppliers and recipients of fishery products for EU-27 partners are North Africa and Middle East countries (TMC).

Figure 5 shows that, on average, TMC represent 80 percent of fishery products exchange with EU-27, for both imports and exports. In contrast, the figure for PCMC as suppliers of fishery products for the EU-27 is less than 1 percent. Despite such a low figure, it is worth pointing out that this group's part in the total export of fish products has increased during the period under analysis from 1 percent in 1995 to 4 percent in 2007.

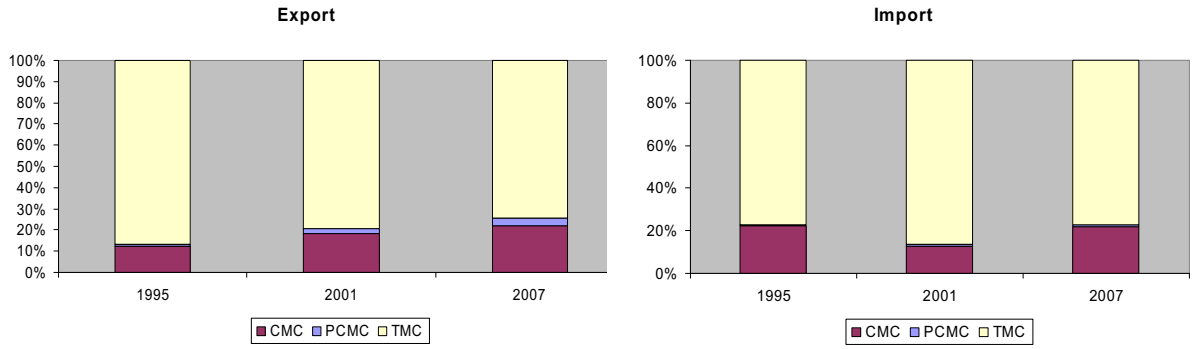


Figure 7 – Role of the non-EU Mediterranean countries in the fishery products exchange with EU-27 countries (exchange volume, 1995, 2001 and 2007). *Source*: Eurostat

The situation is different if the same type of analysis is performed not on the EU-27 as a whole, but only the EUMC, and especially on the export side. Figure 8 shows clearly that the role of the TMC, as recipients of exports of fishery products from EUMC, is more limited (if compared with that of the EU-27) than the CMC (40 percent) and PCMC (9 percent). This can be explained by the geographical proximity between EUMC and candidate Mediterranean countries and those potentially eligible for EU membership (i.e. Croatia and Turkey, together with Albania, Bosnia and Herzegovina, Serbia and Montenegro).

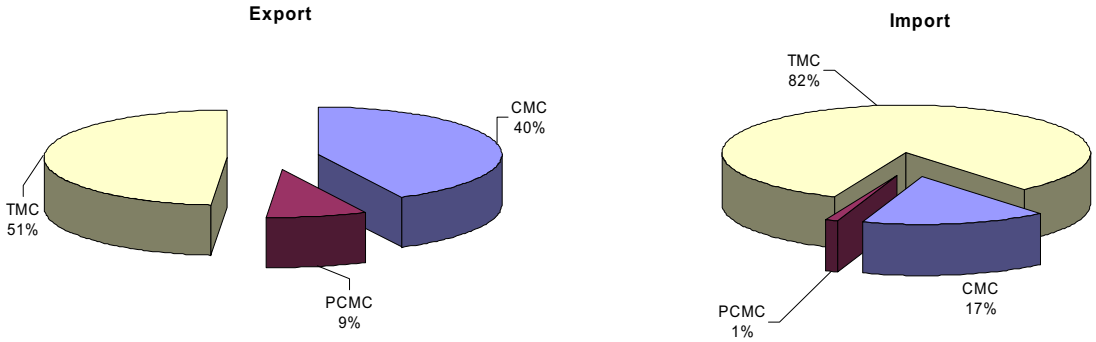


Figure 8 – Role of the non-EU Mediterranean countries in the fishery products exchange with EUMC (exchange volume, average 1995–2007). *Source*: Eurostat

During the period under analysis, beyond a general increase of trade between the EU-27 and Mediterranean countries, an improvement in the position of EUMC (at the expense of other member countries) in the role of suppliers and users of fishery products to and from Mediterranean countries can be seen (Table 12).

Table 12 – Share of EUMC and of other EU members stated in the fishery products exchange to and from CMC, PCMC and TMC (exchange volume, average 1995–1996 and 2006–2007)

Exchange flow	EU country groups	Average 1995–1996				Average 2006–2007			
		CMC	PCMC	TMC	Total	CMC	PCMC	TMC	Total
Export	EUMC	70%	97%	7%	18%	56%	71%	29%	39%
	Other EUMC	30%	3%	93%	82%	44%	29%	71%	61%
	Total	100%	100%	100%	100%	100%	100%	100%	100%
Import	EUMC	58%	98%	76%	72%	79%	99%	79%	79%
	Other EUMC	42%	2%	24%	28%	21%	1%	21%	21%
	Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Eurostat

On average, between the years 1995–96 and 2006–07, the role of EUMC as suppliers for the Mediterranean countries rose from 18 percent to 39 percent. For the EUMC there is, in parallel, a slight increase in their role as recipients of fishery products originating in Mediterranean countries. It is clearly evident from Table 12 that the improvement of this position is mainly due to the intensification of trade between EUMC and the TMC (from the export side) and with the CMC from the import side. In this last case, this positive trend can be explained by the agreements signed by the EU, on one side, and most of the CMC: a) for Turkey, Customs Union signed in 1996 and b) for Croatia, the first Reg, No EC 2007/2000 introducing exceptional trade measures in favour of countries participating in or linked to the SAP and then the SAA, which entered into force in 2005, according to which the flow of fishery products between Croatia and the EU takes place under a regime of free access.

From the analysis of the trends of import and export data, it could be concluded that the increase in exchange flow could not be attributed solely to the entry–exit regimes granted to fish and fishery products in the EU and its partners' territory.

As previously seen, the gradual lowering of tariff levels applied by the EU to products originating from the Mediterranean countries is, for some EU partners, close to duty-free access. In Figure 9, the trend of the index numbers (base = 1995) of imports of fishery products is illustrated for some countries (those countries whose tariff regime on imports of fishery products is clearly available and reported in section 2.4). Most of the agreements with the EU were signed by these countries during the period under analysis, as reported in Tables 3 and 4. The figure clearly shows that the increase does not start from any precise year during the period.

