



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 22.7.2003

# **RAW TOBACCO**

**Markets, CMO**

## TABLE OF CONTENTS

1.	GENERAL OVERVIEW .....	6
1.1.	World tobacco economy .....	6
1.1.2.	Trade .....	6
1.1.3.	Utilisation .....	10
1.2.	Acceding and candidate countries .....	12
1.3.	EU-15 raw tobacco economy.....	14
1.3.1.	Production and yields.....	14
1.3.2.	Area and quota holders .....	17
1.3.3.	Trade .....	20
1.3.4.	Utilisation .....	22
1.4.	Prices .....	25
1.4.1.	World prices.....	25
1.4.2.	European prices .....	28
1.5.	Tobacco holdings: structural analysis.....	32
1.5.1.	Structural characteristics of tobacco holdings .....	32
1.5.2.	Employment.....	38
1.5.3.	Regional analysis .....	42
1.5.4.	MAPS .....	48
1.6.	Income (from the FADN) .....	52
1.6.1.	Profitability of tobacco production: analysis of production costs and margins .....	52
1.6.2.	Income of tobacco farms.....	55
1.6.3.	Conclusions .....	59
2.	THE RAW TOBACCO REGIME.....	59
2.1.	The Common Market Organisation for raw tobacco .....	59
2.1.1.	Current objectives of the CMO.....	59
2.1.2.	Premium system.....	60
2.1.3.	Measures to orient and limit production.....	62
2.1.4.	The Community Tobacco Fund .....	67
2.1.5.	External trade regime.....	68
3.	THE FIRST- PROCESSING INDUSTRY.....	69
4.	EAGGF EXPENDITURE .....	71

4.1.1.	Evolution of expenditure .....	71
4.1.2.	Breakdown by Member State.....	71

### Definitions

- Raw tobacco, is a tobacco in leaves, dried but not yet processed;
- the European Community custom definition: “Unmanufactured tobacco in the form of whole plants or leaves in the natural state or as cured or fermented leaves, whole or stemmed/stripped, trimmed or untrimmed, broken or cut (including pieces cut to shape, but not tobacco ready for smoking) Tobacco leaves, blended, stemmed/stripped and “cased” (“sauced” or “liquored”) with a liquid of appropriate composition mainly in order to prevent mould and drying and also to preserve the flavour are also covered in this heading.”

Eight groups of tobacco varieties are described in the EU CMO (regulation 2075/1992):

- I) flue-cured: tobacco dried in ovens with controlled air circulation, temperature and humidity;
- II) light air-cured: tobacco dried in the air under cover, not left to ferment;
- III) dark air-cured: tobacco dried in the air under cover, left to ferment naturally before being marketed;
- IV) fire-cured: tobacco dried by fire;
- V) sun-cured: tobacco dried in the sun;
- VI) Basmas (sun-cured);
- VII) Katerini (sun-cured);
- VIII) Kaba-Koulak (classic) and similar (sun-cured).

Unit value for exports is a FOB price and unit value for imports is a CIF price

### Reference period

In general, 1993 to 2001. For FAO figures the reference period is 1961 to 2000. For EUROFARM figures the reference period is 1990 to 2000.

The closing date for extraction of Eurostat figures from EUROFARM was 23 April 2003.

### Abbreviations

- MGT: Maximum Guaranteed Threshold
- FADN: Farm Accountancy Data Network (RICA: Réseau d'information comptable agricole)
- AWU: Annual Work Unit
- UAA: Utilised Agricultural Area

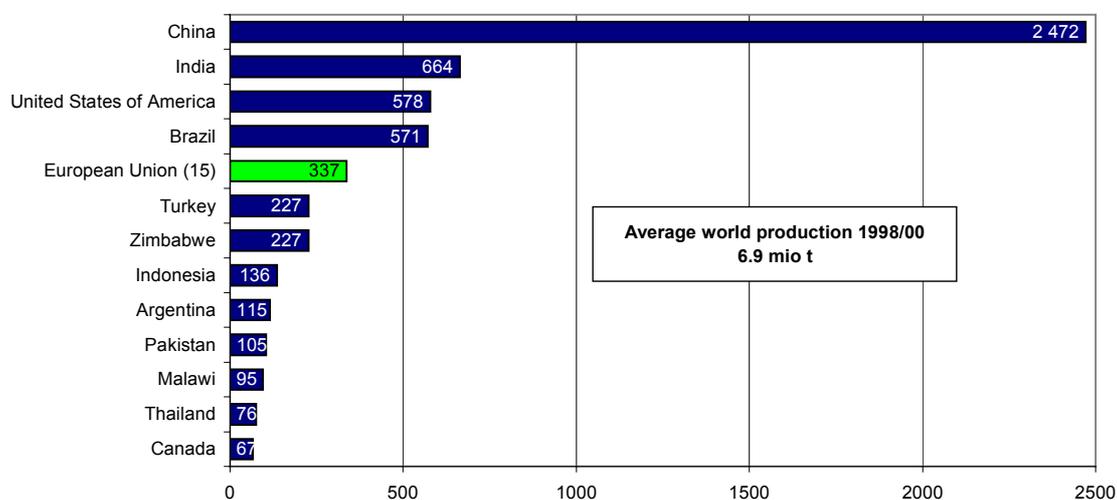
## 1. GENERAL OVERVIEW

### 1.1. World tobacco economy

#### 1.1.1. Production

Cultivated in 128 countries, the annual average (1998-2000) world production of tobacco was 6.9 million tons. South America has the largest cultivated tobacco area but the world's leading producer is China, with 36% of the total quantity produced. Other big producers are India (10% of world production), USA (8%) and Brazil (8%). With 337,000 tons, corresponding to **5% of world production, the European Union is the fifth largest producer**. China leads in the production of Flue Cured varieties, the USA in the production of Light Air Cured and India for Dark Air Cured varieties.

Graph 1 - Main world producers of raw tobacco in '000 of tons, average 1998-2000



Source: FAO and communications of Member States EU-15

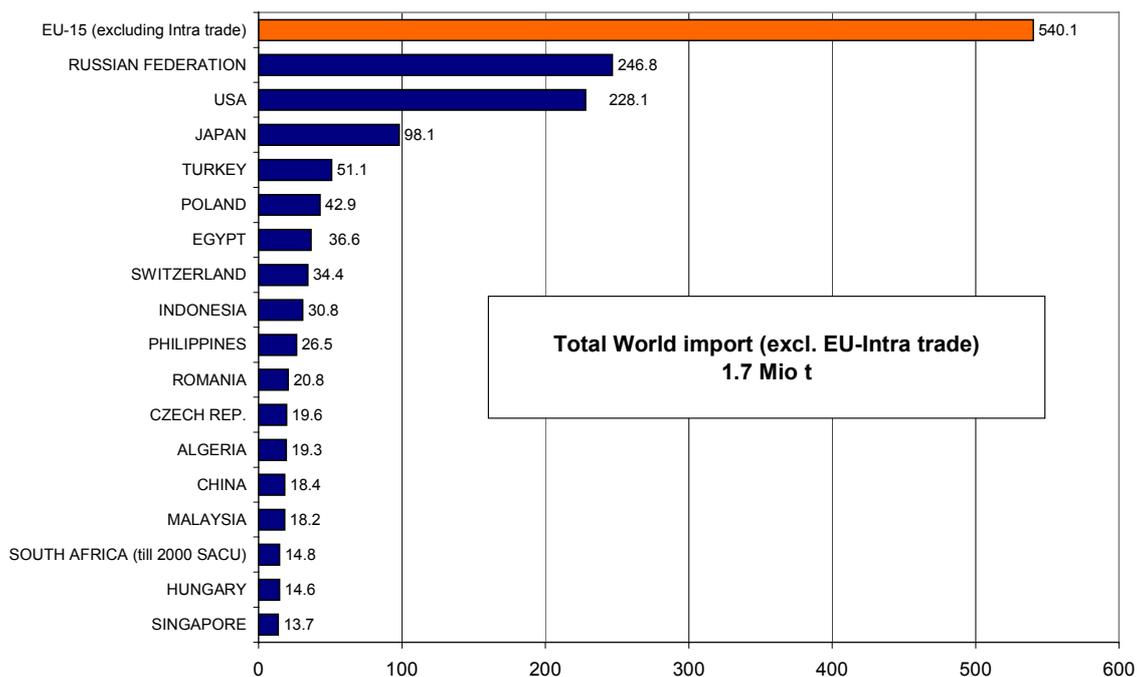
In terms of regional production, Asia ranks first with 4.3 millions tons, followed by South America with 773.2 thousand tons, North America with 645.6 thousand tons, Africa with 509.3 thousand tons, Western Europe with 356.5 thousand tons, Eastern Europe (including European Russia) 194.5 thousand tons, Central America with 139.8 thousand tons and Oceania with 8 thousand tons.

Developing countries produce 80% of the world total (5.5 millions of tons).

#### 1.1.2. Trade

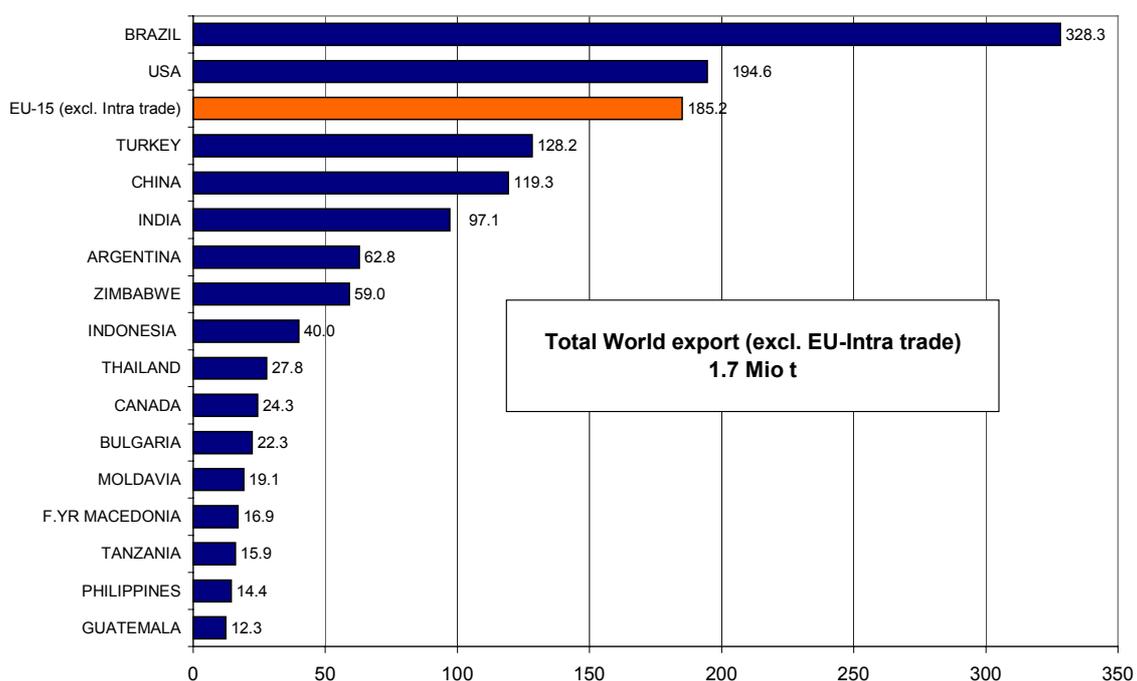
World trade in raw tobacco concerns exclusively raw tobacco in different phases of processing, in leaves or in strips. Trade in tobacco leaves is marginal however. Generally speaking, the volume of trade has increased over the last ten years. COMTRADE figures indicate that, exports and imports of tobacco averaged 1.7 millions tons a year from 1998-2000. According to USDA figures, trade is increasing by approximately 2.4% per year.

Graph 2 – Main world importers of raw tobacco in 000 tons (average 1998-2000)



Source: COMTRADE-EUROSTAT

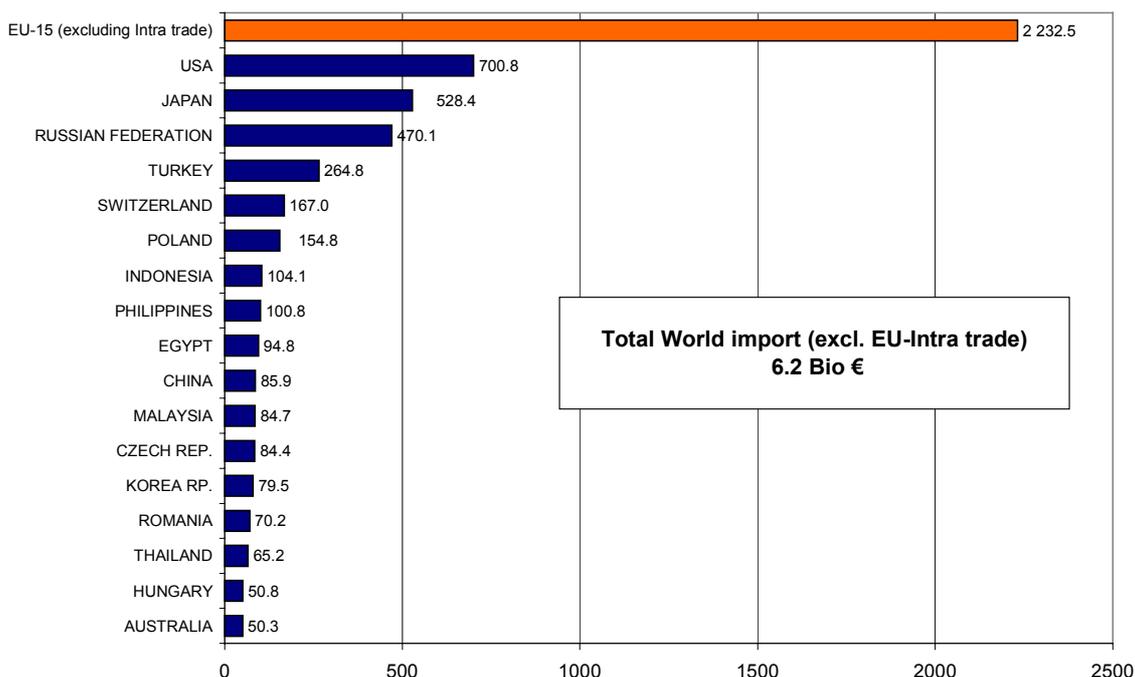
Graph 3 - Main world exporters of raw tobacco in 000 tons (average 1998-2000)



Source: COMTRADE-EUROSTAT – (Bangladesh export quantity has been EXCLUDED due to probably erroneous data)

Looking at import values, from 1998-2000 the shares of the main importing countries, averaged EU (36%), USA (11.3%), Japan (8.5%) and the Russian federation (7.6%). Overall these countries account for 63.4% of the total value of world imports (COMTRADE-Eurostat figures). In terms of volume, the main exporting countries are developing countries (63%) while the biggest importers are developed countries. However, the trend seems to be that developing countries are increasing their imports (on average for the period 1998-2000, developing countries imports were 20% in value and 19% in quantity of the world total).

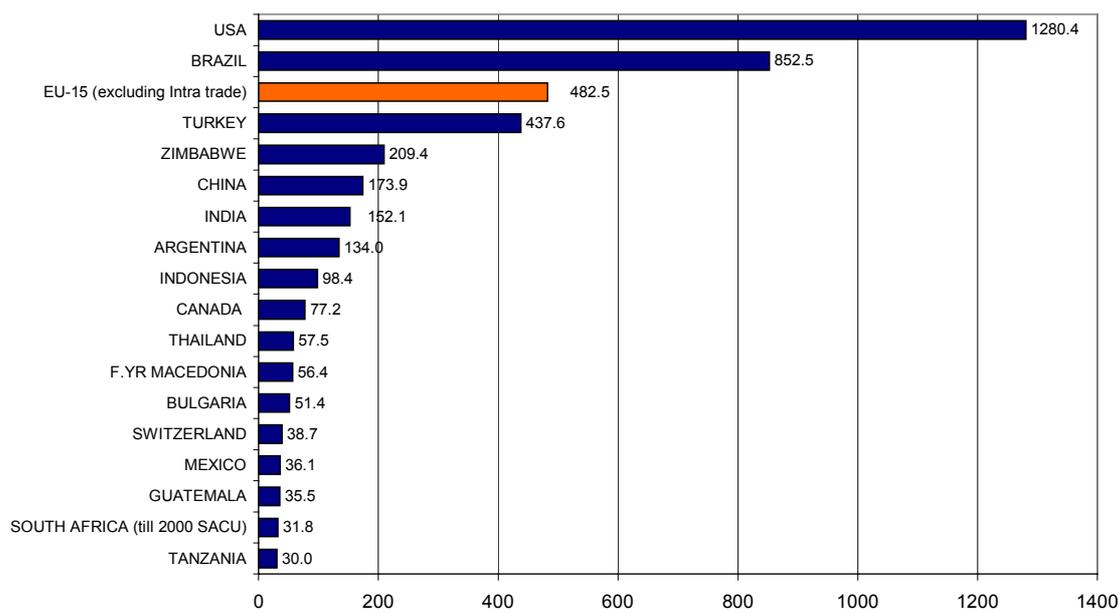
Graph 4 - Main world importers of raw tobacco in Mio of € (average 1998-2000)



Source: COMTRADE-EUROSTAT

On the export side, the big six traditional exporters of raw tobacco are the USA (28.4% of the world total), Brazil (18.9%), EU (10.7%), Turkey (9.72%), Zimbabwe (4.7%) and China (3.9%). Overall, these countries represent 76.4% of the total value of tobacco exported in the world (average 1998-2000 – source COMTRADE and Eurostat).

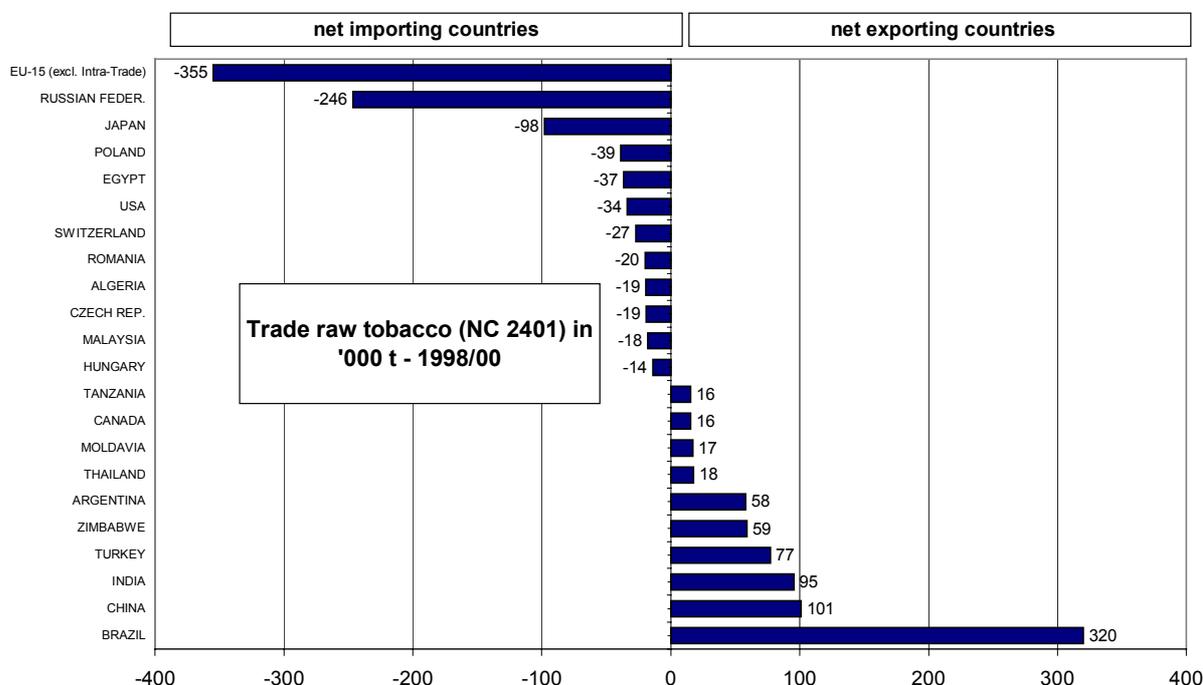
Graph 5 - Main world exporters of raw tobacco in Mio of € (average 1998-2000)



Source: COMTRADE-EUROSTAT

With a trade balance of nearly 355,000 tons, the EU is the most important net importer in the world.