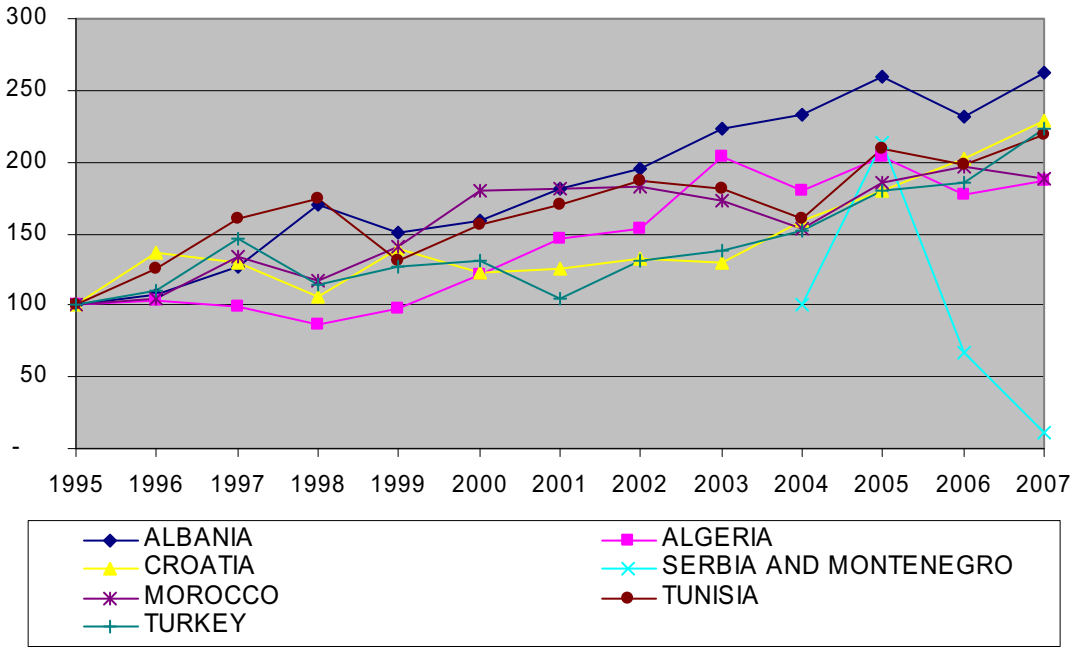


Figure 9 – Trend of the index numbers (base = 1995) for imports of fishery products for some EU-27 partners. *Source*: Eurostat

The increase of the import flow has been continuous since the beginning of the period, underlining the fact that it is not due to the entry into force of a particular agreement on the circulation of goods but to other factors: an increase in EU demand consumption *in primis*, combined with a decrease in EU domestic production. The only exception can be found in the trend of imports from Croatia, whose SAA (that, as previously seen, grants free access for Croatian fish products into the community territory) was signed in 2001 and for which a clear rising trend has been recorded since 2003.

It is remarkable that many of the Mediterranean EU partners, especially the North African countries, which are significant fish producers (like Egypt and Morocco) and which have the world's largest import market for fish next door, are not able to take advantage of the opportunity represented by the duty-free access for most of their fish and fishery products. A very good example is Egypt where 99.5 percent of the fish production remains in the domestic market (only 0.5 percent is destined for exports) – data from FAO Food Balance Sheets[29], average 1991–2005.

In this sense, these countries are losing market share in the EU, just like other developing country groupings (e.g. the African, Caribbean and Pacific Group of States[30]). The main reason is linked to the application of stricter import requirements relating to quality and safety by developed countries. "With import duties in developed countries so low, it is no surprise that the real barrier to trade is often found elsewhere: in quality and safety requirements to processing facilities and products for exporters in developing countries" (Lem, 2006). Because of the perishable nature of fishery products, developing

[29] http://faostat.fao.org
[30] Lem A., personal communication.

countries need financial resources to invest in appropriate technology to maintain the quality of these perishable products (hygiene and food safety requirements set by developed countries). In some cases, developing countries lose market value because of the bad perception of their own products: in 2002 Bangladesh received ten percent less for its shrimp than its competitors because of perceptions that its shrimps were not clean. This amounted to nearly 30 million dollars in lost revenue (Ahmed M. *et al.*, 2006).

Finally, it is interesting to look at changes that occurred, during the period under analysis, in the standardized trade balance of fishery products between individual Mediterranean countries and EUMC (Table 13).

Table 13 – Standardized trade balance of fishery products exchange between Mediterranean countries and EUMC (exchange value, average 1995–1996 and 2006–2007)

Country groups	Mediterranean countries	1995–1996	2006–2007
CMC	Croatia	27%	4%
	Turkey	66%	79%
PCMC	Albania	-12%	13%
	Bosnia and Herzegovina	-100%	-87%
	Serbia and Montenegro	n.a.	-99%
TMC	Algeria	-12%	16%
	Egypt	58%	32%
	Israel	14%	-9%
	Lebanon	-83%	-55%
	Libyan Arab Jamahiriya	-92%	-97%
	Morocco	98%	95%
	Occupied Palestinian Territories	n.a.	-100%
	Syrian Arab Republic	-44%	-100%
	Tunisia	95%	71%

Source: Eurostat

The standardized balances reported in Table 13 enables a comparison of the trade performance of the different countries included in the analysis against EUMC, as importers or exporters of fishery products. From Table 13, the improvement in the commercial position (compared with EUMC as providers of fishery products) of Turkey is clear: its balance increases by 13 percentage points in the period under analysis. A more favourable situation can be also noted for Albania and Algeria, whose negative balance (-12 percent) in 1995–96 becomes positive (+13 percent and +16 percent, respectively) in 2006–2007 (in both cases the agreements with the EU, respectively in 2006 and 2002, guarantee free access to products originating in these countries). There is, however, a worsening of the balance for other countries. For Montenegro and the Occupied Palestinian Territories, for which there are not available data for the 1995–96 biennium, a balance equal to or close to -100, indicates that these countries are net importers of fishery products from EUMC in the 2006–2007 biennium.[31]

Composition by type of products of import–export between Mediterranean countries and the EU

It is interesting, at this point of the analysis, to highlight the composition of the trade in fishery products between the EU-27 and its Mediterranean partners. The exchange volume (2007) by commodity – as provided for in classification SITC Rev.3 – is reported in Tables 14 and 15.

The two flows, imports and exports, were broken down by groups of EU countries (on one side the EU Mediterranean countries – EUMC; on the other side, the other EU countries – OEUC), by groups of

[31] For Montenegro, data are available only from 2005. For the Occupied Palestinian Territories, only sporadic data are available.

Mediterranean countries (CMC, PCMC and TMC) and by commodity groups (the main groups of fish products have been taken into consideration).

At the EU level, the most imported products (32 percent) are fresh, chilled or frozen fish (excluding fillets) followed closely by crustaceans and molluscs (fresh or not, 28 percent) and by prepared or preserved fish (27 percent) – Table 14. The situation changes when considering the Mediterranean country groups. Although fresh, chilled or frozen fish remain the top imported products from the CMC (67 percent), prepared or preserved fish products (037) and crustacean and molluscs fresh, chilled, frozen, dried or salted are the top imported products from, respectively, the PCMC (80 percent) and the TMC (35 percent).