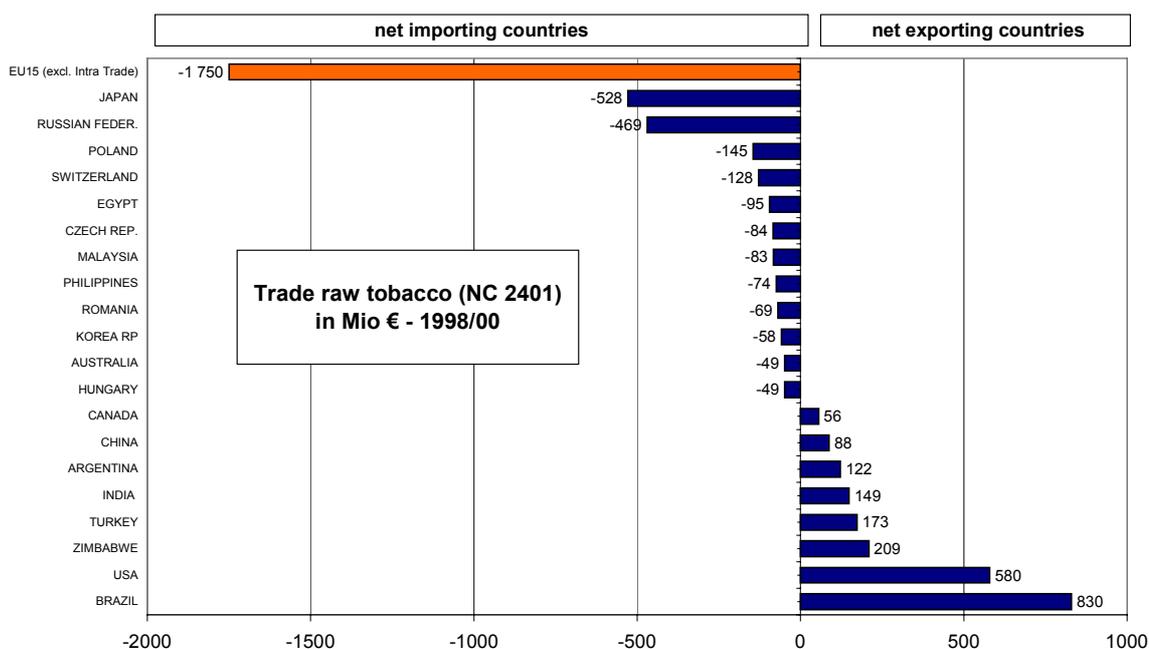
Graph 6 - Trade raw tobacco (average 1998-2000) in '000 of ton



Source: COMTRADE-EUROSTAT – (Bangladesh export quantity has been EXCLUDED due to probably erroneous data)

The terms of value as well, the EU is the biggest net importer (-1,750 mio €). Other large net importers are Japan (-528 mio €) and the Russian Federation (-469 mio €). On the other side, the USA and Brazil are the largest net exporters, with respective balances of 580 mio € and 830 mio €. It is important to note that the USAs ranking in second place is mainly due to the high value of the raw tobacco it exports.

Graph 7– Trade of raw tobacco (average 1998-2000) in Mio of €

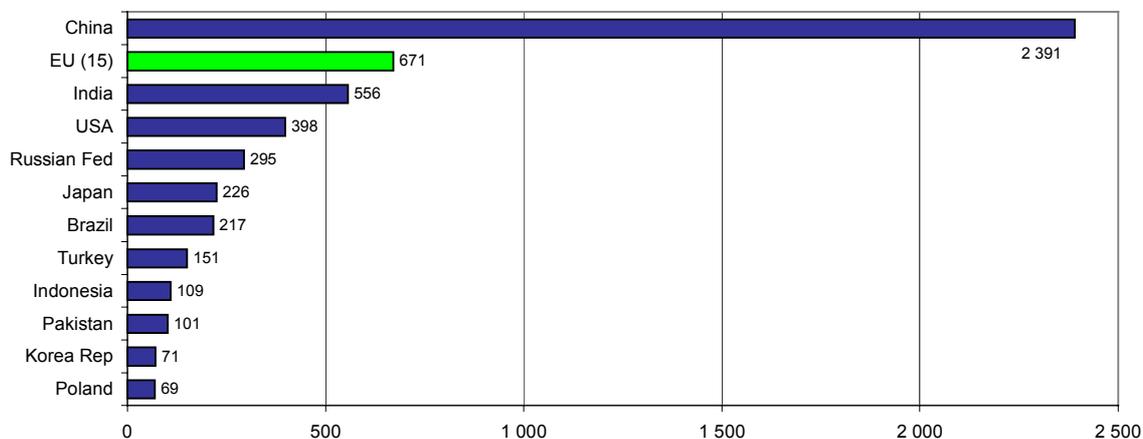


Source: COMTRADE-EUROSTAT

### 1.1.3. Utilisation

The world's top consumer of raw tobacco is China with a 35% share of total world utilisation, followed by the EU (10%), India (8%) and the USA (6%). Developing countries account for 70% of the worlds' total consumption.

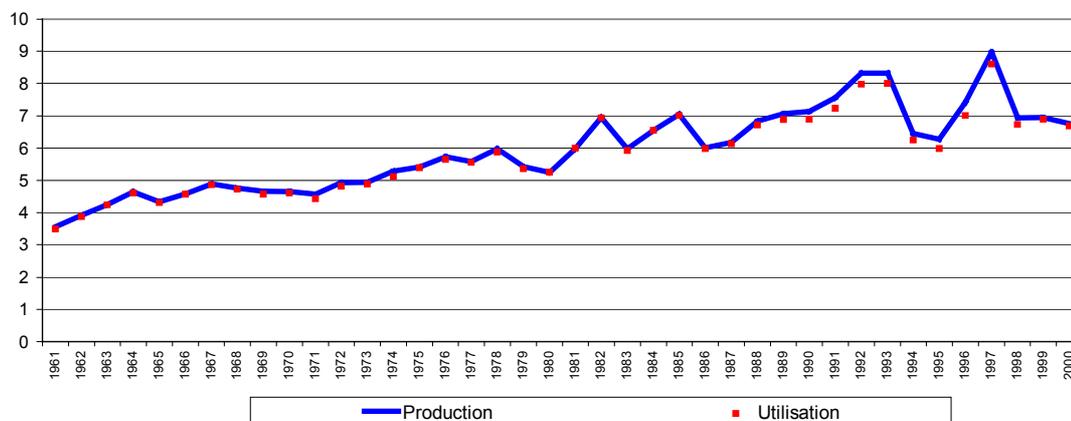
Graph 8 - Main world users of raw tobacco in '000 of tons (average 1998-2000)



Source: FAO – DG AGRI estimations

Tobacco utilisation has increased over the last 30 years and as can be seen from the chart below, the volume of production has consistently been very near or equal to consumption. Over the last few years (1998-2000) however, production and utilisation have both experienced a downturn.

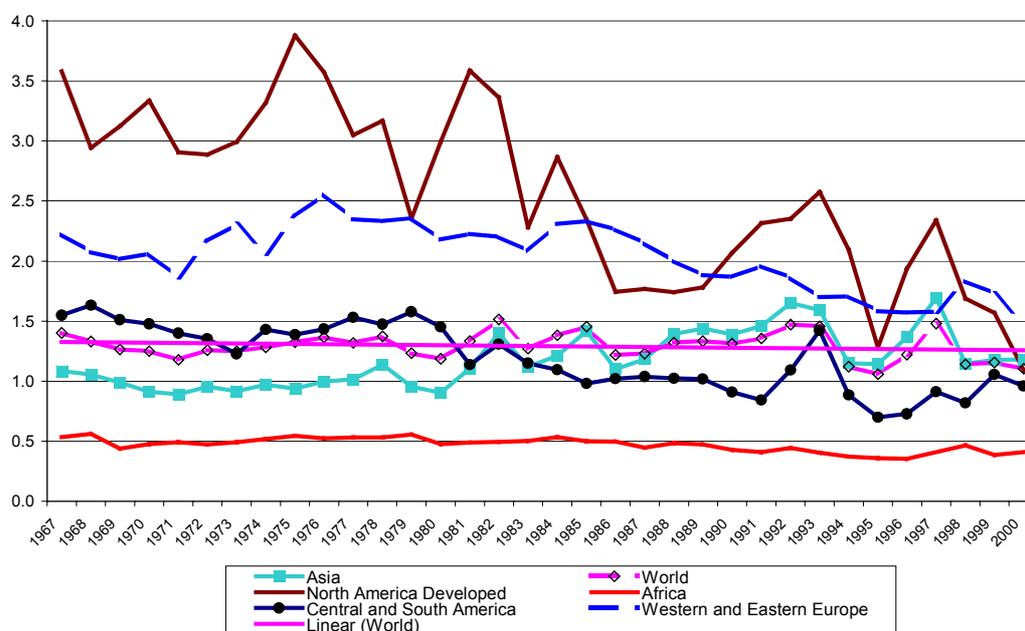
Graph 9 – Tobacco – Evolution of world production and utilisation in Mio of tons



Source: FAO

On the basis of FAO figures, per capita utilisation has seen a very slight decrease at world level. However, in North America and Europe (excluding European Russia) the decline is very steep. Furthermore, world production has approximately doubled in 30 years, while EU production fell by 22% over the period 1990-2001.

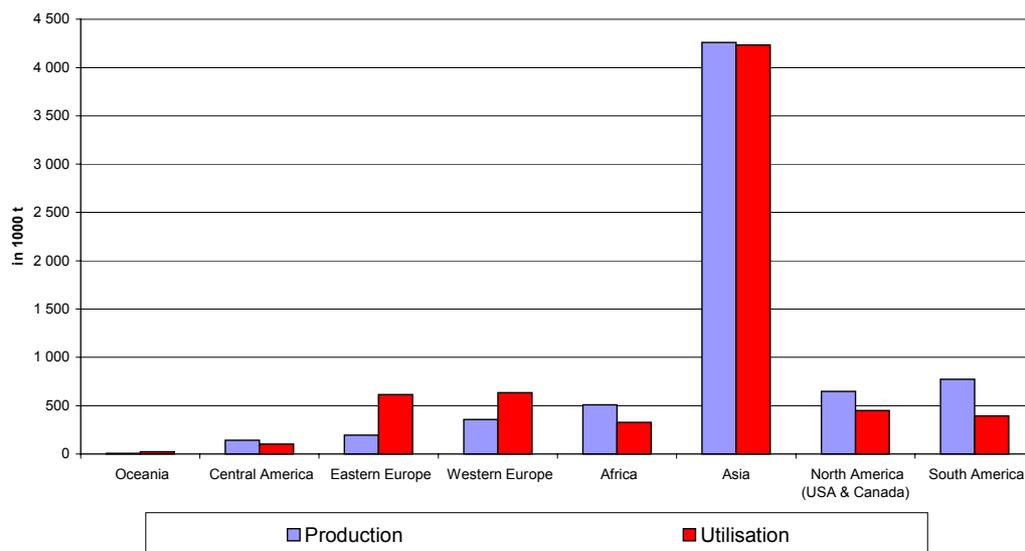
Graph 10 – Evolution of World utilisation of raw tobacco by region (in kg of raw tobacco per capita)



Source: FAO

On annual average, 1998-2000, the highest production surplus was recorded in South America (381,000 tons), while the area with the highest production deficit was Eastern Europe (including European Russia) (-421,000 tons).

Graph 11 - World production and utilisation of raw tobacco by region- average 1998-2000  
(in '000 of tons)



Source: FAO

## 1.2. Accessing and candidate countries

### Production

Among the **10 acceding** countries there are four tobacco producers: Poland, Hungary, Slovakia and Cyprus. From 1998-2000 their annual average production was, Poland 36,968 tons, Hungary 12,904 tons, Slovakia 1,549 tons and Cyprus 337 tons. Poland in particular, produces the Fire Cured varieties. The EU agreed that all the acceding countries should have the possibility of paying tobacco support in a simplified manner (aid per ha) after the accession, but only Poland and Cyprus have decided to take up this option.

**Bulgaria and Romania** (candidate countries) in the same period produced an average of 35,056 tons and 14,412 tons respectively. Both countries produce oriental and similar tobacco varieties.

**Turkey** (candidate country) produced 227,333 tons on average in the same period. Production increased by 86% from 1961 to 2000, although with important oscillations. Turkey in particular produces the oriental varieties.

### Trade

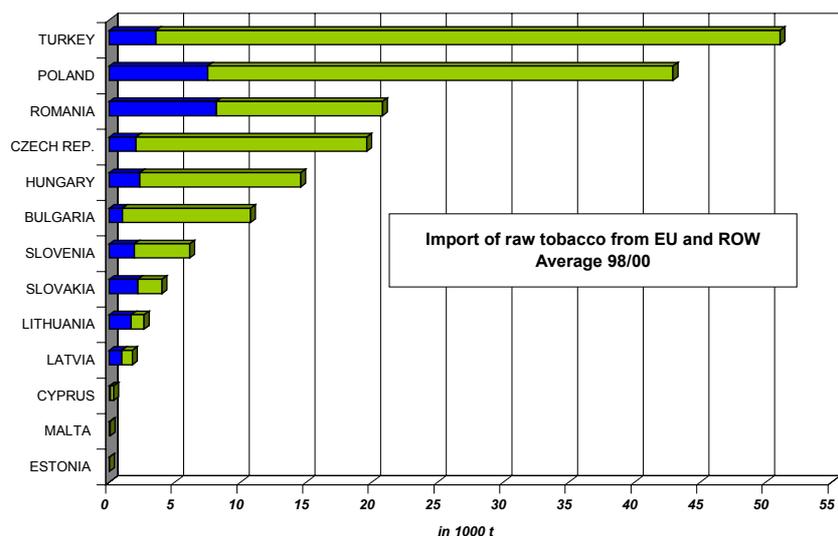
In the period 1998-2000 **the acceding countries** exported on average 9,470 tons of raw tobacco and imported 92,060 tons. Nearly a third of quantity exported went to the EU (2,850 tons). Imports came mainly from the EU (18,667 tons), Brazil (13,710 tons), the USA (12,482 tons) and Zimbabwe (11,809 tons).

Over the same period **Bulgaria and Romania** exported on average 22,275 tons and 773 tons, respectively. They imported, respectively, 10,747 tons and 20,809 tons.

**Turkey** imports mainly from the USA (26,481 tons on average 1998-2000) and also exports in particular the USA (41,885 tons on average 1998-2000). EU exports to Turkey over the same period averaged 2,459 tons. The EU is the second main destination for Turkish exports with 35,918 tons. Turkey's total imports averaged 51,072 tons and total exports are 128,244 tons.

Among these countries, Turkey (+77,173 tons) and Bulgaria (+11,528 tons) are the only net exporters.

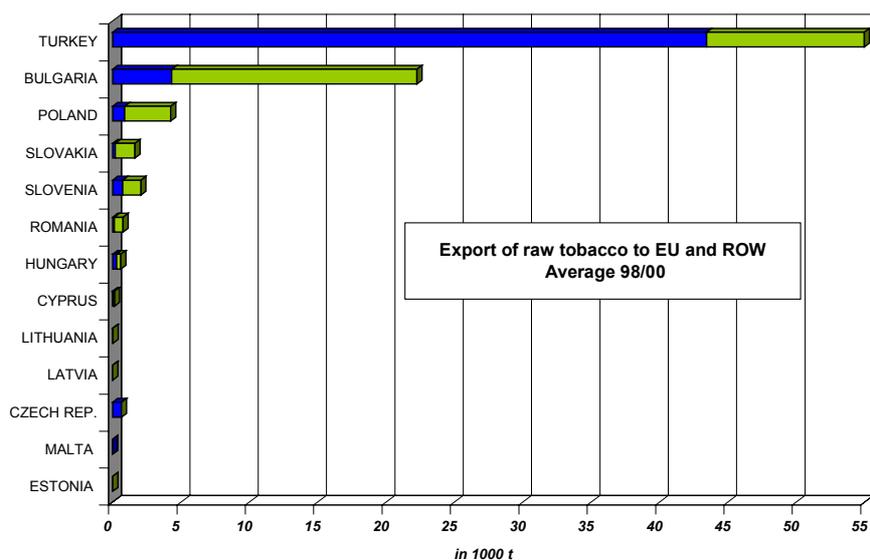
Graph 12 – Import of acceding and candidate countries from the EU and other World countries – raw tobacco – average 1998-2000 (in '000 of tons)



	ESTONIA	MALTA	CYPRUS	LATVIA	LITHUANIA	SLOVAKIA	SLOVENIA	BULGARIA	HUNGARY	CZECH REP.	ROMANIA	POLAND	TURKEY
■ ROW	0.02	0.1	0.2	0.8	1.0	1.8	4.2	9.8	12.3	17.6	12.7	35.4	47.5
■ EU-15	0.0	0.003	0.1	1.0	1.7	2.2	1.9	1.0	2.3	2.0	8.1	7.5	3.5

Source: COMTRADE

Graph 13 – Export of acceding and candidate countries towards the EU and other world countries – raw tobacco – average 1998-2000 (in '000 of tons)



	ESTONIA	MALTA	CZECH REP.	LATVIA	LITHUANIA	CYPRUS	HUNGARY	ROMANIA	SLOVENIA	SLOVAKIA	POLAND	BULGARIA	TURKEY
■ ROW	0.00	0.0	0.0	0.0	0.0	0.1	0.3	0.6	1.3	1.4	3.4	17.9	84.8
■ EU-15	0.01	0.0	0.6	0.0	0.0	0.0	0.3	0.1	0.8	0.2	0.9	4.3	43.5

Source: COMTRADE

## Utilisation

On average (1998-2000) of the 10 acceding countries the bigger users of raw tobacco were Poland (69,109 tons) and Hungary (23,266 tons). In the same period Romania and Bulgaria used 38,085 tons and 19,772 tons, respectively. Turkey's utilisation seems to have fallen by 33% between 1990 and 2000. From 1998-2000 Turkey's average utilisation was 150,754 tons.

At the end of negotiations between the acceding countries and the EU, at the Copenhagen Council in 2002, the following quotas were fixed for the ten new Member States:

### **Council of Copenhagen: negotiation results for Tobacco CMO in the acceding countries**

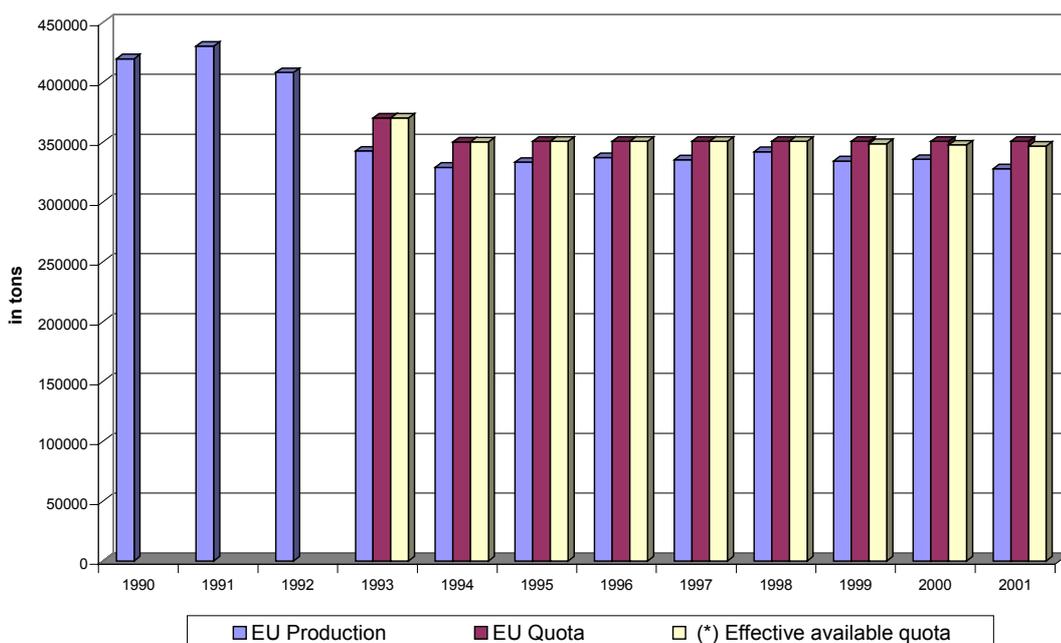
		<i>flue cured</i>	<i>light</i>	<i>air</i>	<i>dark</i>	<i>air</i>	<i>fire cured</i>
	<b>Total MGT for 2004</b>		<i>cured</i>		<i>cured</i>		
<i>Cyprus</i>	350		350				
<i>Czech Republic</i>	-						
<i>Estonia</i>	-						
<i>Hungary</i>	12 355		5768		6587		
<i>Latvia</i>	-						
<i>Lithuania</i>	-						
<i>Malta</i>	-						
<i>Poland</i>	37 933		22200		12633	1867	1233
<i>Slovakia</i>	1 715		1598		117		
<i>Slovenia</i>	-						
<b>total</b>	52 353	-	29916		19337	1867	1233

## **1.3. EU-15 raw tobacco economy**

### *1.3.1. Production and yields*

Since 1993 a production limitation system has applied to tobacco. From 1995 until 2001 the European Community guaranteed an overall maximum quantity of 350,600 tons of raw leaf tobacco per harvest. This decreased to 340,738 tons in 2002, and for 2003 and 2004 the guaranteed quantity will be 334,064 tons. Production is gradually falling in the EU (-23.8% between 1991 and 2001). From a high point of 430,000 in 1991 total EU production declined to 327,587 tons.

Graph 14 – Evolution of EU raw tobacco MGT and production (in tons)



Source: Member States communications – EU regulation.

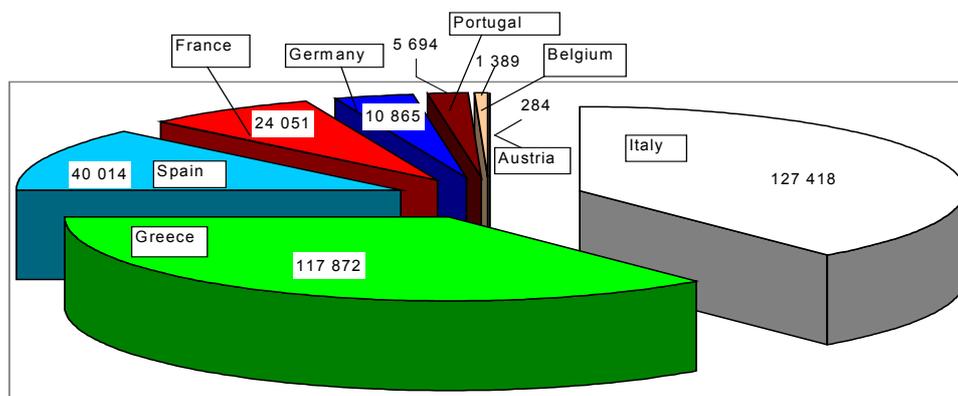
(\*) The difference between the EU quota and the effective available quota is due to transfers from one group of varieties to another and to the EC quota buy-back. With the transfer of quota, to respect the conditions of budgetary neutrality some quantities are lost.

Between 1993 and 2001, the area cultivated (-26.8%) and the numbers of quota holders (-28.2%) also steadily decreased. In 2001 the area was 122,537 ha.

According to official data, from 1993-2000 yields improved in all Member States and in particular in Italy (from 2.2 tons/ha to 3.3 tons/ha) and Portugal (from 1 ton/ha to 2.8 tons/ha). The average EU yield has risen from 2 to 2.7 tons per ha.

In the EU tobacco is produced in eight Member States: Belgium, Germany, Greece, Spain, France, Italy, Austria and Portugal. The main producers are Italy and Greece with, respectively, 127,418 tons and 117,872 tons in 2001. These two countries together represent 75% of total EU production.

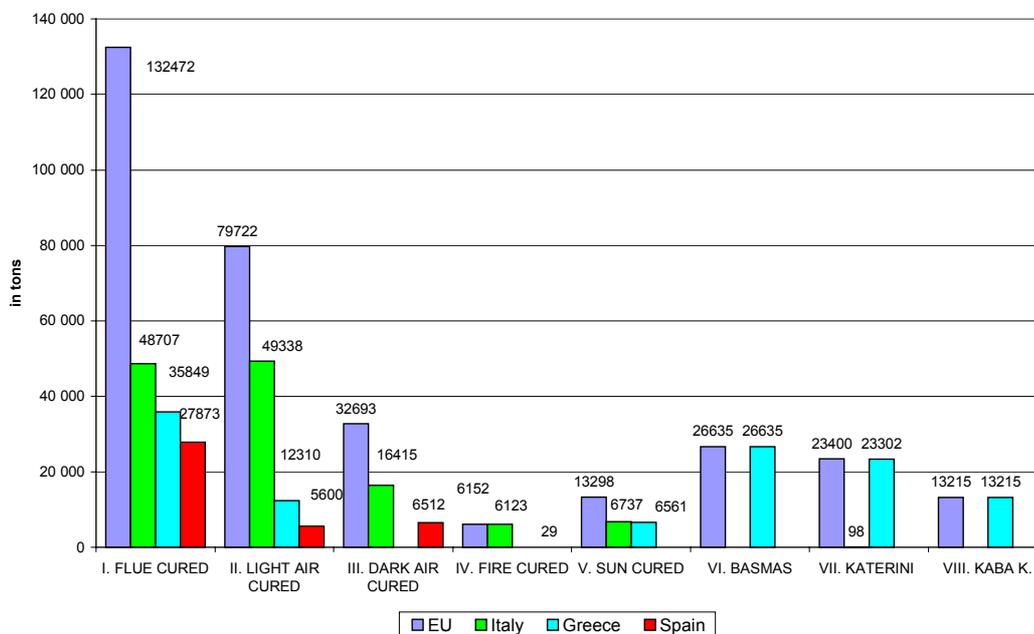
Graph 15 – Production by Member States in 2001 – (in tons)



Source: Member States communications

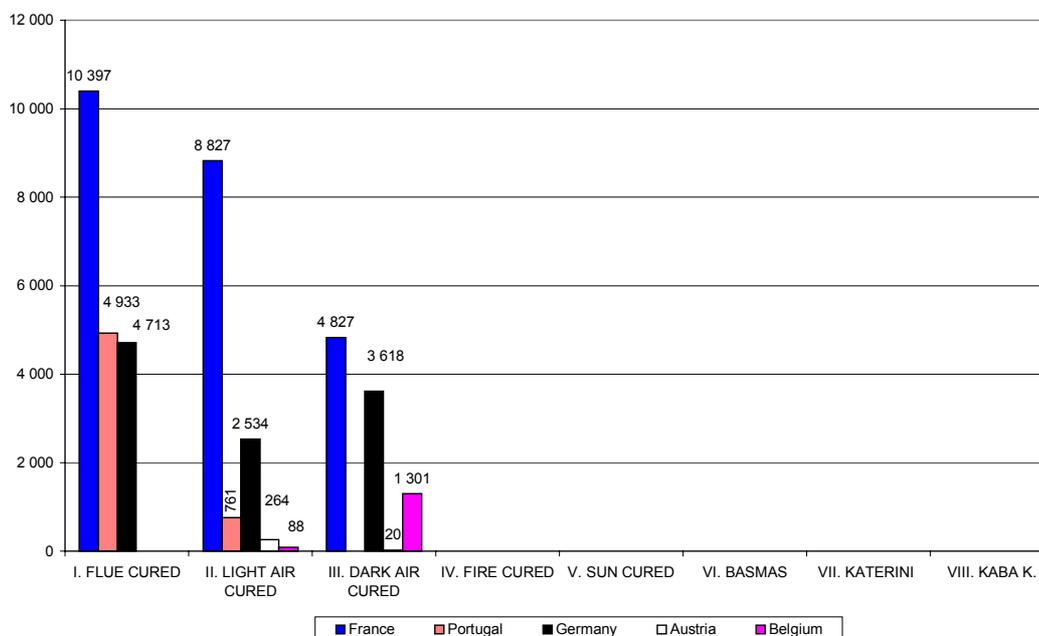
Italy produces mainly Virginia, Burley and Bright varieties of raw tobacco, while Greece produces oriental tobacco varieties (groups VI to VIII) and over the last few years, increasingly, Virginia. A breakdown of the varieties grown by the Member States is given in the following two graphs.

*Graph 16 – Production by group of varieties in the EU, Italy, Greece and Spain in 2001 (in tons)*



Source: Member States communication.

*Graph 17 – Production by group of varieties in France, Portugal, Germany, Austria and Belgium in 2001 (in tons)*



Source: Member States communication

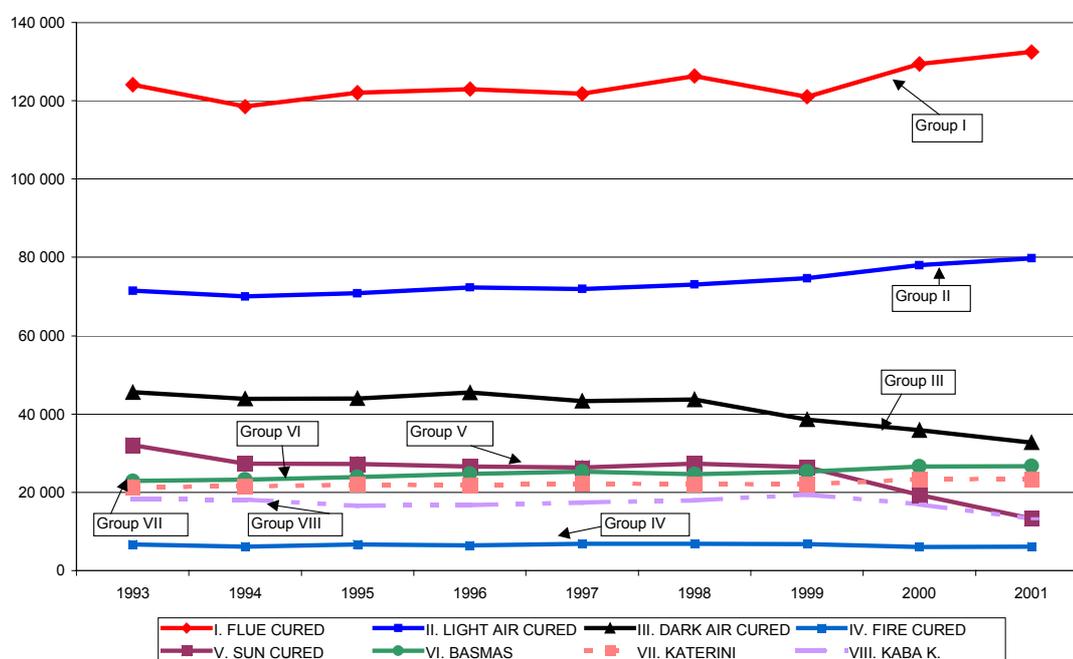
A percentage breakdown by variety produced in the EU in 2001 is given in the following table.

<b>I. FLUE CURED</b>	40.4%
<b>II. LIGHT AIR CURED</b>	24.3%
<b>III. DARK AIR CURED</b>	10.0%
<b>IV. FIRE CURED</b>	1.9%
<b>V. SUN CURED</b>	4.1%
<b>VI. BASMAS</b>	8.1%
<b>VII. KATERINI</b>	7.1%
<b>VIII. KABA K.</b>	4.0%

Source: Member States communication.

This production profile is the result of a gradual shift from groups III and V towards groups I, II, VI and VII. This evolution is coherent with falling demand for groups III and V.

Graph 18 – Evolution of production by group of varieties (in tons)

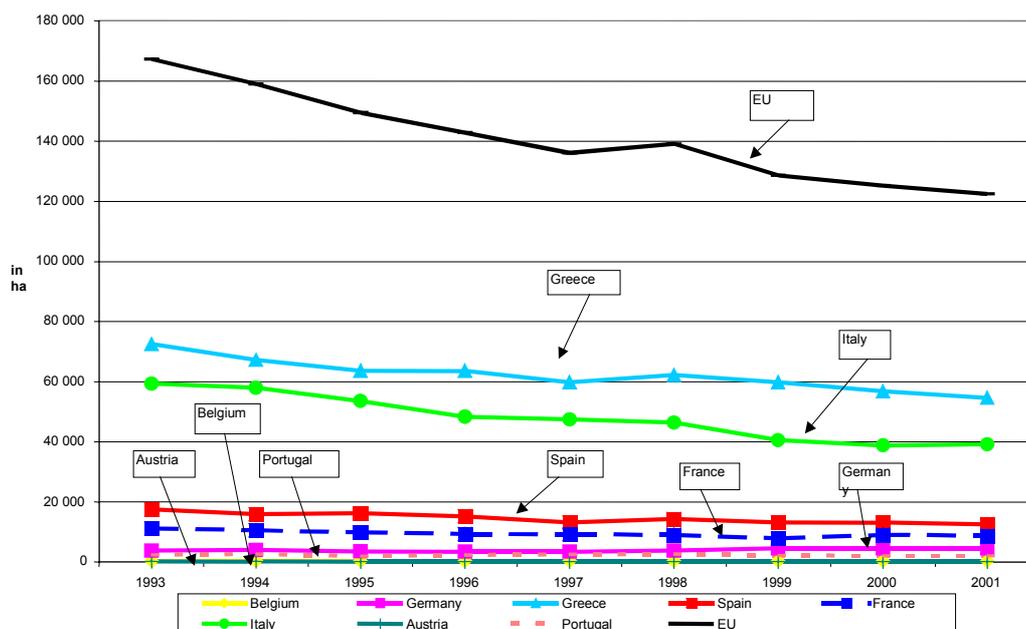


Source: Member States communication

### 1.3.2. Area and quota holders

Since 1993 the total area given over to tobacco production has been on the decline. Between 1993 and 2001 it fell by nearly 45,000 ha, mostly in the main producing Member States (Greece -17,740 ha, Italy -20,199 ha and Spain -4,935 ha). It should be note that during the first years of the analysis (1993 to 1997) it was not compulsory to collect data on cultivated areas, so these figures may not be totally accurate. Declared area was, probably, nearer to the theoretical area than the real. Declarations of cultivated area have been more reliable since 1998.

Graph 19 – Evolution of EU raw tobacco area (in ha)



Source: Member States communications

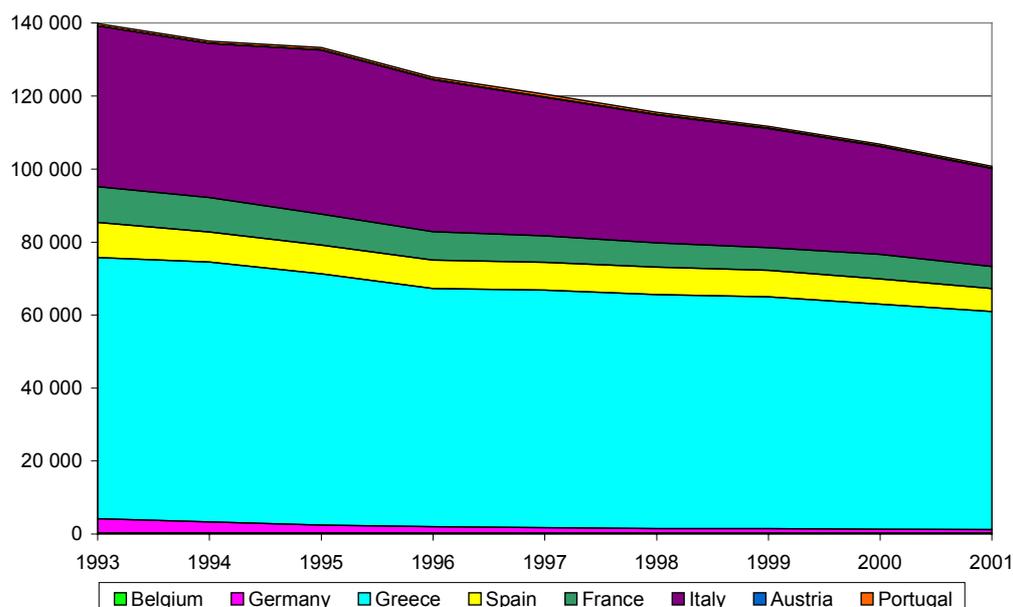
In 2000, 0.1% (125,420 ha) of the Eus total Utilised Agriculture Area (96,455,390 ha) was cultivated with tobacco (EUROFARM figures).

According to information supplied by Member States, the number of tobacco producers fell from almost 140,000 in 1993 to 101,000 in 2001 (-28%). The most dramatic decrease, in percentage terms, was recorded in Germany (-76% or -2,936 in absolute terms) but in absolute terms the reduction was higher in Italy (-17,228) and Greece (-1,782).

*In reality, however, tobacco producer means “quota holder”. As each producer may have several quotas, depending on the number of varieties cultivated, the real number of individual producers is the same as the number of holdings with tobacco. In 2000 there were, on basis of EUROFARM survey, 79,510 holdings.*

Production per producer increased in all Member States between 1993 and 2001 showing for the whole EU an increase from 2.4 to 3.3 tons (+33%). This suggests that in these years an important concentration of farms occurred.

Graph 20 – Evolution of producer numbers by Member States

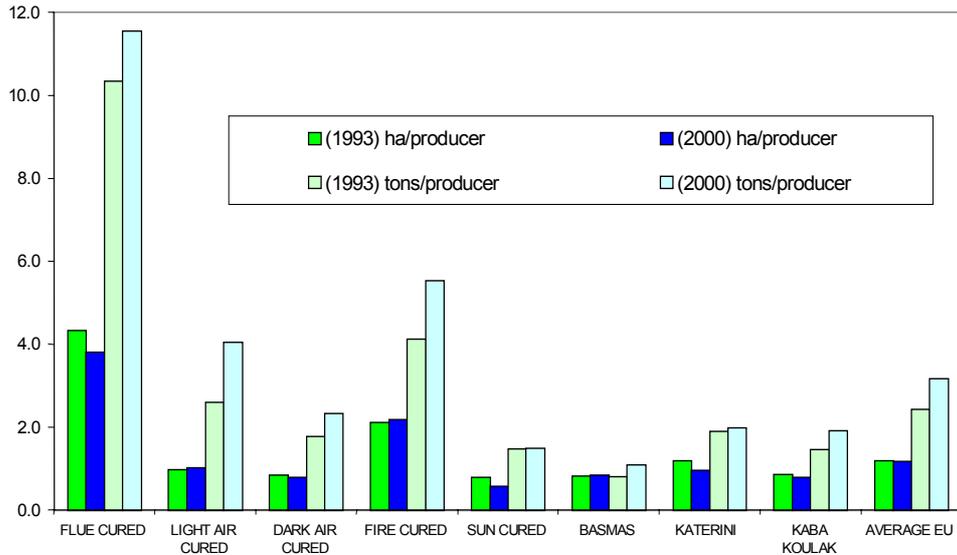


Source: Member States communication (no figures of Austria for 1993 and 1994, before accession)

Varietal specialisation is very high on tobacco-producing farms, and an analysis of the number of producers per group of varieties and by Member State yields interesting results. Between 1999 and 2001 the number of producers increased only for Group I (22%) and for Group VII (12%). The biggest reduction was in the production of Group V varieties (-40%).

A comparison of data for 1993 and 2000, shows that production has been shifting from one group to another. In particular, a reduction of area from 4.3 ha to 3.8 ha can be observed for producers of Flue Cured and a smaller reduction for producers of Dark Air Cured, Sun Cured, Katerini and Kaba Koulak. By contrast, an increase in area can be observed for producers of Light Air Cured, Fire Cured and Basmas. However, as explained above, area data for 1993 must be viewed with caution, as an obligation to declare cultivated area has existed only since 1998. Average area per producer in the EU appears to have decreased slightly, to 1.1 ha in 2000.