The EUMC's most imported fish commodities are, in contrast, the 036 groups (crustaceans, molluscs fresh, chilled, frozen, dried, salted or in brine). In the trade relation between EUMC and the Mediterranean country groups, the same EU-type situation exists, regarding the most imported commodity groups.

A completely different scenario can be found in the imports from OEUC. The most imported fish commodities of the non-Mediterranean EU countries are prepared and preserved fish products (51 percent of the total imports). These products dominate the imports from TMC (64 percent) or constitute the only imported commodities (100 percent) in the case of PCMC. For the OEUC, the most imported products from Croatia and Turkey (CMC) are fresh, chilled or frozen fish.

Table 14 – Imports of fish and fishery products among EU-27 country groups and the Mediterranean country groups by commodity (exchange volume, thousand tonnes, 2007)

EU country groups	Commodity groups	Mediterranean country groups			Total	
		CMC	PCMC	TMC	Thousand tonnes	%
EU	Fish, fresh (live or dead), chilled or frozen (034)	41.58	0.42	50.70	92.70	*32.31*
	Fish, dried, salted or in brine, smoked fish; flours, meals and pellets of fish, fit for human consumption (035)	9.40	0.08	1.19	10.67	*3.72*
	Crustaceans, molluscs fresh, chilled, frozen, dried, salted or in brine (036)	4.24	0.05	76.62	80.91	*28.20*
	Fish, crustaceans, molluscs and other aquatic invertebrates, prepared or preserved (037)	7.18	2.24	67.94	77.36	*26.96*
	Other products (081.42, 291.96, 411)	0.02	0.00	25.27	25.29	*8.81*
	Total	**62.42**	**2.79**	**221.72**	**286.92**	**100.00**
EUMC	034	31.40	0.42	45.70	77.52	33.69
	035	7.18	0.08	1.18	8.43	3.66
	036	4.16	0.05	76.33	80.54	35.00
	037	5.19	2.23	40.76	48.18	20.94
	081.42, 291.96, 411	0.00	0.00	15.43	15.43	6.71
	Total	**47.94**	**2.78**	**179.39**	**230.10**	**100.00**
OEUC	034	10.17	0.00	5.01	15.18	26.71
	035	2.22	0.00	0.01	2.23	3.93
	036	0.08	0.00	0.29	0.37	0.65
	037	1.99	0.01	27.18	29.18	51.36
	081.42, 291.96, 411	0.02	0.00	9.84	9.86	17.35
	Total	**14.48**	**0.01**	**42.33**	**56.82**	**100.00**

Source: Eurostat

Among exports, fresh, chilled or frozen fish still remain the most traded commodity (64 percent), far higher than the next group of products. The same situation can be found both at the two different EU country levels and in the trade relations with the different Mediterranean country groups.

Some differences exist when considering the second exported commodity group of products (in volume terms): at EU level it is the 036 group (crustaceans and molluscs) accounting for 19 percent of the total fish exports. More or less the same situation can be found in the export relations with CMC and TMC, while the second most exported products towards the PCMC are prepared or preserved fish.

At the EUMC level, the scenario is similar to the other EU country (OEUC) exports towards CMC and PCMC, regarding the second commodity group, mainly other fish products, namely flours, meals and pellets unfit for human consumption, and fats and oils and their fractions.

Table 15 – Exports of fish and fishery products among EU-27 country groups and the Mediterranean country groups by commodity (exchange volume, thousand tonnes, 2007)

EU country groups	Commodity groups	Mediterranean country groups			Total	
		CMC	PCMC	TMC	Thousand tonnes	%
EU	Fish, fresh (live or dead), chilled or frozen (034)	29.43	10.13	99.39	138.95	64.37
	Fish, dried, salted or in brine, smoked fish; flours, meals and pellets of fish, fit for human consumption (035)	0.20	1.70	6.74	8.63	4.00
	Crustaceans, molluscs fresh, chilled, frozen, dried, salted or in brine (036)	6.88	1.46	32.31	40.65	18.83
	Fish, crustaceans, molluscs and other aquatic invertebrates, prepared or preserved (037)	4.12	6.20	8.07	18.39	8.52
	Other products (081.42, 291.96, 411)	3.23	2.72	3.31	9.25	4.28
	Total	**43.85**	**22.20**	**149.82**	**215.87**	**100.00**
EUMC	034	16.61	6.72	26.78	50.10	60.52
	035	0.07	1.68	5.14	6.90	8.33
	036	6.44	1.43	3.52	11.39	13.76
	037	2.34	3.86	6.13	12.33	14.90
	081.42, 291.96, 411	1.13	0.26	0.67	2.06	2.49
	Total	**26.60**	**13.95**	**42.24**	**82.79**	**100.00**
OEUC	034	12.82	3.42	72.61	88.85	66.76
	035	0.12	0.02	1.59	1.73	1.30
	036	0.44	0.02	28.79	29.26	21.98
	037	1.78	2.34	1.94	6.06	4.55
	081.42, 291.96, 411	2.10	2.45	2.64	7.19	5.40
	Total	**17.25**	**8.25**	**107.58**	**133.08**	**100.00**

Source: Eurostat

It is worth noting, at this point of the analysis, the trend in the import–export of fishery products classified by commodity groups.

Figure 10 shows the trend over a period of twelve years (1995–2007) of the imports of fish products by the EU-27 from Mediterranean countries. This type of graph gives a measure of the percentage contribution, over time, of each commodity group. It can be found, in figure 7, how the contribution, to total imports, is more or less the same, along the period, for each commodity group. Beside a little increase of the percentage weight, in 1997 and, more slightly, in 1999, for the commodity groups 034,

036 and 037, it can be seen, since 2000, an increase for imports of fish dried, smoked and flours, meals and pellets for human consumption (037) and a slight decrease of the incidence of other fish products imports.