Graph 21 – Area and production by producer and Group – 1993 and 2000

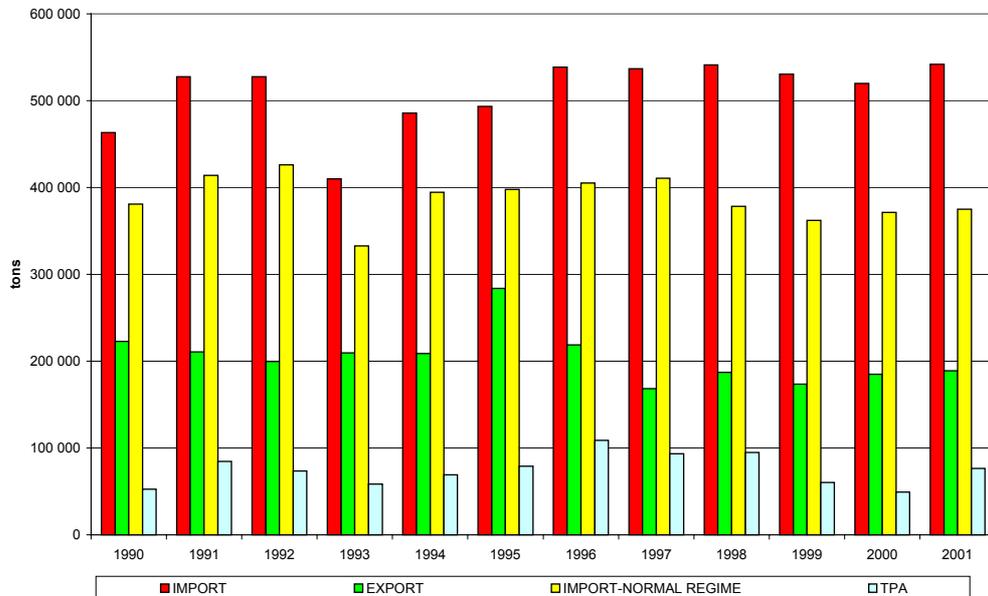


Source: MS communications  
(annexes I and II of EC regulations 1771/93 and 2636/1999)

### 1.3.3. Trade

The graph below shows, for the EU, total imports and exports, imports under the normal regime and the TPA regime. For tobacco the importance of the TPA regime is marginal. Total imports show an upward trend, with smooth fluctuations. The same fluctuating pattern is recorded for exports, although in this case quantities seem to be declining slightly over the years.

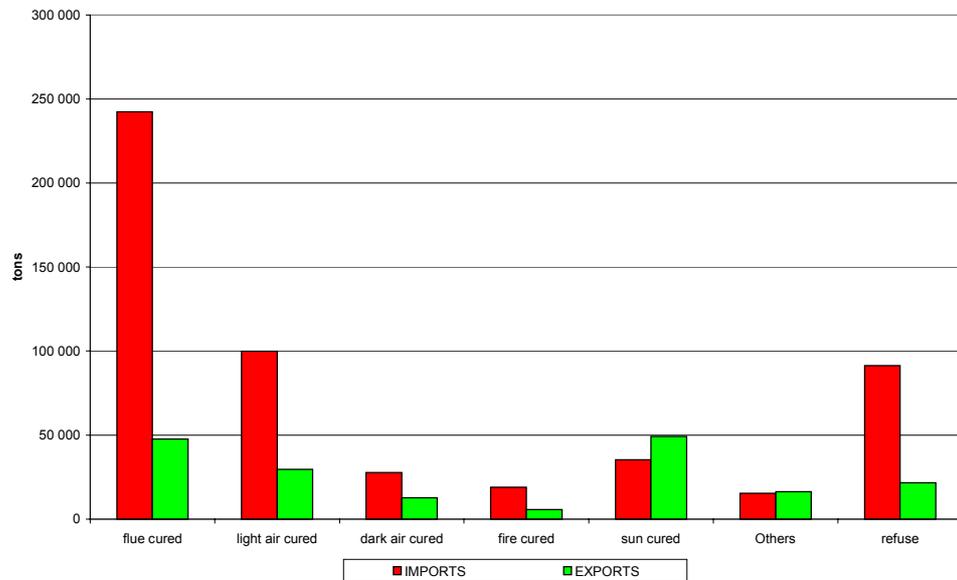
Graph 22 – EU imports, exports, TPA regime and normal regime – tobacco including tobacco refuse



Source: EUROSTAT

Of the different varieties the most imported is Flue Cured, while Sun Cured is exported most. The graph below also shows that trade in tobacco refuse is not negligible. The overall value of imports is 2.26 billions € (average 1999-2001). Flue Cured together with Light Air Cured varieties represents 74% of the total. The value of exports over the same period averaged 0.49 billion €, with Sun Cured and Flue Cured varieties together making up 56% of the total.

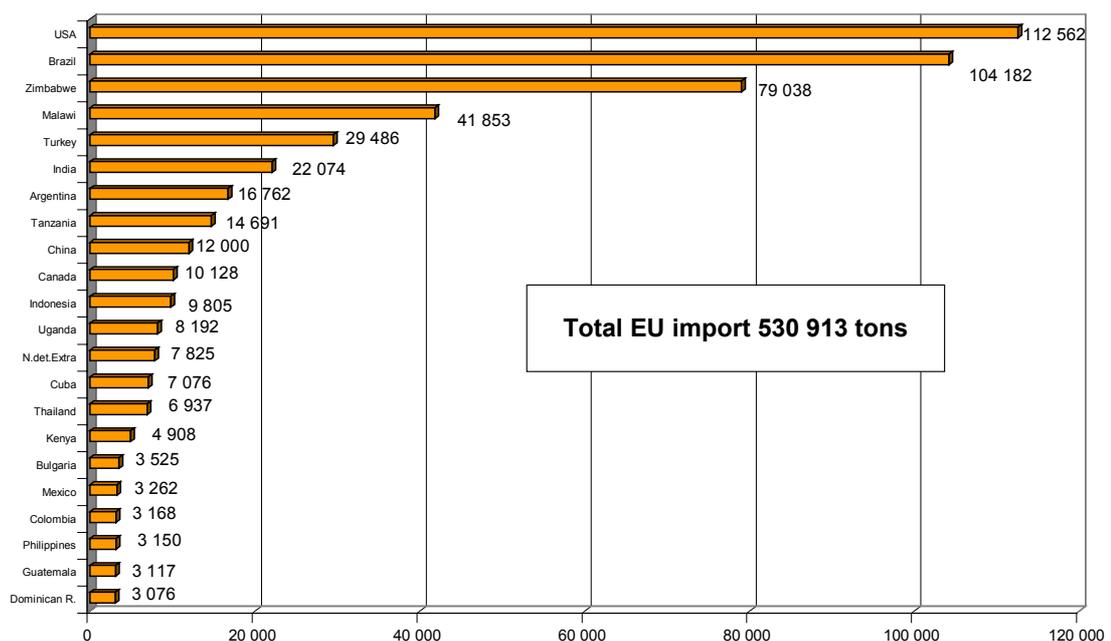
Graph 23 – EU imports and exports by group of varieties (included tobacco refuse) - average 1999-2001 – in tons



Source: EUROSTAT – (The CN codes for Sun Cured also includes the three oriental variety groups)

While EU imports draw on a great number of small suppliers, the USA and Brazil make up 41% of the total. The EU in particular imports Flue cured varieties from the USA and Brazil.

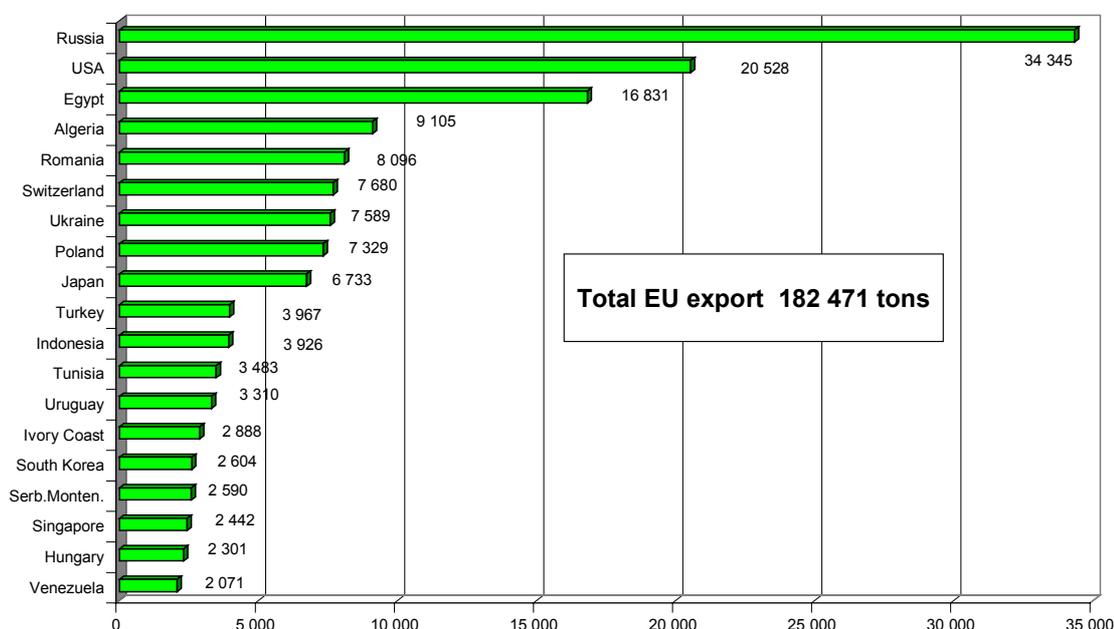
Graph 24 – EU 15 imports from third countries (average 1999-2001) - (in tons)



Source: EUROSTAT

There is a more balanced spread of EU exports. Main destinations are Russia (19%), the USA (11%) and Egypt (9%). EU exports to Russia are concentrated on the Sun Cured group of varieties, including the Orientals, and tobacco refuse. To the USA the EU exports Sun Cured varieties, including the Orientals, followed by Dark Air Cured, and to Egypt the Flue Cured group of varieties.

Graph 25 – EU 15 exports toward third countries (average 1999 – 2001) – (in tons)



Source: EUROSTAT

Intra-trade flows, based on the average for 1999-2001, shows total exchanges within the EU of 184,159 tons, slightly higher than exports. Italy with 49 thousand tons, Greece with 30 thousand tons and Spain with 20 thousand tons are the main suppliers. Germany with 40 thousand tons, followed by Belgium with 23 thousand tons and the United Kingdom with 21 thousand tons, are the main buyers. Most traded varieties are Flue Cured (65 thousand tons), Light Air Cured (35 thousand tons) and Sun Air Cured including the Orientals (24 thousand tons). Tobacco refuse (39 thousand tons) also represents a significant share of EU intra-trade.

#### 1.3.4. Utilisation

Eurostat does not collect data on the use of raw tobacco or the final consumption of tobacco and does not calculate the specific balance sheet. For this reason it is only possible to estimate the internal use of raw tobacco on the basis of the following calculation:

$$\text{Utilisation} = \text{Imports} + \text{Production} - \text{Exports} \pm \text{stocks variation}$$

*It should be noted that the stock data are available only at first processing industry level and for this reason it is possible that stock figures refer to the product both before and after processing. In some case tobacco refuse is also counted. For 2001 the following calculation gives an EU utilisation of 586,965 tons.*

balance sheet	1994	1995	1996	1997	1998	1999	2000	2001
production	328 786	333 187	337 020	335 076	342 021	334 191	335 491	327 587
imports	485 550	493 432	538 749	536 709	541 308	530 622	520 077	542 039
exports	208 935	283 866	218 863	168 407	187 245	173 676	184 957	188 779
stocks var.	-19398	-35260	6265	-17746	31133	-113956	37480	-93882
utilisation	586 003	507 493	663 171	685 632	727 217	577 181	708 091	586 965

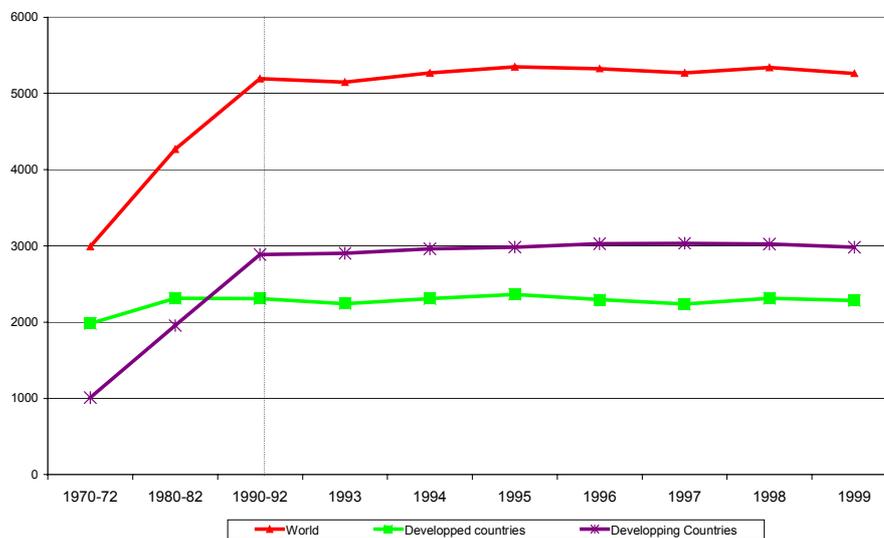
Source: EUROSTAT COMEXT – Member States communications

On the basis of EU production (Member State communications) and the estimated utilisation, the EUs degree of self-sufficiency in raw tobacco is 53%.

### Consumption of cigarettes

World consumption of cigarettes is indicated below:

Graph 26 – Evolution of cigarette consumption in the World - (in tons)

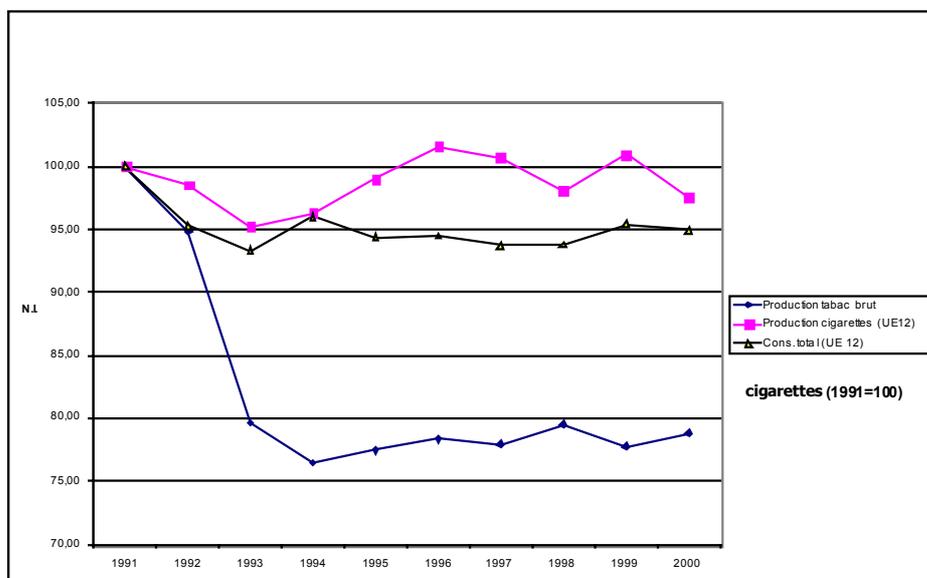


Source: USDA/FAO

Consumption appears stable from 1993 to 1999. However, the developing countries consume more cigarettes than developed countries. World Bank estimates suggest that smuggling account for between 6 and 9% of all world consumption.

The graph below shows the evolution of cigarette consumption relative to the production of cigarettes and raw tobacco in the EU. (These figures refer only to legal transactions).

Graph 27 – Evolution of cigarette consumption relative to the production of cigarettes and raw tobacco in the EU, between 1991 and 2000 - (1991=100)

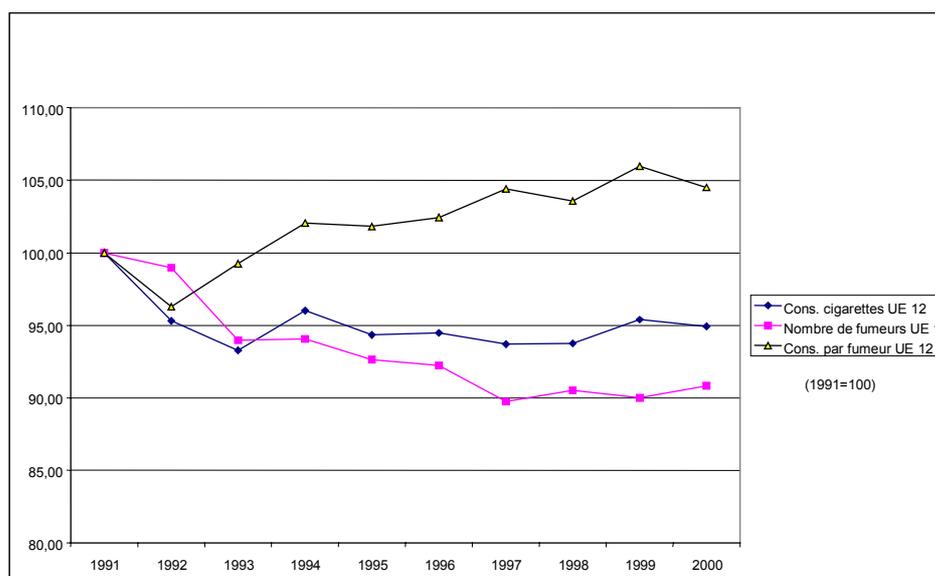


Source: CECCM – EUROSTAT and EC regulations

This graph shows that consumption has remained relatively stable while tobacco production fell sharply between 1991 and 1994. Total consumption of cigarettes in the EU in 1999 was 628,000 tons. It is interesting to see that in the period 1991 – 2000 cigarette production overtook EU consumption.

The next graph shows that, while the number of smokers fell, per capita consumption increased. The overall consumption of cigarettes therefore remained relatively stable. The consumption of hand-rolled cigarettes increased in the countries of North and East Europe.

Graph 28 – Evolution of total consumption of cigarettes, consumption per capita and number of smokers – 1991/2000 (1991=100)



Source: CECCM

The evaluation report produced in 2002 by COGEA affirmed that consumption of cigarettes in the EU is not at all linked to the tobacco CMO. This would suggest that any change to the CMO and consequently to EU production of tobacco would have no impact on the EUs cigarette consumption.

## 1.4. Prices

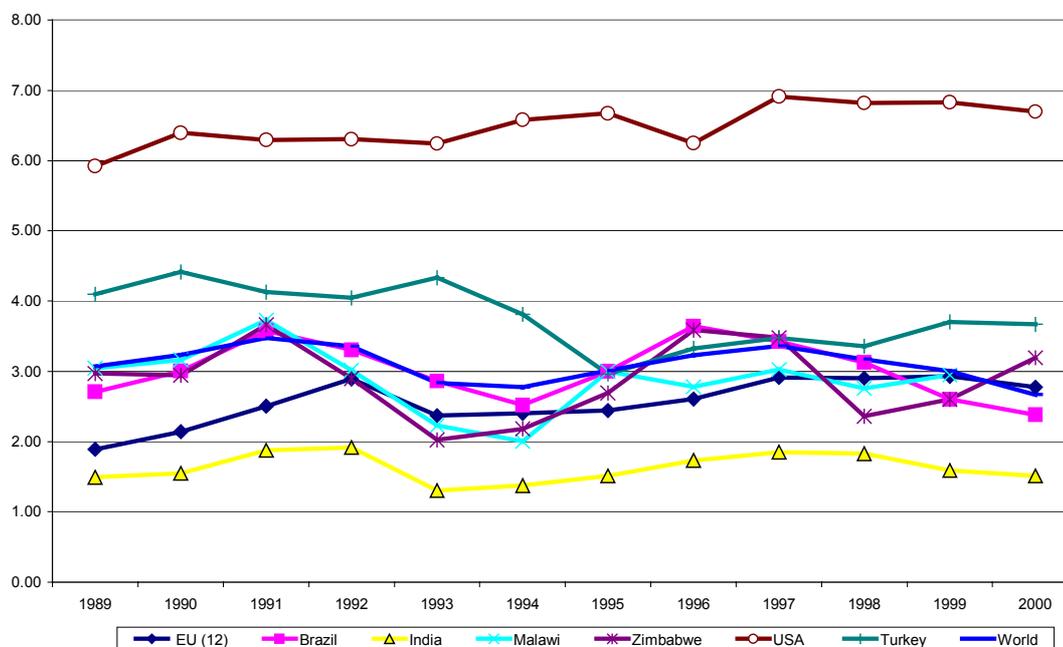
### 1.4.1. World prices

For processed raw tobacco (unmanufactured tobacco), which is the product traded throughout the world, no international prices fixing exists to guide the market.

*In reality, a few multinational traders and manufacturing corporations determine tobacco prices, using a complex grid to evaluate quality, and on the basis of availability of supply and the volume of stocks. Also, speculation may influence prices, as the market in tobacco is highly concentrated around a limited number of manufacturing and trading corporations.*

A wide range of prices therefore exists for each variety. In these conditions the most reliable prices are the FAOs, although as these are an average of world export prices, they can only be indicative. The evolution of these prices shows a cyclical pattern and a slight downward trend (-1.16%). When expressed in dollars it is possible to see at World level a minimum price of 2.67 \$ per kg in 2000 and a maximum price of 3.47 \$ per kg in 1991.

Graph 29 – World evolution of average export prices for tobacco (in US \$/kg)



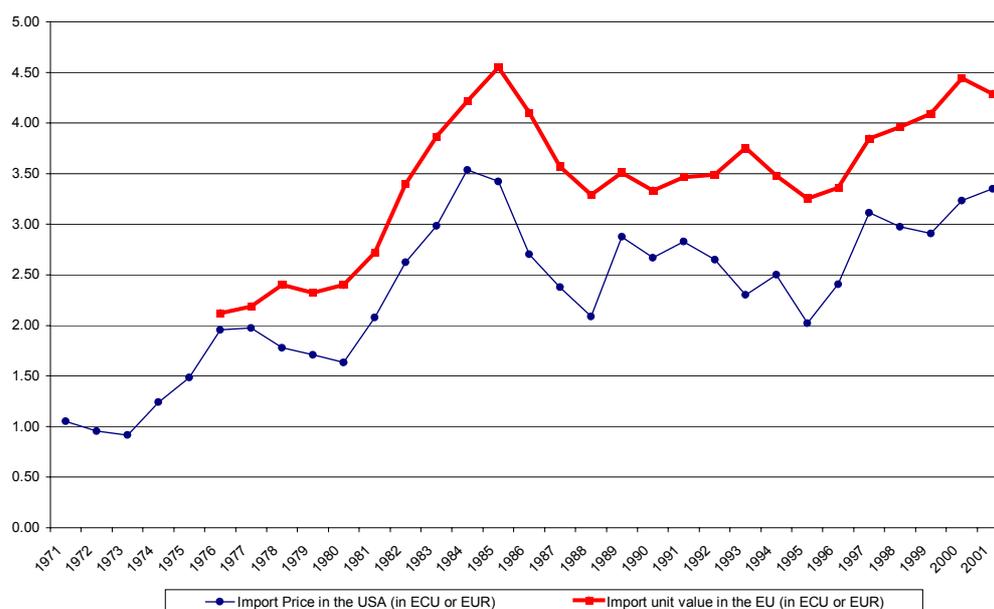
Source: FAO (EU(12) includes the intra-trade)

Different trends can be observed in different countries. For the EU-12 the average (geometric) increase, calculated between 1989 and 2000, gives a result of +3.25% and for USA +1.03%. In some cases there was a negative price development, as in the case of Turkey (-0.92%) and Brazil (-1.07%). The oscillation in world prices can in part be compensated by phased marketing. Oscillation is less marked for the USA, while for Zimbabwe and Malawi large variations have been recorded.

Variation in market demand and the different quality of tobacco, are responsible for generating the large prices differences. The USA and to a lesser extent Turkey, show the best prices. However, the USA mainly exports Virginia and Burley varieties, while Turkey exports oriental tobaccos.

The graph below shows the evolution of prices for tobacco imports into the USA from 1971 to 2001 and into the EU from 1976 to 2001. While both lines follow a parallel path, the EU import prices are always higher than the USAs.

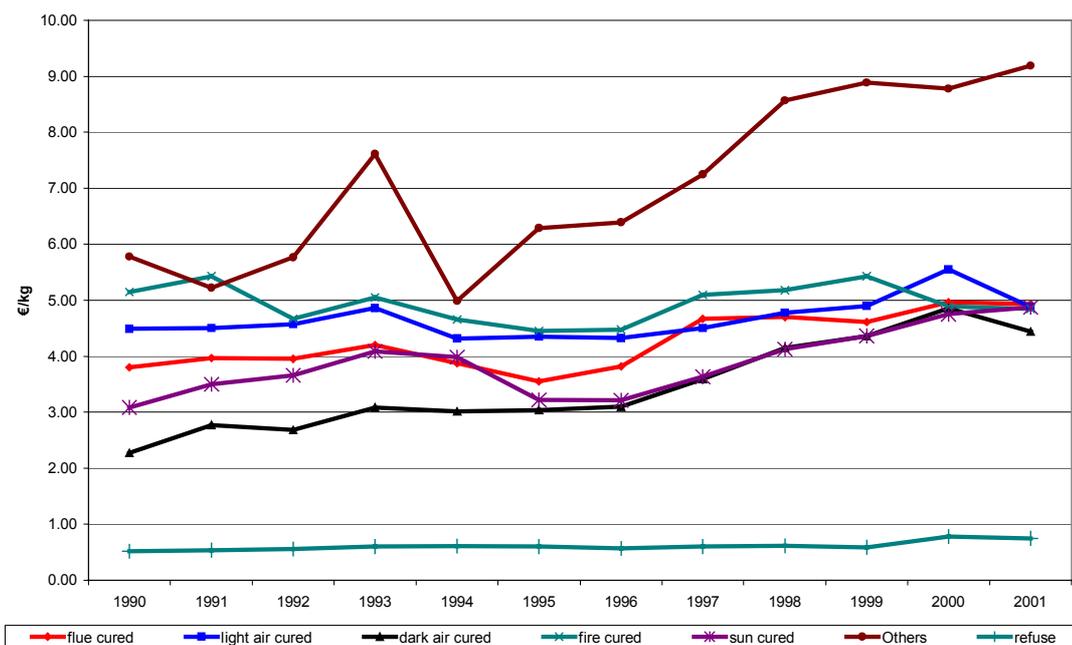
Graph 30 – Evolution of import prices in the USA and in the EU (in EUR or ECU/kg) (CIF prices)



Source: UNCTAD / EUROSTAT

Expressed in €/kg the unit value of imports shows only a slight increase from 1990 to 2001, except for the oriental varieties, which recorded a sharper increase in value. Unit values of the other five groups have been converging over the years. The unit values of exports also increased only slightly, with the exception of tobacco refuse which was stable and Fire Cured, whose unit value increased more dynamically than the other groups.

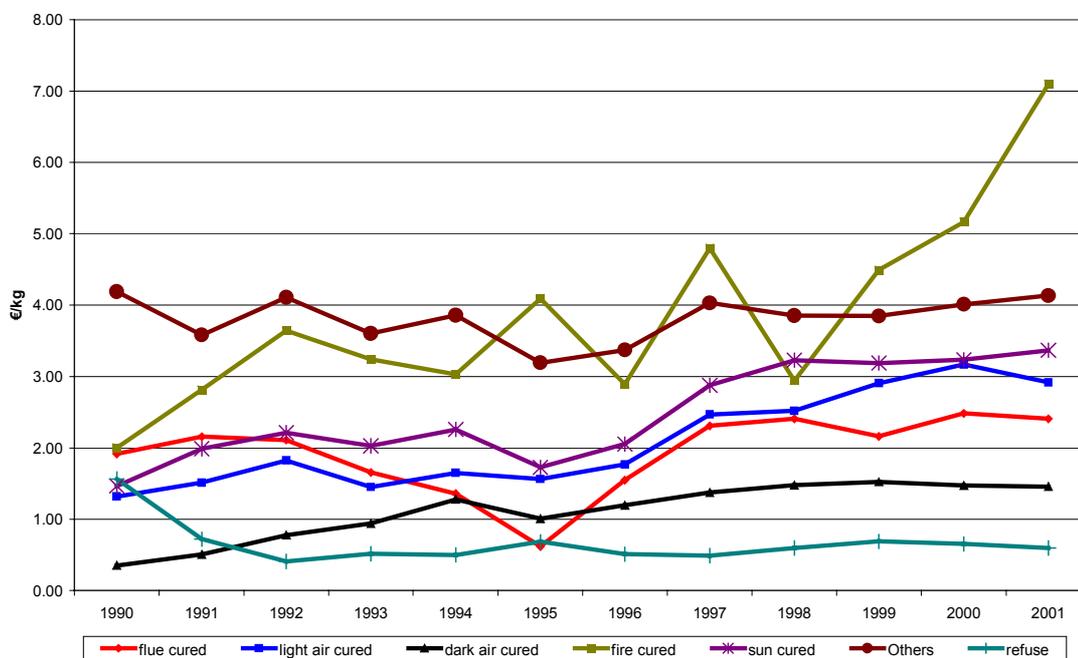
Graph 31 – EU import unit value €/kg (CIF) by group of varieties (including tobacco refuse)



Source: EUROSTAT – (The CN codes of the Sun Cured includes also the three groups of oriental varieties)

For imports, the highest unit values (average 1999-2001) are realised on tobacco from the USA (7.44 €/kg), South Africa (5.50 €/kg) and Mexico (5 €/kg).

Graph 32 – EU export unit value €/kg (FOB) by group of varieties (including tobacco refuse)



Source: EUROSTAT – (The CN codes of the Sun Cured includes also the three groups of oriental varieties)

For export, the best unit values (average 1999-2001) are realised for tobacco sales to Turkey (4.25 €/kg) and Tunisia (4.04 €/kg) while the export value of sales to the USA is 2.86 €/kg.

### 1.4.2. European prices

An indication of trend in demand in the EU for the different variety groups is given in the following table (*source: (EC) regulation 2075/1992, DG AGRI, COGEA*):

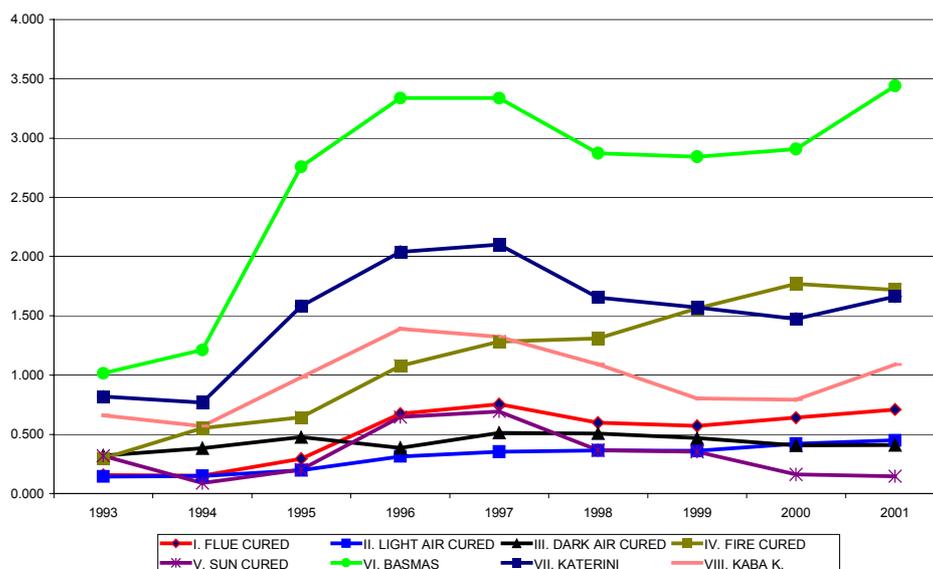
<i>Groups of Varieties classified on the basis of the drying process</i>	<i>Varieties</i>	<i>Production's zones</i>	<i>Distribution of production in 2001</i>	<i>Manufacture destination</i>	<i>Demand</i>
I. Flue Cured	Virginia, Virginia D and hybrids thereof, Bright	Some varieties of France, Italy (Veneto), Spain	40.4%	production of cigarettes "american blend"	
		Other MS or regions			
II. Light Air Cured	Burley, Badischer Burley and hybrids thereof, Maryland	Every producer MS	24.3%		
III. Dark Air Cured	Badischer Geudertheimer, Pereg, Korso, Paraguay and hybrids thereof, Dragon Vert and hybrids thereof, Philippin, Petit Grammont (Flobecq), Semois, Appelterre, Nijkerk, Misionero and hybrids thereof, Rio Grande and hybrids thereof, Forchheimer Havanna Iic, Nostrano del Brenta, Resistente 142, Goyano, Hybrids of Geudertheimer, Beneventano, Brasile Selvaggio and similar varieties, Fermented Burley, Havanna Kentucky and hybrids, Moro di Cori, Salento	Spain (Andalusia)	10.0%	Dark cigarettes and cigars	
		Other MS or regions			
IV. Fire Cured	Kentucky and hybrids, Moro di Cori, Salento	Italy	1.9%	cigars and "Toscani"	
V. Sun Cured	Xanthi-Yaka, Perustitza, Samsun, Erzegovina and similar varieties, Myrodata Smyrnis, Trapezous and Phi I, Kaba Koulak (non classic), Tsebelia, Mavra	Greece	4.1%	production of local traditional cigarettes	
		Italy (Puglie)			
VI. Basmas	Basmas	Greece	8.1%	give taste and	
VII. Katerini	Katerini and similar varieties	Greece	7.1%	aroma to the	
VIII. Kaba Kulak	Kaba Koulak (classic), Ellassona, Myrodata Agrinion, Zichnomyrodata	Greece	4.0%	cigarettes american blend	

The average prices for EU exports remained below the world averages from 1989 to 1999 (reaching a low point of -38.4% in 1989). However, world and EU prices have tended to converge and in 2000 the EU price overtook the world price by 3.9%.

Since 1996, after the EU Council decided that the payment of the premium would be transferred from the first processing industry to the producer or producer organisation, buying prices of raw tobacco have improved and better reflected the market value.

A lack of efficiency on the part of some of the first processing industry may have been one of the reasons that kept prices low. This problem has still not been resolved. The difference in prices between Member States producing tobacco also depends on the degree of concentration of supply (producer groups) and the processing industry. In Italy and to a lesser extent Greece, the large number of economic actors has a negative effect on market prices. In 2001 the largest number of first processing industries was recorded in Italy (61) followed by Greece (33) and Belgium (9). France, with only 2 enterprises, is the exception.

Graph 33 – Evolution of EU prices by group of varieties (in €/kg)



Source: Member States (average prices paid by first processing industry)

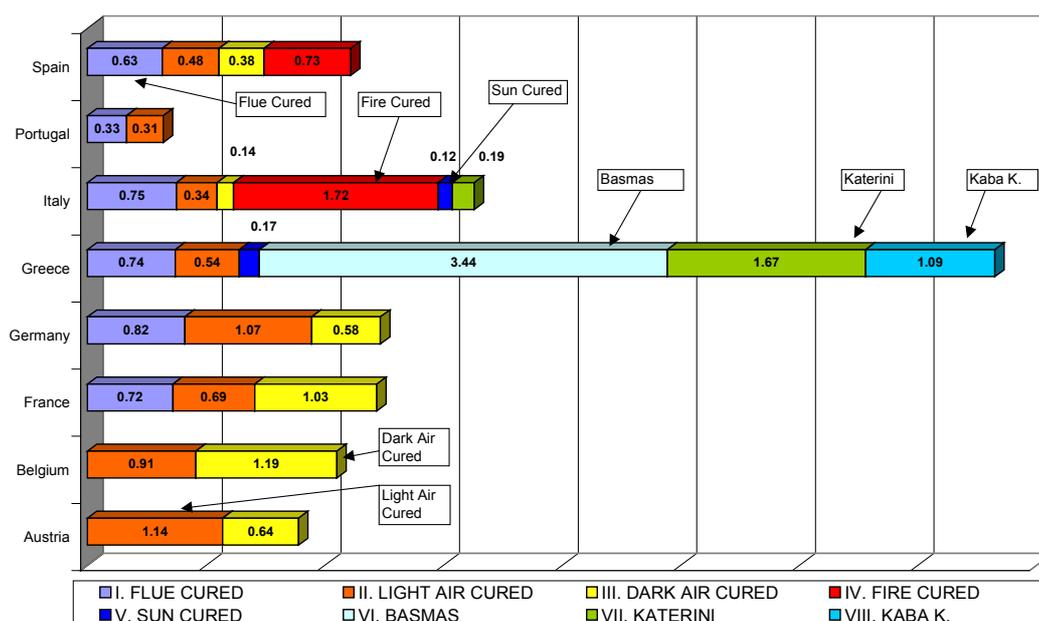
An analysis of the evolution of raw tobacco selling prices by variety shows that from 1993-2001 all prices increased with the exception of Group V, Sun Cured. In this case prices fell, despite a sizeable reduction in cultivated area, reflecting the persistent difficulty of selling tobacco from this group of varieties. A similar situation can be observed for Group III (Dark Air Cured) due to the falling consumption of dark cigarettes. This group of varieties is anyway used to produce cigars. The biggest increase can be observed for Basmas, Katerini and Fire Cured from 1995 to 1997. Prices subsequently tended to stabilise at a lower level until 2000, except for Fire Cured. In 2000 and 2001 there was a notable upturn for Basmas, Katerini and Kaba Kulak.

In percentage terms in the period 1993-2001 the most spectacular price increase was realised by the Fire Cured (+479%), the Flue Cured (+348%), the Basmas (+239%) and Light Air Cured (+213%) groups.

Looking at the figures by Member State, again from 1993-2001, the biggest increases were realised in France and Spain for the Flue Cured group (respectively +1025% and +813%), in Italy and Greece for the Light Air Cured (respectively +600% and +507%), in Italy for the Fire Cured (+482%) and in Greece for the Basmas (+239%). However, it is worth noting that Basmas varieties are only cultivated in Greece. Prices for Sun Cured in Greece and Dark Air Cured in Italy have increased respectively by 315% and 1173% but remain very low.

In absolute terms the highest prices were observed, in 2001, in Germany (0.820 €/kg) and Italy (0.754 €/kg) for the Flue Cured varieties, in Austria (1.140 €/kg) and in Germany (1.070 €/kg) for Light Air Cured, in Belgium (1.190 €/kg) and France (1.030 €/kg) for Dark Air cured, in Italy (1.724 €/kg) for Fire Cured, in Greece for Basmas (3.440 €/kg), Katerini (1.664 €/kg) and Kaba Kulak (1.090 €/kg). The lowest price was recorded in Italy for the Sun Cured group (0.120 €/kg).

Graph 34 – Magnitude of prices by group of varieties and by Member States in 2000  
(in €/kg)



Source: Member States (average prices paid by first processing industry)

Between 1993 and 2000 the weighted average of EU prices increased by 151% while the overall unit value of imports increased by only 18% over the same period. The following table compares the different prices, in absolute values, in €/kg in 1993 and 2000.

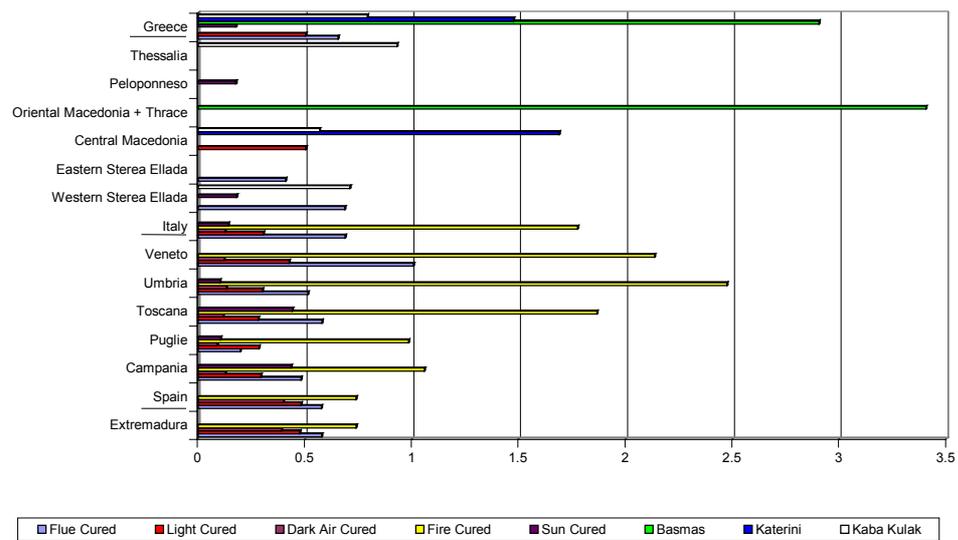
	EU price average arithmetic weighted	unit value of the EU export	average world price to export	unit value of the EU import
1993	0.32	1.75	2.83	3.76
2000	0.80	2.77	2.67	4.44

Source: respectively, Member States / EUROSTAT / FAO (including EU-12 prices) / EUROSTAT

As these prices are recorded for the product at different stages of marketing and processing, the comparison can only be regarded as indicative.