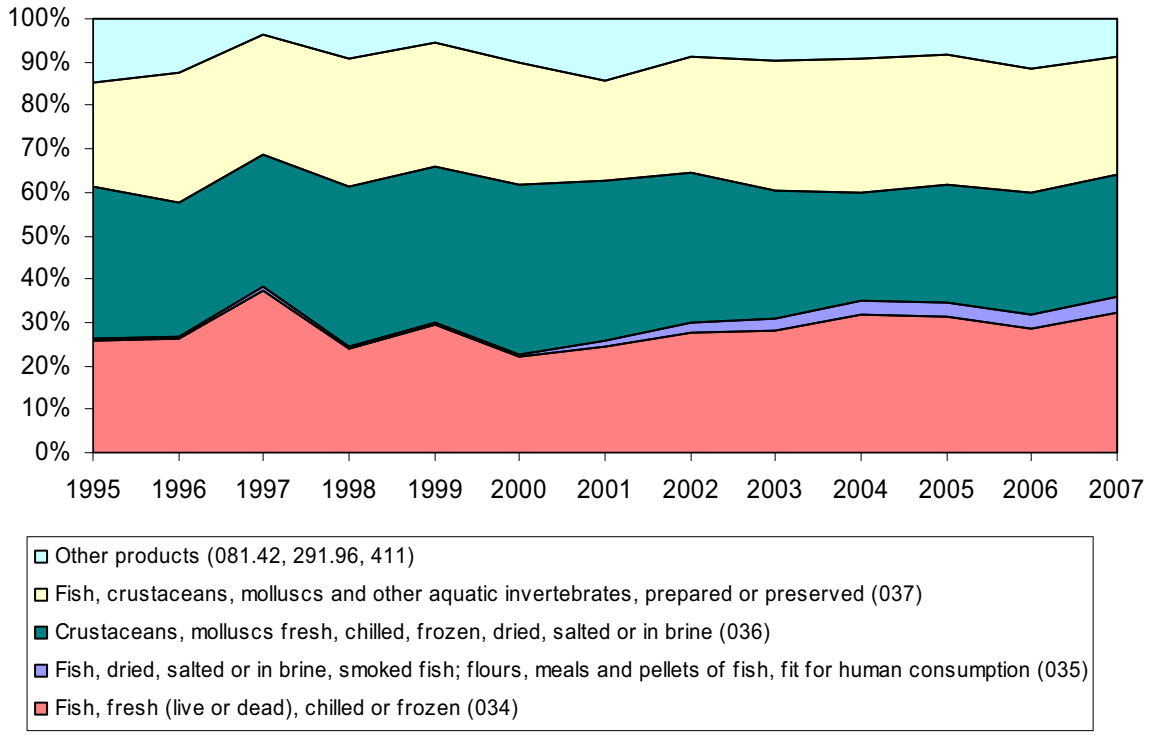


Figure 10 – Imports of fish products, by commodity, by EU-27 from Mediterranean countries (exchange volume, 1995–2007). *Source*: Eurostat

Figure 11 is similar to Figure 10, except for the importers: EUMC only, compared with EU-27 in Figure 10. In comparison with the previous figure, it should be noted that, besides the larger influence of commodity group 036 (crustacean and molluscs) on total imports, there is also an increase, over the period under analysis, of the contribution of the 034 and 035 commodity groups to detriment of the 036 commodity group.

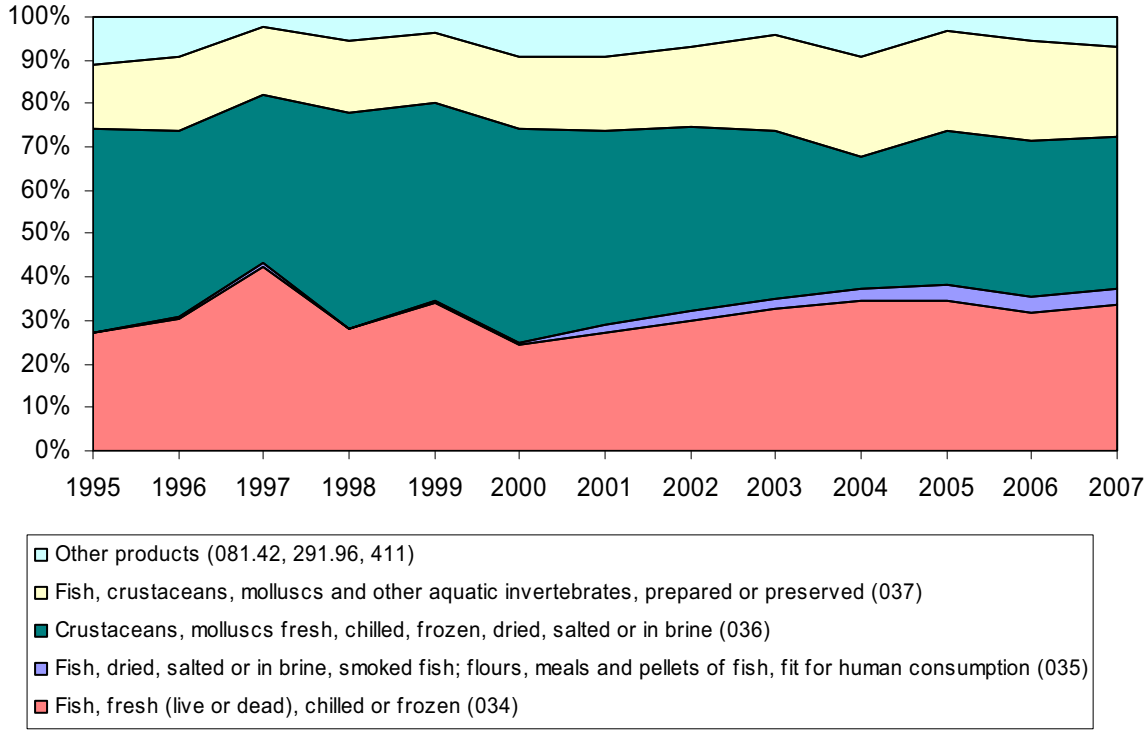


Figure 11 – Imports of fish products, by commodity, by EUMC from Mediterranean countries (exchange volume, 1995–2007). *Source*: Eurostat

Figures 12 and 13 show, in contrast, the contribution of commodity groups over time on total exports of fish products. The most visible phenomenon, at first glance, is that EU countries export more fish, fresh, frozen and chilled (more or less 70 percent) than other fish commodities. This is most probably because of the highly perishable nature of fresh fish; developing countries (including certain Mediterranean partners) are still not able to satisfy completely hygiene and food safety requirements set by the EU for fresh products entering its own territory. Over time, there is a slight decrease in the contribution of this commodity group (034); a clear decrease in the weight of other products on total exports; and an increase in the contribution of crustacean and molluscs (036) and fish dried, smoked, etc. (035). Another significant result occurred in 1999, with a large drop in fresh, frozen and chilled fish compared with a peak in the weight of the other products commodity group.

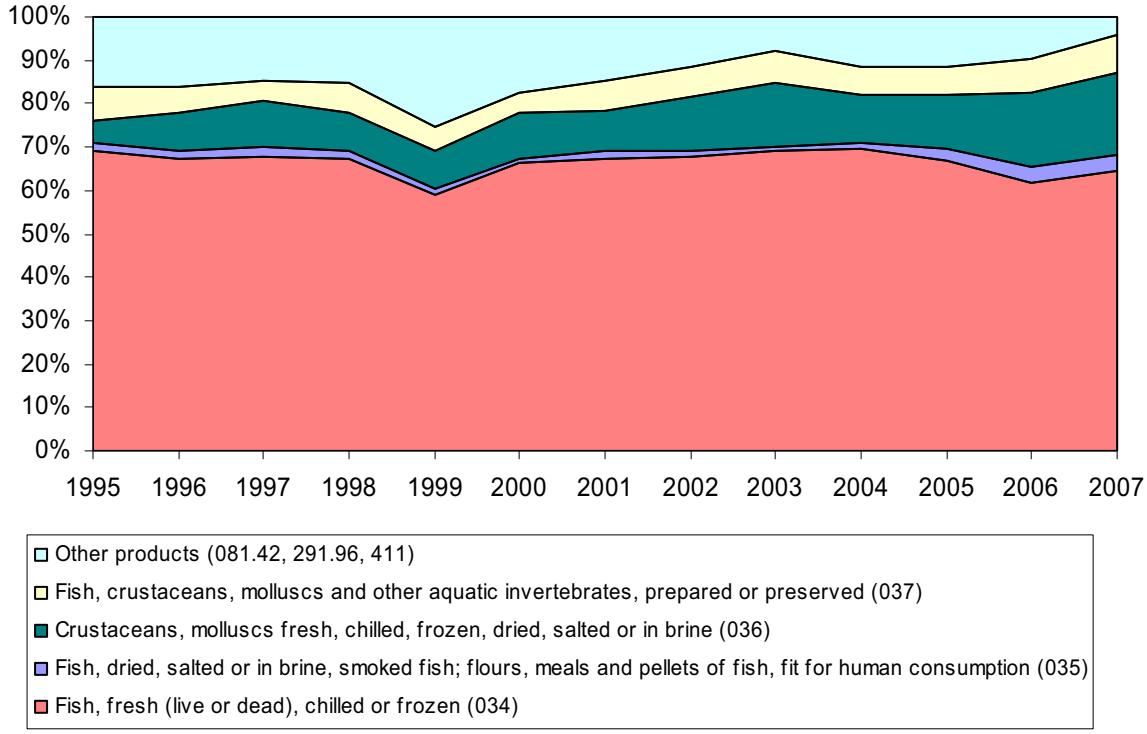


Figure 12 - Exports of fish products, by commodity, by EU-27 to Mediterranean countries (exchange volume, 1995–2007). *Source*: Eurostat

Figure 13 illustrates the trend of exports from EUMC towards their Mediterranean partners. The most noticeable difference in comparison with Figure 12 is the lower level of exports of fresh, frozen and chilled fish (more or less 50 percent compared with 70 percent from EU-27). The trend of this commodity group over the last twelve years shows some positive peaks of the contribution of exports of fresh fish, to the detriment of prepared or preserved fishery products (037) in 1997, 2000 and since 2002. There is also a noticeable reduction in exports of the other products commodity group.

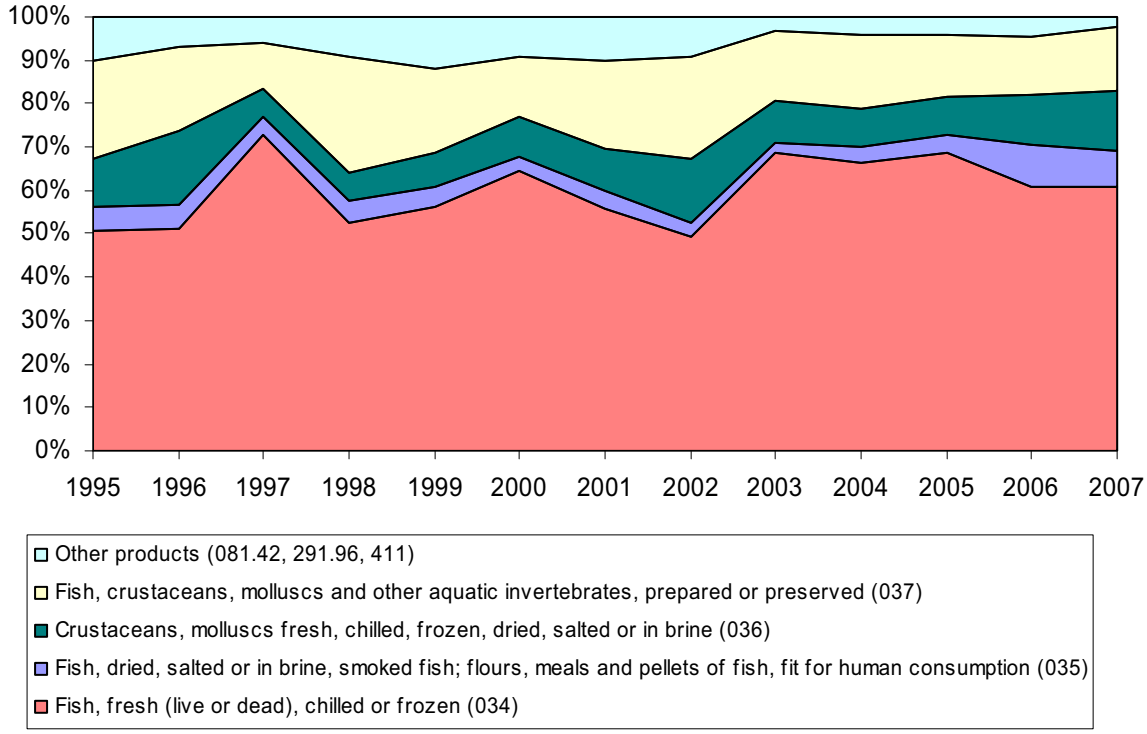


Figure 13 – Exports of fish and fishery products, by commodity, by EUMC to Mediterranean countries (exchange volume, 1995–2007). *Source*: Eurostat

The following tables and figure show the trend in the imports and export of fishery products between EU-27 and their Mediterranean partners by species. Species are considered as a group whatever their status (fresh, chilled, frozen, salted, prepared, preserved, etc.). Figure 14 and Table 16 and show imports of fish products, respectively, by main group of species and by main species, in the last twelve years.

Figure 14 shows that, even if there has been an increase in weight at some point of total imports of crustaceans, at the end of the analysed period (2007) the role of each species group is about the same as that at the beginning of the period (1995, i.e. 66 percent fish, 3 percent crustacean and 31 percent molluscs).