- The EU weighted arithmetic average price refers to raw tobacco at producer stage and before first processing, the unit value of EU exports refers to raw tobacco after first processing at FOB stage, the average world export price refers to raw tobacco after first processing and at FOB stage and the unit value for EU imports refers to raw tobacco after first processing and at CIF stage.

Graph 35 – Price scale by group of varieties and by major regions of EU production in 2000 (in €/kg)



Source: Payment Agencies

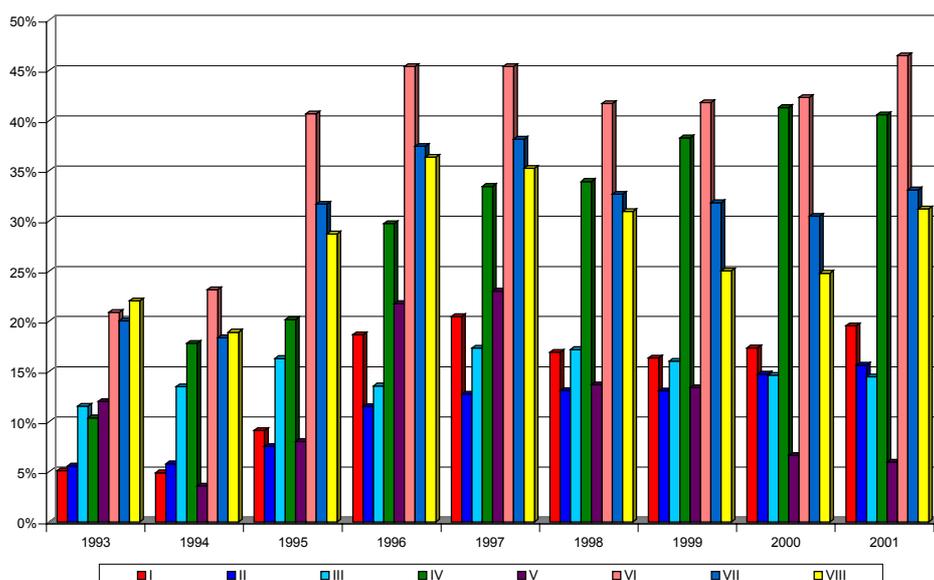
A comparison between the major regions of production in 2000 shows that there are sometimes big differences in price for the same group of varieties. These differences should reflect variations in quality. The Oriental varieties and in particular Basmas and Katerini, produced in Greece, attract the highest prices, followed by the Fire Cured group produced in some Italian regions.

Relationship between prices and total receipts (net premiums + market price)

At this point in the analysis it is also interesting to compare the evolution of EU market prices and the level of total receipts (defined as the total net premiums<sup>1</sup> + market price), received by the tobacco producer for raw tobacco. This relationship is very important because it expresses the tobacco producers' level of dependence on EU aid and the gap that remains between market price and total receipt. In other words, when the ratio is high the producer is less dependent on EU subsidies, as the market price is higher.

<sup>1</sup> Net premium is calculated in this way: Total premium – % reduction for producers' group – % reduction for Tobacco fund.

Graph 36 – Evolution of relationship between market price and total receipts  
 (= net premium + market price)  
 by variety (in %)



Source: calculations on the basis of Member States communications and EU regulations

This graph shows clearly that the ratio market price/total receipts increased between 1993 and 2001, except for groups III and V. For groups IV (Fire Cured), VI (Basmas), VII (Katerini) and VIII (Kaba-Kulak) the improvement was particularly dramatic. In the case of groups IV and VI the market price represented over 40% of total receipts.

By Member State, the data shows that in 2001 the best were recorded for Flue Cured in Italy (21%), for Light Air Cured in Austria (27%) and Germany (25%), for Dark Air Cured in Belgium (31%) and France (28%), for Fire Cured in Italy (41%), and for Basmas (46%), Katerini (33%) and Kaba Kulak (31%) in Greece.

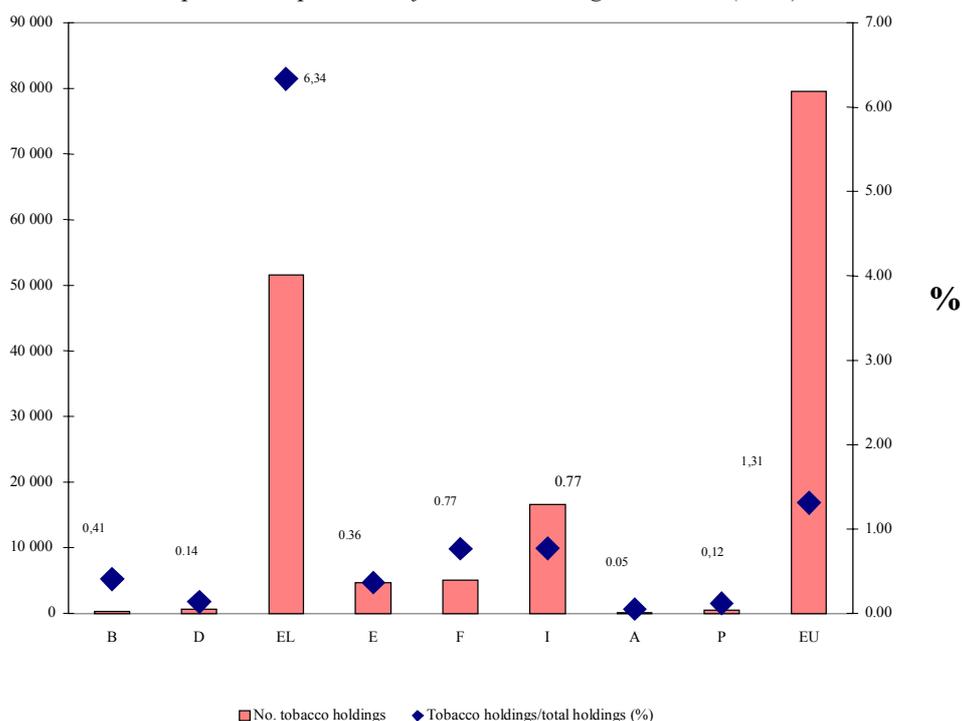
In the same year the worst results were recorded in Portugal (10%) for group I, in Portugal (12%) and Italy (13%) for group II, in Italy (6%) for group III, in Italy (5) and Greece (7%) for group V and in Italy (5%) for group VII.

## 1.5. Tobacco holdings: structural analysis

### 1.5.1. Structural characteristics of tobacco holdings

According to EUROFARM figures, in 2000 there were 79,510 farms producing tobacco in the EU, representing only 1.33% of all EU farms. In 2000, almost 64% of these holdings were concentrated in Greece, where they make up about 6.8% of total Greek farms and even more of their Standard Gross Margin (SGM 12.1%). The second most important country, in terms of the number of tobacco holdings, is Italy, with a share of 21%.

Graph 37 – Importance of tobacco holdings in the EU (2000)



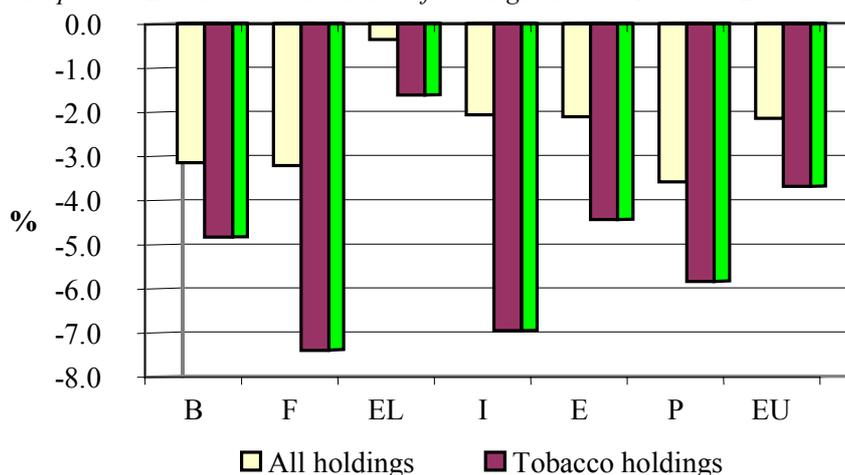
Source: EUROFARM survey of EUROSTAT

Over the last decade (1990-2000)<sup>2</sup>, the number of holdings growing tobacco declined faster than the total number of holdings. While the total number of holdings in the EU decreased by 2% per year (Annual rate of change)<sup>3</sup>, holdings with tobacco fell by 3.6% per year. The countries that experienced the greatest loss of tobacco holdings were France and Italy where the decline was, respectively, to 7.4% and 6.9% for tobacco holdings. In absolute terms this represented, respectively, 5,890 and 17,540 farms.

<sup>2</sup> Because 1990 EUOFARM data for Austria and Germany are not available, these two countries are not included in the variation analysis.

<sup>3</sup> The annual rate of change, in symbol % TAV, is used for the calculation of changes in a given variable over a period of time. It is calculated as follows:  $100 * \text{Anti-Log} \left[ \text{Log} \frac{(Y^{t+1})}{(Y)} : N \right] - 100$ . Where  $Y^{t+1}$  is the value of variable referred to the last year available (in our case 2000);  $Y^t$  is the value of the same variable referred to a previous year (1990);  $n$  is the number of years between the first and the last year considered.

Graph 38 – Decrease in the number of holdings between 1990 and 2000



Source: EUROFARM survey of EUROSTAT

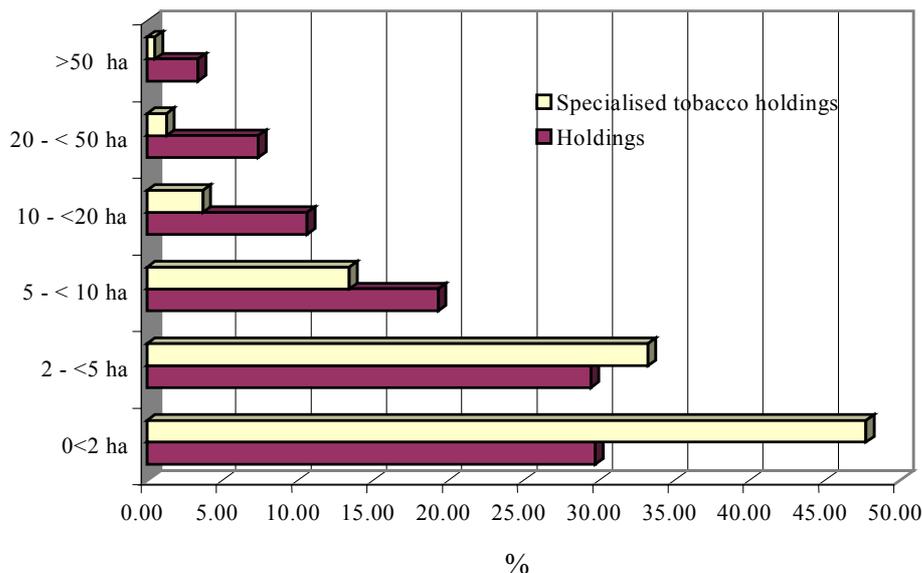
Figures for specialised farms give an idea of the magnitude of professional holdings: almost half (49.8%) the holdings growing tobacco are specialised<sup>4</sup> in this crop. In Greece and Spain the figure is over 50%, while it is lower in Belgium and France, where tobacco is often grown alongside other crops. In Italy and Portugal specialised tobacco holdings make up about 35% of the total. Since 1990 specialisation has tended to increase in all tobacco-producing Member except Belgium.

Irrigation is important for tobacco production, since it increases the vegetal mass (especially for the varieties of groups I and II) and improves the quality of the tobacco. According to the FADN database, tobacco farms with irrigation have increased from 8% to 36% over the last seven years. However, it should be emphasised that the RICA sample includes only Greek and Spanish data, as the other Member States have not communicated information on their irrigated area.

The breakdown of tobacco holdings by size reveals that almost 60% of holdings growing tobacco have less than 5 ha, while more than 18% range from 5 to 10 ha. This small scale is even more evident in the figures for specialised farms, where 81.1% have less than 5 ha.

<sup>4</sup> The EUROSTAT definition of specialised tobacco holding is the same than the FADN. In this case a tobacco holding is said to be specialised when the standard gross margin is at least 2/3 of its SGM.

Graph 39 – Breakdown of EU tobacco and specialised holdings by farm size - 2000

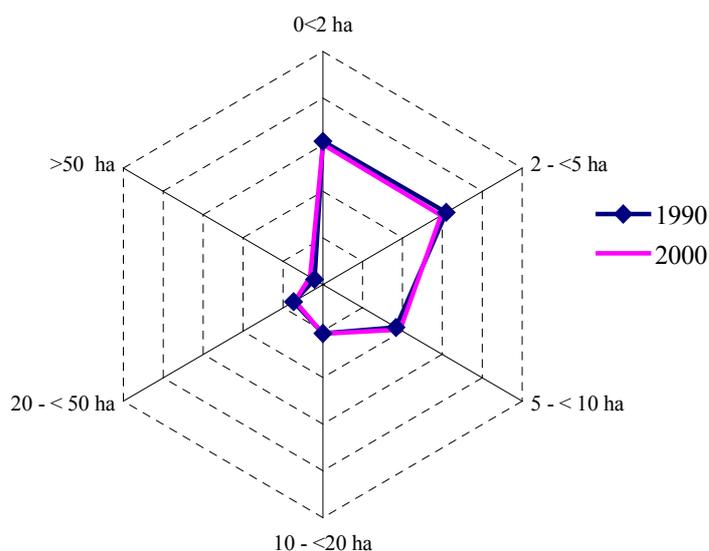


Source: EUROFARM survey of EUROSTAT

The small scale of the typical tobacco holding limits the possibility for farmers to diversify.

From 1990 to 2000 the breakdown of holdings by size of UAA at EU level remained almost unchanged. From the following graph, it is possible to note a very slight decrease in the percentage of very small holdings (between 2 and 5 ha), and 1% increase in the share of holdings between 5 and 10 ha and more than 50 ha.

Graph 40 – Breakdown of tobacco holdings by farm size- EU Level



Source: EUROFARM survey of EUROSTAT

Some changes at Member State level are more significant. In Greece, the percentage of holdings between 2 and 5 ha has been steadily falling, while the share of larger holdings (10-20 ha and 20-50 ha) has been increasing. This trend is more evident in France, where the share of holdings with more than 50 ha has risen from about 13% to 34%, in parallel with a significant fall in the number of holdings between 10 and 20ha (from 25% to 13%). In Italy and Belgium the trend is towards, an increase in the intermediate size classes: 10-20 ha for Italy and 20-50 ha for Belgium.

One consequence of these changes is a slight increase in the average size of holding. This aspect will be described later.

*Breakdown of tobacco holdings by size and Member State (%)*

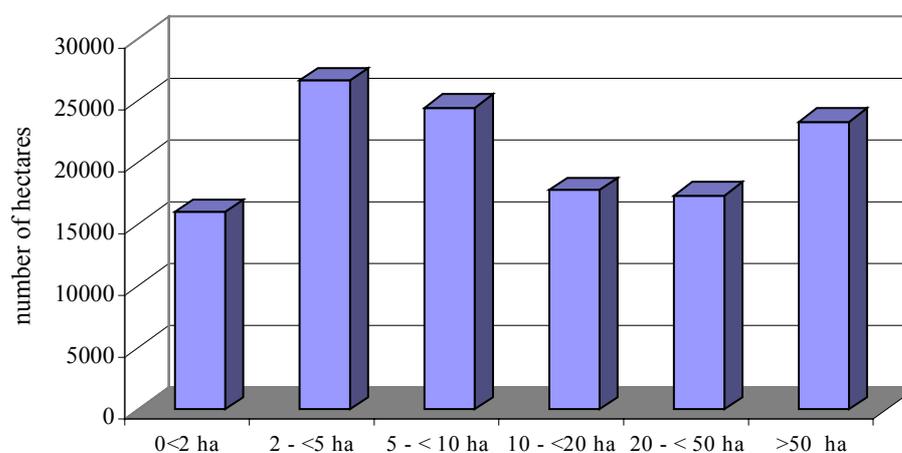
	Belgium		Greece		Spain		France		Italy		Portugal		EU	
	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000	1990	2000
0<2 ha	4.9	4.0	33.4	33.0	21.0	17.9	1.4	1.4	37.4	32.9	43.0	42.0	30.7	30.0
2 - <5 ha	4.9	4.0	36.3	33.6	32.1	30.1	1.8	1.8	31.0	26.3	30.1	30.0	31.0	29.7
5 - < 10 ha	24.4	16.0	19.3	19.6	27.4	27.7	7.9	3.7	18.4	21.7	9.7	10.0	18.4	19.4
10 - <20 ha	46.3	36.0	8.6	9.4	11.7	14.7	24.9	12.5	8.8	12.4	4.3	4.0	10.5	10.6
20 - < 50 ha	19.5	40.0	2.1	3.9	4.9	6.0	51.0	46.7	3.0	4.8	4.3	4.0	7.3	7.1
>50 ha	0.0	0.0	0.3	0.4	3.1	3.6	12.9	33.9	1.5	2.0	8.6	10.0	2.1	3.2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: EUROFARM survey of EUROSTAT

Despite these changes, the distribution of holdings among the different size classes remains unbalanced. There is still a myriad of very small tobacco holdings across the European Union, with a very strong concentration in Greece, Spain, Portugal and Italy. In contrast, the tobacco holdings of Belgium, France, Austria and Germany are characteristically much larger.

The area cultivated with tobacco in the EU, in 2000, was 125,420 ha. The breakdown of this area between the different size classes of farm is shown, in absolute terms, in the following graph:

*Graph 41 – Breakdown of tobacco hectares by farm size –EU (2000)*



Source: EUROFARM survey of EUROSTAT

The largest part of the tobacco-growing area is regrouped in farms between 2 and 5 ha; 5 and 10 ha and over 50 ha. The remaining area is divided fairly

equally between the other size classes. It is interesting to note that, in 2000, 3.4% of farms (those >50 ha) cultivated 18.6% of the total tobacco area and 10.8% of farms (those >20 ha) cultivated 32.4% of the total tobacco area. The following table shows the distribution of tobacco hectares and the number of tobacco holdings in the EU, at a higher level of desagregation:

EU	>0<1	1<2	2<3	3<4	4<5	5<6	6<10	10<15	15<20	≥20	Total
ha tobacco	22 060	34 830	15 650	7 380	4 670	3 770	8 450	5 670	3 740	18 850	125 070
No holdings	39 050	27 040	6 970	2 260	1 110	710	1 170	500	210	410	79 430*
UAA Tot	216 220	243 250	94 220	44 680	25 190	19 140	32 490	31 640	16 260	71 630	794 720

\* For reasons of confidentiality holdings located in areas of minimal production are excluded, thus 79430 does not correspond to the total number of tobacco holdings (79,510).