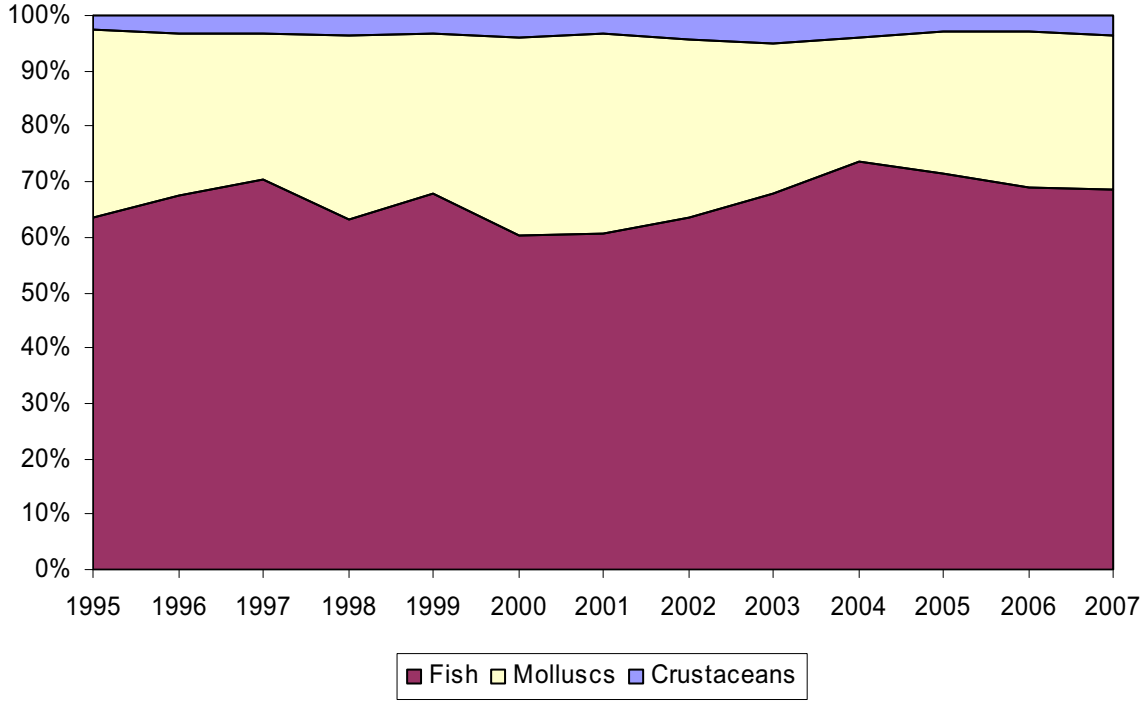


Figure 14 – Contribution of the main species groups on the total imports of fish and fishery products, by EU-27 from Mediterranean countries (exchange volume, 1995–2007).
***Source*: Eurostat**

Table 16 gives more detailed information on the main species imported. The most imported species are cuttlefish, octopus and squid (mainly from Morocco), followed by herrings and sardines (mainly from Croatia and Morocco). For all the species reported in Table 16, there was an increase in imports. The highest growth rate was for salmonidae (mostly OEUC imports of frozen trout from Turkey, produced by aquaculture), especially in the second half of the observed period. Imports of cod also show a high growth rate (almost all imports by EUMC of fresh or chilled cod originate in Albania, Croatia and Turkey). In contrast, Table 16 reports a decrease in imports, throughout the period, of oysters and tunas. For some species (such as cuttlefish, octopus, squid and shrimps), a positive growth rate can be observed in the first half of the period and a negative rate in the second half.

Table 16 – Imports of the main species by EU-27 from Mediterranean countries (exchange volume, thousand tonnes, 1995, 2001, 2007)

Main species	1995	2001	2007	% var. 2001/1995	% var. 2007/2001	% var. 2007/1995
Anchovies	0.05	0.11	0.21	105	93	295
Cod	0.71	3.71	8.19	426	121	1 062
Cuttlefish, octopus and squid	37.71	71.63	62.66	90	-13	66
Flatfish	2.47	6.38	7.66	158	20	210
Hake	0.04	0.08	0.09	99	6	111
Herrings and sardines	16.90	40.53	48.38	140	19	186
Oysters	1.00	0.02	0.01	-98	-19	-99
Salmonidae	0.06	0.23	2.72	278	1094	4 419
Scombrids	3.02	5.52	11.84	83	114	293
Shrimps	0.36	1.11	0.47	209	-58	30
Tunas	15.68	9.84	3.96	-37	-60	-75

Source: Eurostat

Figure 15 and Table 17 show exports of fish products, respectively, by main group of species and by main species, in the last twelve years. Figure 15 shows that, despite the very high contribution of fish to total exports (the most exported species are, indeed, herrings and sardines, tunas and mackerels or scombrids), there was an increase in exports of crustaceans to the detriment of fish, during the period under analysis.

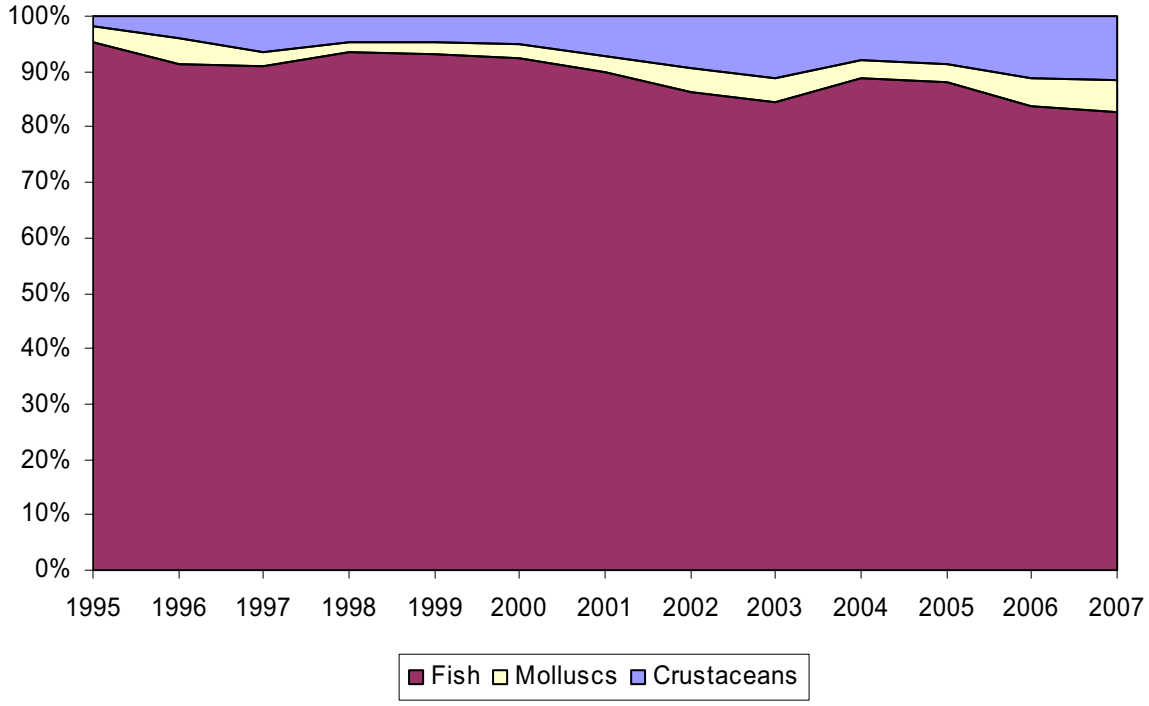


Figure 15 – Contribution of the main species groups on the total exports of fish and fishery products, by EU-27 to Mediterranean countries (exchange volume, 1995–2007). *Source*: Eurostat

Table 17 shows an increasing trend, throughout the period (percentage variation 2007/1995), for most species. The highest increase in export volumes is for shrimps and cod exports. In contrast, there is a decrease in export volumes for anchovies, oysters and scombrids. As far as tunas are concerned, after a positive trend in the first half, a decrease is recorded for the second half of the observed period.