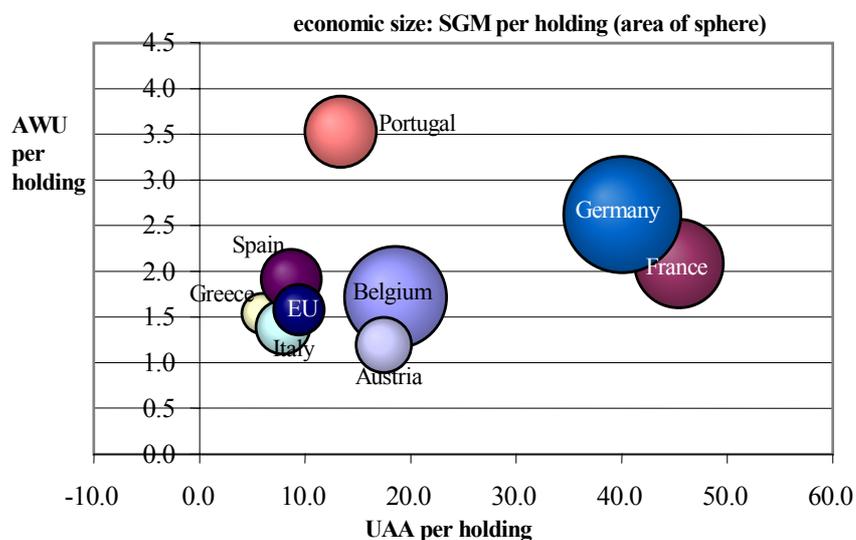
Source: EUROFARM survey of EUROSTAT

The table shows the high concentration of holdings in the smaller size classes. Almost 83% of tobacco holdings, in fact, have less than 2 hectares. An analysis of “representative” tobacco holdings helps to clarify the structural picture of tobacco production at Member State level. Graph 42 illustrates the number of hectares, labour input (AWU) and the SGM per holding. It can be seen that Spain, Italy and Greece have holdings with very similar features. In these countries, farms growing tobacco typically: i) are physically small (with an average UAA around 6 ha per holding); ii) have a low labour input per holding (1.5 AWU on average) and iii) are economically smaller than other EU holdings. Portuguese and Austrian tobacco farms differ from this first group in that they are slightly larger and Portuguese holdings are much more labour intensive.

In contrast, Belgian, German and French tobacco holdings are both economically and physically larger, with farms in France and Germany typically exceeding 40 hectares.

The low average size of tobacco holdings at EU level is mainly due to the small size of holdings in Greece.

Graph 42 – Average characteristics of tobacco holdings



Source: EUROFARM survey of EUROSTAT (see also graph n° 50 for regional analysis)

Although the data varies markedly from country to country, between 1990 and 2000 the average size increased in all Member States except Greece and Spain. For Greece the relative figures were almost stable; for Spain the UAA by holding declined, while the hectares of tobacco per holding increased from 2.7 to 3.7.

At EU level, the average agricultural area per holding increased from 8.4 to 9.4 ha, while the number of tobacco hectares per holding, as well as the value of annual work units, remained almost unchanged. In terms of UAA per holding, the biggest increase was seen in France (from 31.3 to 45.4 ha). This was not accompanied, however, by an equal increase in the number of tobacco hectares, suggesting that tobacco holdings in this country have not taken part in the expansion of UAA.

*Average characteristics by Member States*

	SGM per holding (Ecu/Euro)		UAA per holding		Ha Tobacco per holding		AWU per holding	
	1990	2000	1990	2000	1990	2000	1990	2000
Belgium	42,438	82,575	14.2	18.6	1.1	1.6	1.5	1.7
France	31,771	62,164	31.3	45.4	1.0	1.9	1.9	2.1
Elláda	8,207	12,866	5.2	5.9	1.1	1.1	1.5	1.5
Italy	15,484	23,172	6.3	7.9	1.6	2.1	1.5	1.4
España	13,263	28,441	9.4	8.7	2.7	3.7	1.6	1.9
Portugal	28,756	40,435	12.3	13.4	2.2	4.5	4.1	3.5
Germany		108,040		40.0		6.5		2.6
Austria		24,244		17.5		1.2		1.2
<i>EU</i>	<i>13,254</i>	<i>20,284</i>	<i>8.4</i>	<i>9.4</i>	<i>1.4</i>	<i>1.6</i>	<i>1.6</i>	<i>1.6</i>

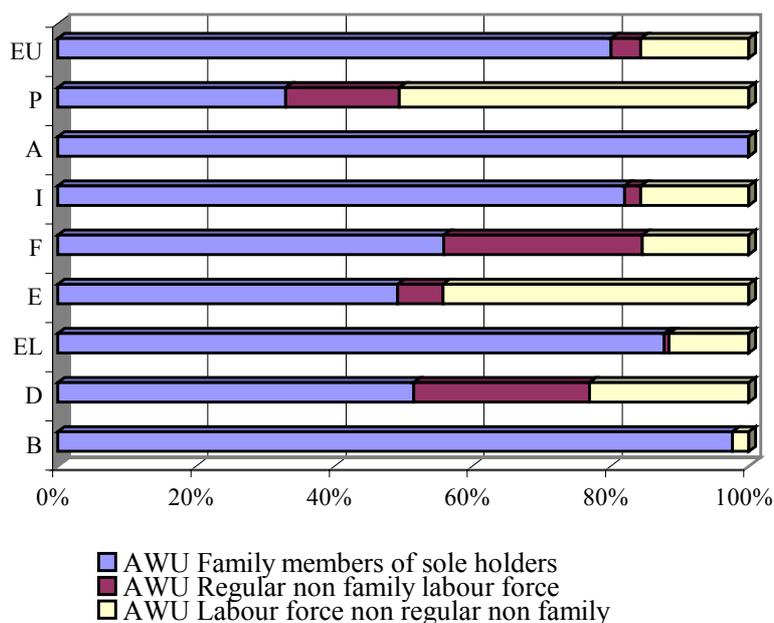
*Source: EUROFARM survey of EUROSTAT*

### *1.5.2. Employment*

***Tobacco production is typically a highly labour-intensive activity.*** Technical constraints limit the extent to which tobacco growing can be mechanised. The tobacco sector is therefore an important employer, using in absolute terms manpower equivalent to 126.070 AWU, which corresponds to 2.4% of the total AWU employed in the agricultural sector. Greece employs the highest number of labour units per year, with 79,230 AWU (Annual Work Units). Italy follows with 23,120 units. Together these two Member States represent 81% of the total labour force employed in tobacco production (126,070 AWU).

In the EU tobacco sector, family labour strongly prevails over other kinds of labour: around 80% of the total labour force (against 73% for holdings without tobacco).

Graph 43 – Labour by type -2000



Source: EUROFARM survey of EUROSTAT

The employment of regular non family labour is quite important in percentage terms for France and Germany, where this kind of worker accounts for about 25-29% of the total. The use of seasonal labour is notable in Portugal (51%), followed by Spain (44.4%) and Germany (23%), where the demand for this kind of worker is concentrated on the summer season.

Over the years, the percentage of family labour has steadily decreased, falling from 86% to 80% (EU level), while the percentage of seasonal workers has risen (from about 12% to 16%).

As tobacco production is a highly labour intensive sector, tobacco holdings characteristically use more annual work units, per farm and per hectare, than other kinds of holdings. On EU average, the AWU per farm is 0.877 for all types of holdings as against 1.586 for tobacco holdings. The AWU per hectare is 0.055 as against 0.158, which corresponds, approximately, to 284 hours per hectare per year.<sup>5</sup>

<sup>5</sup> The Annual Work Unit (AWU) is based on national collective conventions but when nothing is indicated by the Member States EUROSTAT assumes the following relationship: 1 AWU= 1800 hours per year.

Annual work unit per farm and per hectare - 2000

	All Holdings		Tobacco holdings	
	AWU per hold.	AWU per ha	AWU per hold.	AWU per ha
B	1.198	0.053	1.720	0.090
D	1.307	0.036	2.621	0.041
EL	0.664	0.154	1.536	0.280
E	0.833	0.041	1.917	0.129
F	1.425	0.034	2.088	0.046
I	0.628	0.104	1.391	0.164
A	0.912	0.054	1.200	0.076
P	1.257	0.136	3.529	0.079
EU	0.877	0.055	1.586	0.158

Source: EUROFARM survey of EUROSTAT

Portugal, Germany and France show the highest value in terms of AWU per farm, while Greece and Italy record the highest values for labour per hectare.

To complete this analysis it is important to look at some social aspects, such as the age, education and gender of the tobacco farmer. Human resources have an important influence on how farms are managed and on how farmers respond to changes in policy.

At EU level 30% of all tobacco farmers are over 65 years old, while approximately 23% are between 55 and 65. Greece and Portugal have the highest percentage (more than 60%) of tobacco farmers in the over-65 age group. This is typically because smallholders continue to work into their retirement years, a factor which may slow down the process of modernisation and the introduction of new cultural practices.

In France around 19% of holdings is a legal entity or forms part of a group. Germany and Austria are characterised by a bigger proportion of younger holders. This may reflect the more professional nature of northern EU holdings or a different convenience, in their respective countries, to register their name under a different item.<sup>6</sup>

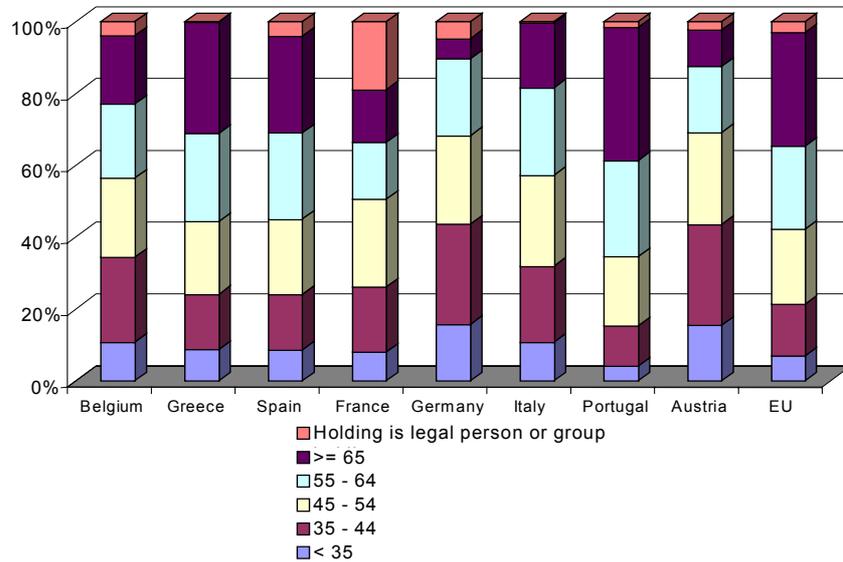
Among the Member States data reveals big differences in the level of training. In Greece, Portugal, Italy and Spain more than 90% of tobacco farm managers have only practical experience. In contrast, the figures for Northern EU countries show a higher percentage of managers with either basic or full training. In France the percentage of fully trained managers is even higher, at about 40%.

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<sup>6</sup> These figures may be questionable: the statistics do not necessarily reflect the fact that older holders retain only a nominal participation, while the real activity is performed by younger members of the family.

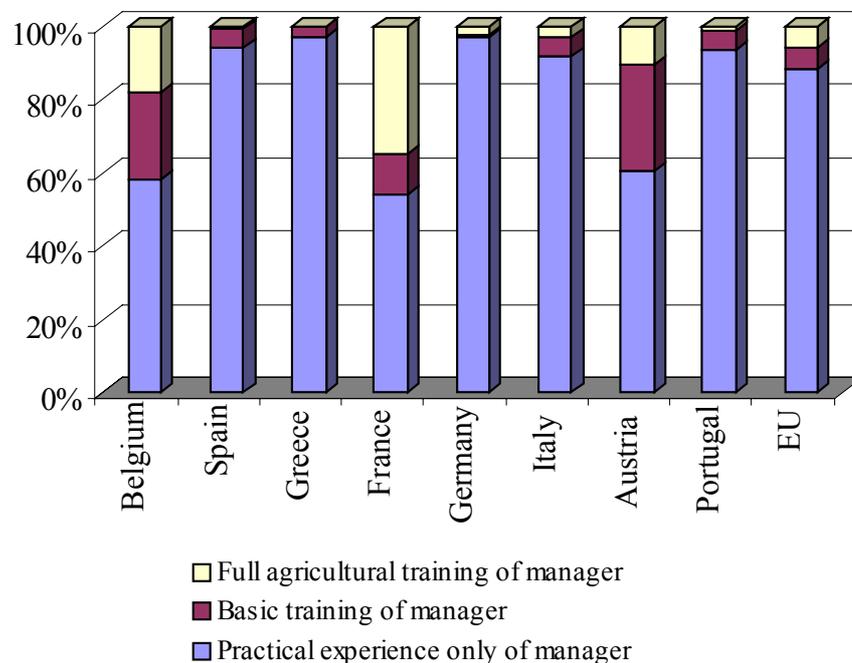
Most tobacco farmers are men; only about 25% of farm holders are women, although the percentage varies widely between the Member States.. Italy and Austria have the highest percentage of women managers, in contrast with Belgium and Germany where the share is respectively 14% and 8%.

Graph 44 – Breakdown of holders by age (2000)



Source: EUROFARM survey of EUROSTAT

Graph 45 – Breakdown of holdings by management training (2000)

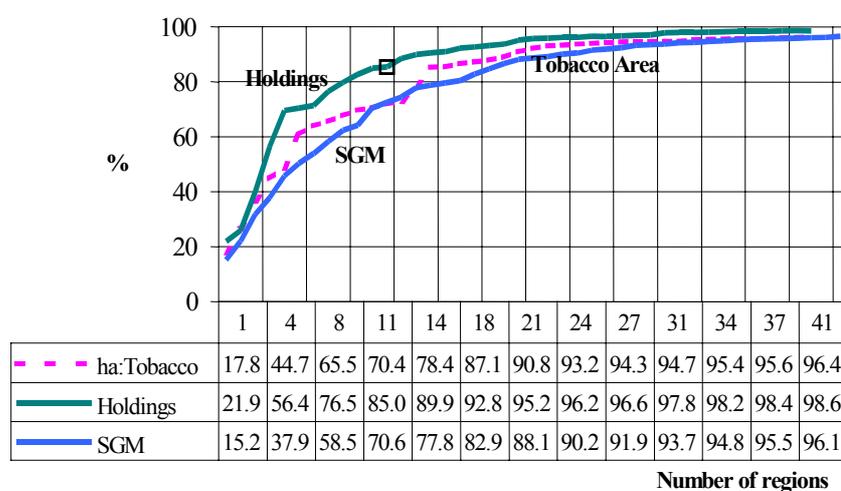


Source: EUROFARM survey of EUROSTAT

### 1.5.3. Regional analysis

Tobacco production is characterised by an uneven distribution of farms across the European Regions (NUTS 2 level). The top seven tobacco producing regions, ranked on the basis of the number of holdings, concentrate around 70% of the total number of holdings, 63% of the area under tobacco and 57% of the total SGM. The top eleven regions concentrate, respectively, 83% of the holdings, 70% of the area and 71% of the SGM. The probable explanation for this high concentration is the climatic conditions needed to grow tobacco. Most of the holdings are located in Greece, followed by Italy, Spain and the South of France, all areas characterised by a typical Mediterranean climate.

Graph 46 – Distribution of tobacco by region in EU (2000)

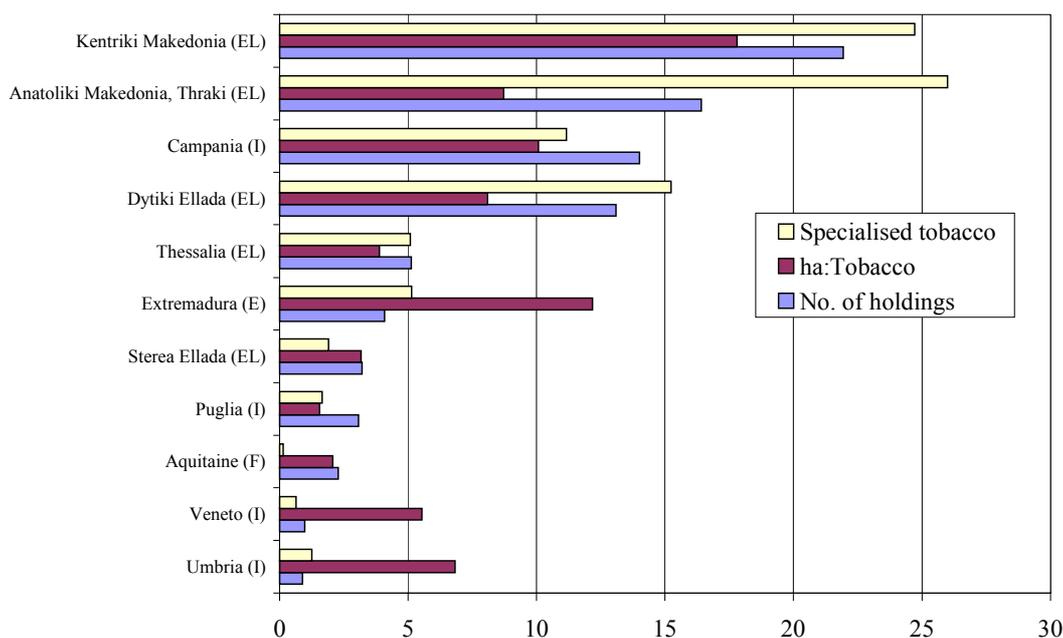


Source: EUROFARM survey of EUROSTAT

A detailed analysis of the top eleven regions shows that one is in Spain (Extremadura), four are in Italy (Puglia, Campania, Umbria and Veneto), one in France (Aquitaine) and five in Greece (Sterea Ellada, Dytiki Ellada, Thessalia, Kentriki Makedonia and Anatoliki Makedonia, Traki).

The following graph shows that Kentriki and Anatoliki Makedonia are the most important production regions, together representing 60% of all tobacco holdings, 25% of the tobacco area and 21% of the total SGM. In addition, 50% of all specialised tobacco farms are concentrated in these two regions.

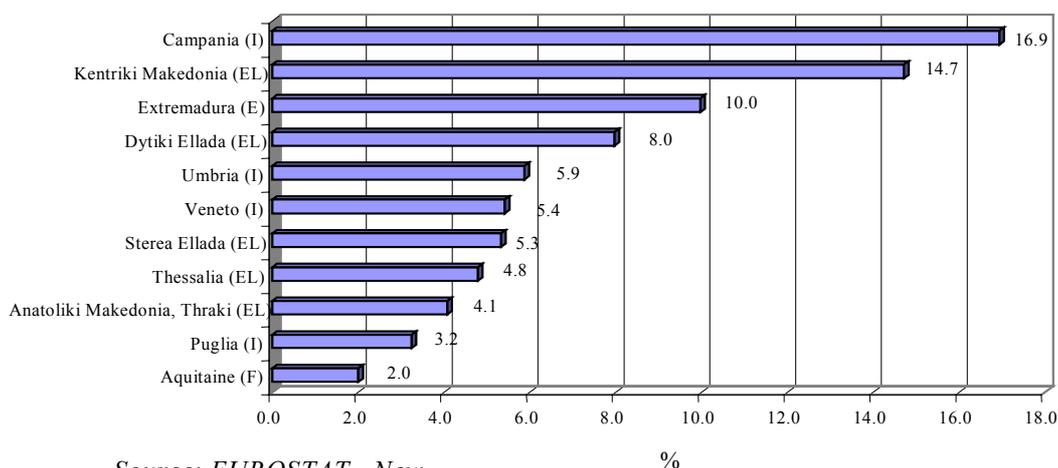
Graph 47 – Tobacco holdings, specialised tobacco holdings and tobacco area by regions (EU=100)



Source: EUROFARM survey of EUROSTAT

The eleven regions under consideration account for nearly 80% of total EU production, corresponding to 289 thousand tons. Campania leads with 16%, followed by Kentriki Makedonia with about 15%. Although more than 25% of the specialised farms are concentrated in Anatoliki Makedonia alone, it produces only 4% of the EU's tobacco, reflecting a very low productivity per hectare and/or a prevalence of small farms.

Graph 48 – Distribution of production in main European regions



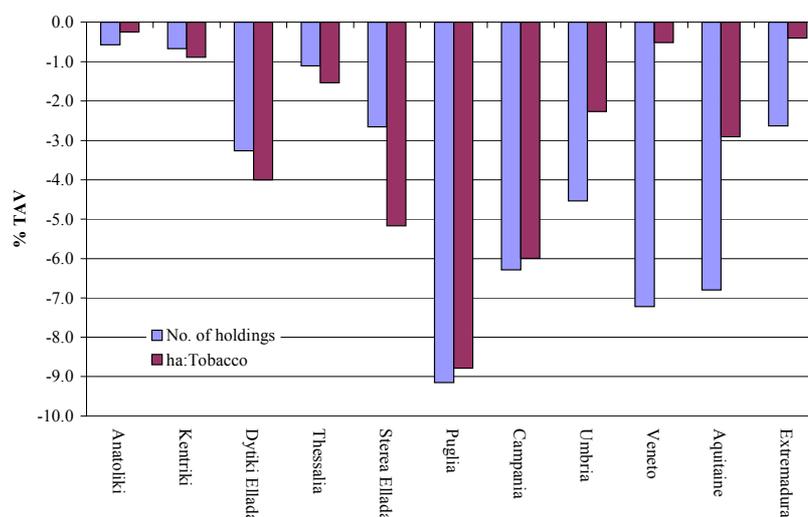
Source: EUROSTAT - New

### Recent Trend

Over the last decade some of these regions experienced a sharp decline in tobacco cultivation. This is considered to be due to the implementation of the tobacco reform of 1992, which abolished intervention and export refunds, introduced production quotas (by group of variety and MS), simplified the regime and introduced stricter controls.