Table 17 – Exports of the main species by EU-27 to Mediterranean countries (exchange volume, thousand tonnes, 1995, 2001, 2007)

Main species	1995	2001	2007	% var. 2001/1995	% var. 2007/2001	% var. 2007/1995
Anchovies	1.10	0.98	0.50	-11	-48	-54
Cod	1.03	2.29	6.84	122	198	563
Cuttlefish, octopus and squid	2.44	5.11	8.72	110	71	257
Flatfish	0.30	0.87	1.34	188	53	341
Hake	0.33	1.28	1.52	287	18	357
Herrings and sardines	27.79	40.79	45.58	47	12	64
Oysters	0.05	0.03	0.04	-26	26	-6
Salmonidae	0.32	1.13	1.24	254	9	286
Scombrids	19.17	23.80	13.79	24	-42	-28
Shrimps	0.06	0.22	0.41	269	90	601
Tuna	12.67	21.00	15.56	66	-26	23

Source: Eurostat

Finally, Table 18 highlights, for each non-EU Mediterranean country, the main products and the key partners, for both imports and exports. In this table, the products' references are provided in greater detail. It may be noted, for instance, that Morocco, the major supplier of EU-27 (173 000 tonnes in 2007, 66 percent of EU imports from Mediterranean countries), exports mainly cuttlefish, octopus and squid (frozen, dried, salted or in brine) and sardines, prepared or preserved (as previously stated). The main user of fishery products originating in Morocco is Spain, for the obvious reason of geographical proximity. At the same time, Morocco refers, for imports, mainly to the Dutch market for the supply of crustaceans (not frozen), as well as flour, powder and pellets (fit for human consumption).

The second largest EU supplier is Turkey (16 percent of the total volume of EU-27 imports), whose main partners are, for exports, Italy, and for imports, France and Greece. On the exports side, Turkey provides mainly fish (other than cod, mackerel, herring, anchovies, tuna, salmon and fish dishes), fresh or chilled, in particular farmed sea bass and seab ream from its growing aquaculture sector. At the same time, Turkey imports, from France and Greece, mainly frozen tuna, destined for its canning industry.

Table 18 – Top products and EU countries in the import–export of fishery products of non-EU Mediterranean countries (exchange volume, 2006[32])

Non EU Mediterranean countries	Export		Import	
	Top products	Top EU countries	Top products	Top EU countries
Albania	1) Other fish, whole or in pieces, but not minced[33]	Italy	1) Anchovies, salted 1) Other fish, fresh or chilled [34]	Italy, Greece
Algeria	1) Cuttlefish, octopus and squid, frozen, dried, salted or in brine; flours, meals and pellets thereof, fit for human consumption 2) Shrimps and prawns, frozen	Spain	1) Tunas, skipjack and Atlantic bonito (*Sarda* spp,), whole or in pieces, but not minced, prepared or preserved, 2) Tunas, skipjack or stripe-bellied bonito, frozen	Spain
Bosnia and Herzegovina	1) Tunas, skipjack or stripe-bellied bonito, frozen	Italy	1) Other fish, frozen 2) Cuttlefish, octopus and squid, frozen, dried, salted or in brine; flours, meals and pellets thereof, fit for human consumption	Spain
Croatia	1) Other fish, fresh or chilled 2) Anchovies, salted	Italy	1) Herrings, sardines, sardinella, brislings or sprats, frozen	Spain, Slovenia
Egypt	1) Cuttlefish, octopus and squid, frozen, dried, salted or in brine; flours, meals and pellets thereof, fit for human consumption 2) Other fish, fresh or chilled	Italy	1) Other fish, frozen	Netherlands
Israel	1) Fish, live	United Kingdom, Belgium	1) Fish fillets, frozen 2)Herrings, sardines, sardinella and brislings or sprats, whole or in pieces, but not minced, prepared or preserved,	Netherlands
Lebanon	1) Herrings, sardines, sardinella, brislings or sprats, frozen	Cyprus	1) Salmonidae, fresh or chilled	United Kingdom, Spain
Libyan Arab Jamahiriya	1) Fish, live	Spain, Greece	1) Tunas, skipjack and Atlantic bonito (*Sarda* spp,), whole or in pieces, but not minced prepared or preserved	Spain
Morocco	1) Cuttlefish, octopus and squid, frozen, dried, salted or in brine 2) Herrings, sardines, sardinella and brislings or sprats, whole or in pieces, but not minced prepared or preserved 3) Other fish, fresh or chilled	Spain	1) Crustaceans, other than frozen including flours, meals and pellets of crustaceans, fit for human consumption	Netherlands

[32] The last year, 2007, was not considered because for some countries data are not available. For the Occupied Palestinian Territories, the year 2003 was used.
[33] In the group fish, the following species are excluded: cod, mackerel, herring, anchovies, tuna, salmon and flat fishes.
[34] Livers and roes are not included in the codes referring to fresh, chilled and frozen fishes, whatever species it is. Liver and roes have specific codes, i.e. 034.19 (fresh and chilled) and 034.29 (frozen), 035.4 (dried, smoked, salted or in brine).

Non EU Mediterranean countries	Export		Import	
	Top products	**Top EU countries**	**Top products**	**Top EU countries**
Montenegro	1) Other fish, fresh or chilled	Italy	1) Cuttlefish, octopus and squid, frozen, dried, salted or in brine 2) Other fish, prepared or preserved	Spain, Italy
Occupied Palestinian Territories			1) Fish, salted [35]	Netherlands
Serbia and Montenegro	1) Mackerel (scombrids), frozen	Italy, Spain	1) Herrings, sardines, sardinella, brislings or sprats, frozen 2) Mackerel (scombrids), frozen	Spain, Poland
Syrian Arab Republic	1) Molluscs and other aquatic invertebrates, prepared or preserved, n,e,s,	France, Cyprus	1) Fish fillets, frozen	Netherlands
Tunisia	1) Cuttlefish, octopus and squid, frozen, dried, salted or in brine 2) Shrimps and prawns, frozen	Italy	1) Tunas, skipjack or stripe-bellied bonito, frozen 2) Herrings, sardines, sardinella, brislings or sprats, frozen	Spain, France
Turkey	1) Other fish, fresh or chilled	Italy	1) Tunas, skipjack or stripe-bellied bonito, frozen	FR, Greece

[35] Other than cod and anchovies.

4. CONCLUSIONS

The aim of this paper was to outline a framework of the exchange of fish products in the Mediterranean basin in the light of recent political changes.

First, the analysis gave a measure of the role that the Mediterranean basin plays in the global trade of fishery products. It revealed that, during the period 1990–2005, there was an increase in the role of the Mediterranean basin as a supplier (exporter), in part related to a growing aquaculture sector; at the same time the region saw a decrease of imports of fishery products in the context of the global trade.

By briefly analysing the context of intra-Mediterranean trade, the Mediterranean exchange matrix, the study revealed that approximately 23 percent of the fishery products imported by Mediterranean countries come from the Mediterranean basin.

The core of the study comprised an analysis of the fish trade between the two sides of the Mediterranean basin, the EU and the non-EU. The trade of fishery products between the northern and the southern Mediterranean is of particular importance when considering recent trends in production and consumption, as well as the legal framework covering both the production and the trade sides of the fishery sector.

As mentioned above, in order to cope with high and growing domestic demand (as a result of high and growing standards of living, leading to increased consumption of fish products), and a decrease in fish production (caused by a number of restrictions set by the CFP on catch and effort), EU imports of fish products from the rest of the world are on a constant rise. In these circumstances, neighbouring Mediterranean countries can play a key role, especially in the light of recent liberalization processes, for example, the Euro-Mediterranean Partnership (or Barcelona Process) and the Stabilization and Association Process in the western Balkans.

It has been recognized that for many of the EU's Mediterranean partners, access of fisheries products to the EU market is almost duty free (in some cases the contrary is also true). The analysis in section III highlighted a significant increase in exports of fishery products of Mediterranean countries to the European market. However, the analysis of the import and export trends also revealed that this increase could not be attributed solely to the entry–exit regimes granted to the fish and fishery products in the EU and its partners' territory. The increase of the import flow has been continuous since the beginning of the period (that is, some time before the entry into force of the trade agreements), stressing the fact that it is most likely due to other factors: primarily, the increase in EU demand and consumption, in conjunction with a decrease in EU domestic production (caused by catch and effort restrictions).

The analysis also revealed another important issue: certain Mediterranean EU partners that are significant fish producers and that have the largest import market for fish in the world on their doorstep, are not able to take advantage of the opportunity represented by duty-free access for most fish and fishery products. A clear example is Egypt, where 99.5 percent of fish production remains in the domestic market (only 0.5 percent is destined for export) – data from FBS, average 1991–2005. The result is that Mediterranean countries lose market share in the EU, like many other developing country groupings. The main reason is new import requirements related to quality and safety measures by the importing countries; but lack of product development and a narrow range of species is also part of the problem. Many developing countries need financial resources to invest in appropriate technology to maintain the quality of such perishable products, and thus satisfy the hygiene and food safety requirements set by developed countries. Nevertheless, developing countries still tend to represent 50 percent of all fish exports.

One lesson that could be drawn by policy-makers is that, although the reduction and elimination of tariff barriers inspired by WTO agreements give fishing communities the idea of greater fair trade in international markets, non-tariff barriers may be so stringent and expensive that the "small farmers and fishers may no longer find a profitable niche in the supply chain as they lack financial resources and technical knowledge to keep up with the new regulatory requirements by the major importing countries" (Lem, 2006).

At the same time, the management of trade issues in developing countries should now acknowledge that it is time to pursue better quality management by adopting internationally recognized standards that include improved hygiene and food safety, human rights issues, fair labour practices and environmental concerns.

The analysis also revealed a growing trend in imports by Mediterranean countries of fishery products originating in the EU territory. This can be attributed to both an increase in fish consumption levels (driven by population growth together with an increase in income levels) and a gradual lowering, in some Mediterranean countries, of the tariff levels for fishery products originating in the EU. It should, in any case, be emphasized that the degree of liberalization applied to the access of EU fishery products in other Mediterranean countries has not reached the same level as that granted by the EU.

In fact, the analysis showed, during the period under analysis, beyond a general increase in trade between the EU and Mediterranean countries, an improvement in the position of EUMC (at the expense of other member countries) in the role of suppliers and users of fishery products for non-EU Mediterranean countries.

The cross-sectoral analysis of fishery production and trade provides a number of conclusions and lessons for the future.

Fishery management should take into account the demand and trade in fish products with regard to the sustainability of marine resources and vice versa, in particular:

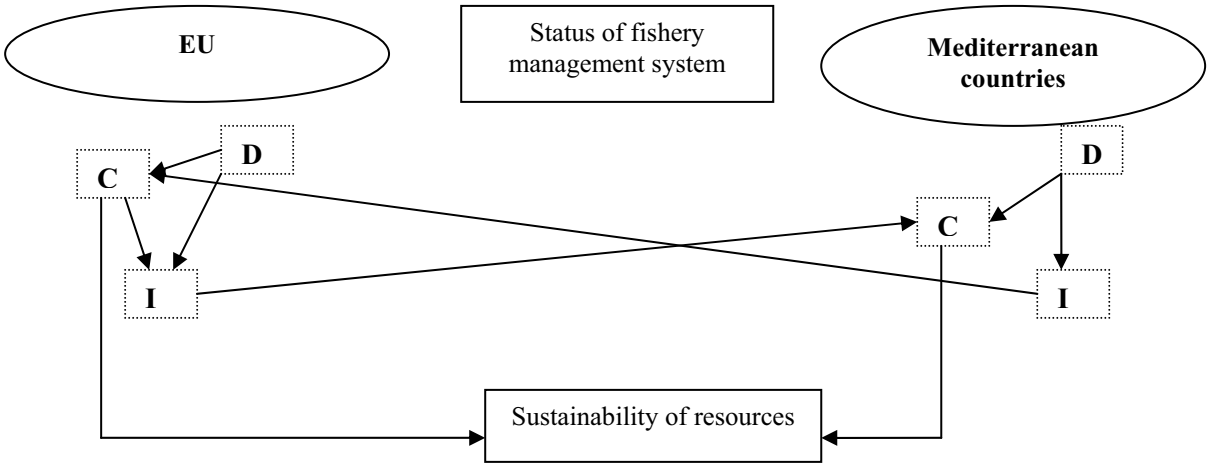
- given catch and effort restrictions on EU fisheries;
- given recent trends in marine capture production for non-EU Mediterranean countries, especially for TMC (+50 percent in the period 1990–2007) and assuming that the present management system remains unchanged; and
- given the forecasts on fish consumption until 2030 that reveal an increase in Mediterranean consumption, in particular for TMC (based on a stable fish consumption level, scenario 2).

A likely future scenario will be characterized by:

- an increase in imports by non-EU Mediterranean countries of fishery products originating in the EU territory, especially from EUMC (given the preferential relationships evidenced by the analysis, due to logical, geographical reasons);
- an increase in non-EU Mediterranean domestic production; and
- an increase in fishing pressure exerted on Mediterranean resources, with clear consequences in terms of sustainability.

The contrary is also true, in the sense that sustainability issues, i.e. resource conservation, can affect trade, as a result of management measures and restrictions in production, i.e. increasing level of imports.

The relationships can be summarized in the following flow chart:



Finally, the analysis provided insight into the qualitative composition, by type of products, of the trade in fishery products between the EU and its Mediterranean partners.

In general, it can be said that the most imported category of seafood by non-EU Mediterranean countries are fish, whereas molluscs (cuttlefish and squid) make up a large part of exports towards EU, as well as farmed products, in particular bass and bream.