The biggest changes were seen in the Italian Regions of Campania, Puglia and Umbria, where the number of tobacco holdings fell by more than 4.5% (TAV). This was accompanied by an overall drop in the cultivated tobacco area, between 1990 and 2000, of 16,000 ha, an average annual change of – 4.4%. The only exception to this downward trend was Veneto, where the number of holding fell by 7% but the area cultivated declined less sharply (-0.5%), reflecting an increase in the average size of tobacco holdings and, hence, a greater concentration.

Graph 49 – Trend in the number of tobacco holdings and hectares



Source: EUROFARM survey of EUROSTAT

The reduction in the other regions was less marked, and more in line with the decline in the overall number of farms. A possible explanation for this difference between Greece and Italy may be Italy's greater flexibility due to better climatic and land conditions.

#### The relative importance of tobacco production in each region

The following table shows the share of tobacco production as a percentage of the whole agricultural sector. For some of the regions tobacco is crucial, representing one of the most important – if not the only - agricultural activities.

Anatoliki Makedonia, Kentriki Makedonia and Dytiki Makedonia are the regions where tobacco has the highest relative importance. In the first of these regions tobacco accounts for 20% of the total holdings, 34% of all employment and 19% of the total SGM coming from the agricultural sector. Tobacco is less important for Aquitaine, Extremadura and the Italian regions, where tobacco holdings represent just a small proportion of the total, although they play an important role from an economic and employment point of view. Tobacco is more important in Campania and Umbria, where tobacco holdings employ respectively around 11% and 9% of all agricultural labour and where they account for about 10% and 19% of the total SGM.

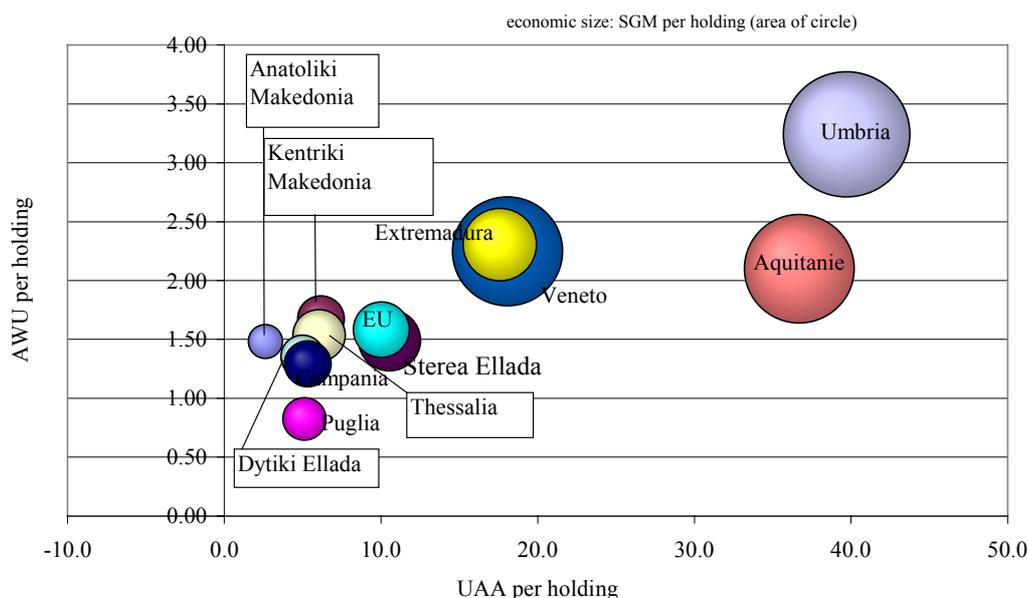
*Tobacco holdings, SGM, UAA and AWU  
as % of Total Number of agricultural holdings, SGM, UAA and AWU in 2000*

	<b>Tob. Hold/All holdings</b>	<b>Tobacco SGM/Tot. Agr. Value of SGM</b>	<b>UAA in tob.Hold/Tot Agr. UAA</b>	<b>AWU Tob/ total Agr. AWU</b>
Anatoliki Makedonia, Thraki	20.21	18.84	9.64	34.18
Kentriki Makedonia	14.93	22.51	16.98	28.10
Dytiki Makedonia	8.04	17.47	12.47	19.08
Thessalia	5.12	8.68	5.99	10.63
Stereia Ellada	3.20	11.87	7.67	7.75
Puglia	0.85	1.31	1.02	1.37
Campania	5.25	9.61	10.10	10.87
Umbria	1.54	18.52	7.76	8.56
Veneto	0.44	2.75	1.64	1.54
Aquitaine	3.22	2.86	4.51	4.11
Extremadura	3.83	9.76	1.95	11.58

Source : *EUROFARM survey of EUROSTAT*

The regional comparison stresses the specific features observed at national level. From Graph 50 it is possible to identify clearly the presence of three different farm structures. The small holdings, both in economic and size terms, are characterised by a low level of Annual Work Unit per holding, and are mostly located in Greece and some Italian regions (Campania and Puglia). A second group includes Extremadura and Aquitaine, and, although different from the point of view of size, are economically similar and utilise the same level of labour per holding. Finally, a third group, made up by Umbria and Veneto, is characterised by large farms in terms of area, labour force employed and economic performance.

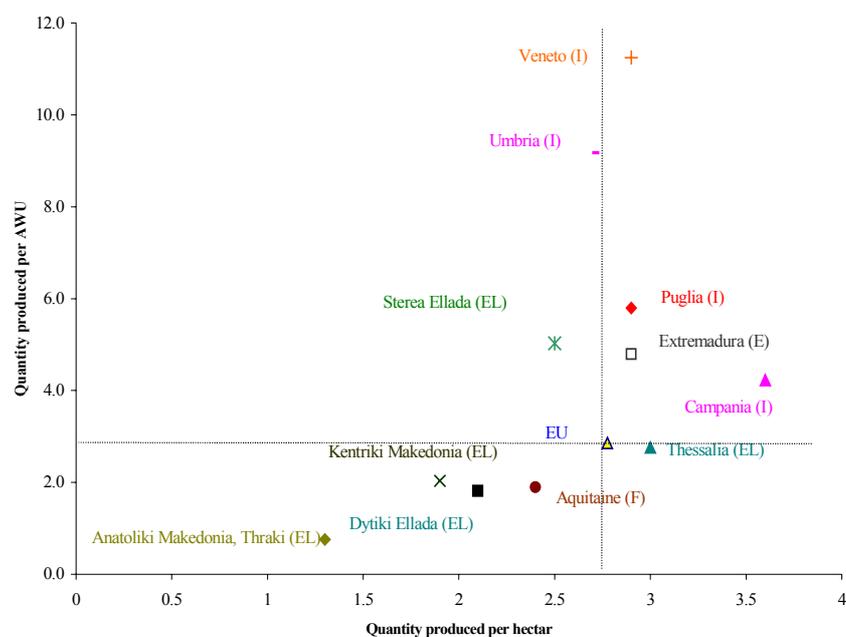
*Graph 50 – Tobacco holdings in the main regions (2000)*



Source: *EUROFARM survey of EUROSTAT (see also graph n°42 for national analysis)*

Graph 51 gives an indication of the productivity per hectare and AWU of the different regions. The French and Greek regions, except Thessalia and Sterea Ellada, are characterised by low productivity both in terms of tons per ha and AWU. In contrast, the Italian and Spanish regions show a higher productivity than the European average. Veneto in particular stands out from the other regions for the highest quantity obtained per annual work unit. A possible explanation is that in Italy more high-yield varieties are cultivated (Variety Groups I and II).

Graph 51 – Productivity



Source: EUROFARM survey of EUROSTAT

### Employment (regional analysis)

As already seen at MS level, the regional analysis confirms that tobacco holdings are characterised by family holdings with little hired labour. There are just a few exceptions: Extremadura (Spain) and Aquitaine (France), where non-family labour employed on a regular basis plays an important role, with a share of 20% and Veneto and Umbria (Italy), where there is a high proportion of seasonal work. All five Greek regions plus Campania (Italy) rely heavily on family labour, which in all cases represents more than 80% of the AWU.

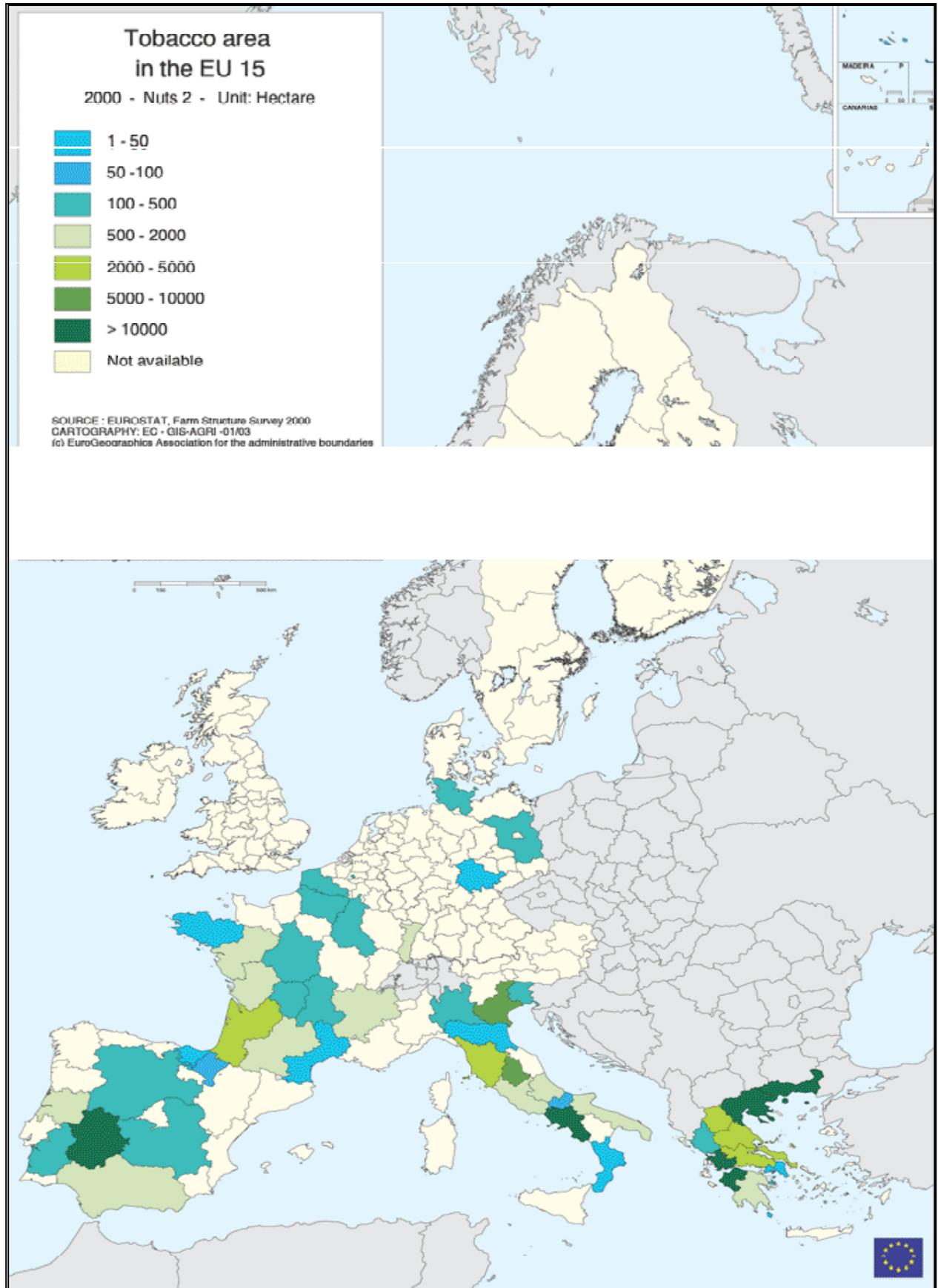
Graph 52 – Employment at regional level

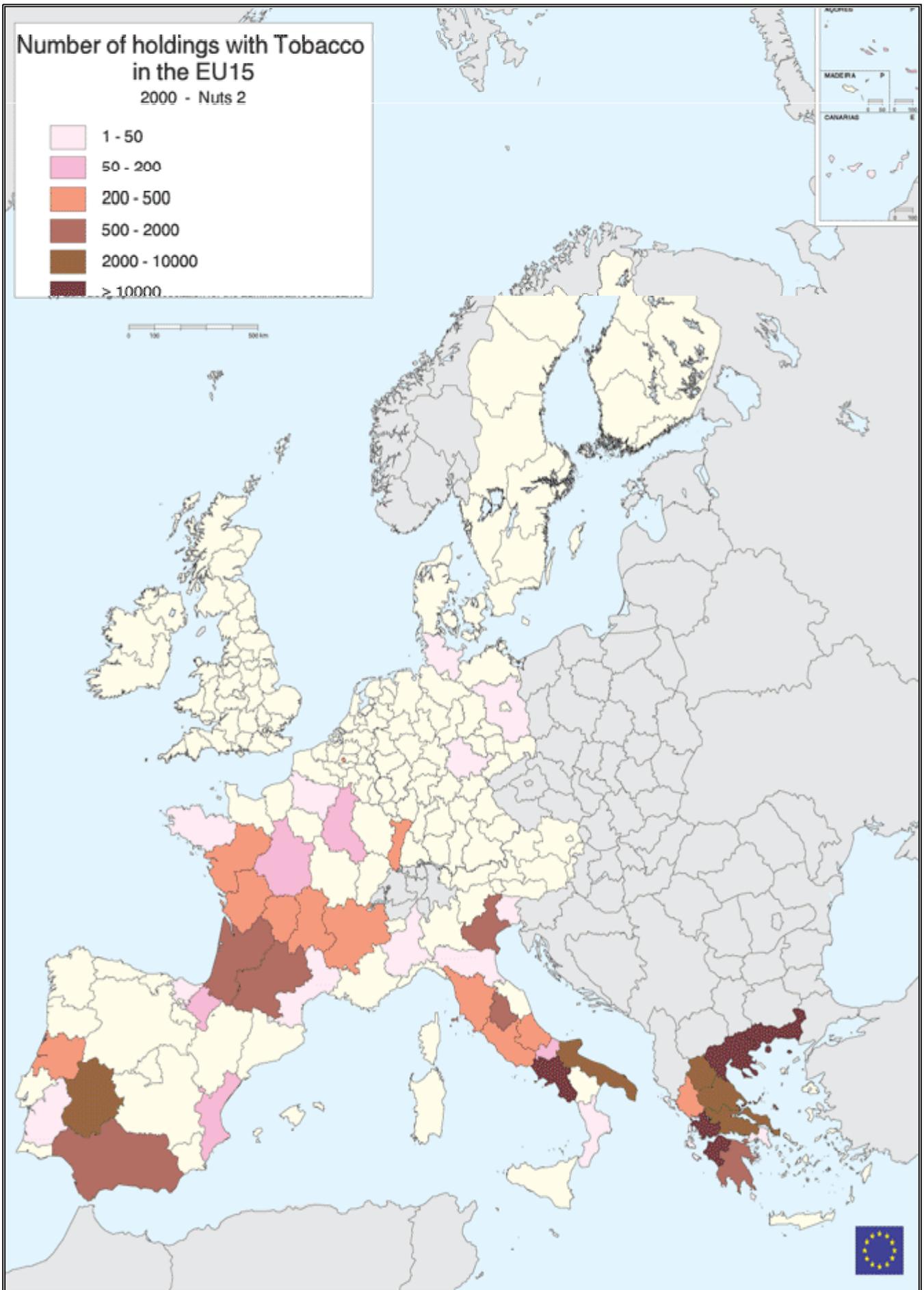


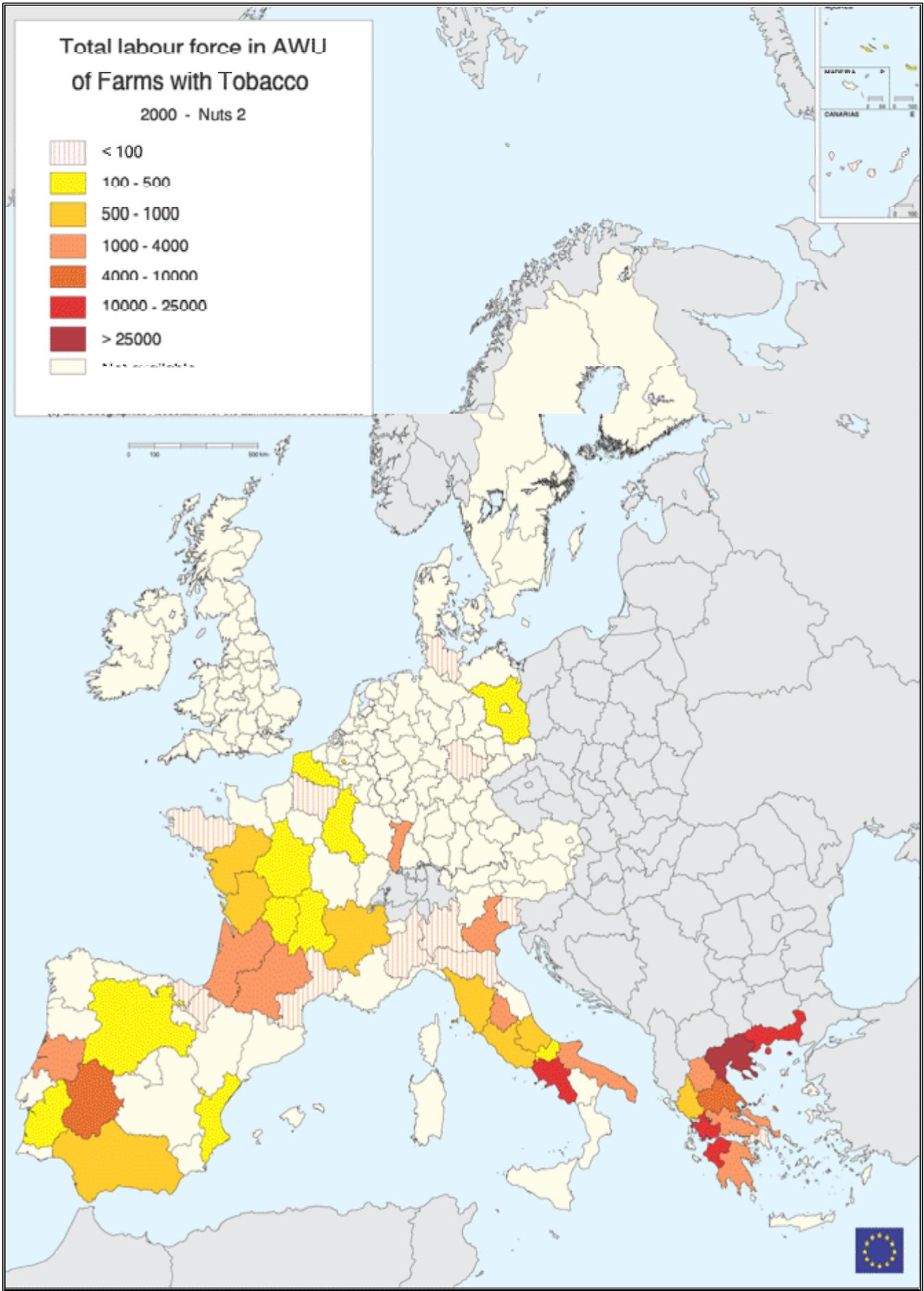
Source: EUROFARM survey of EUROSTAT

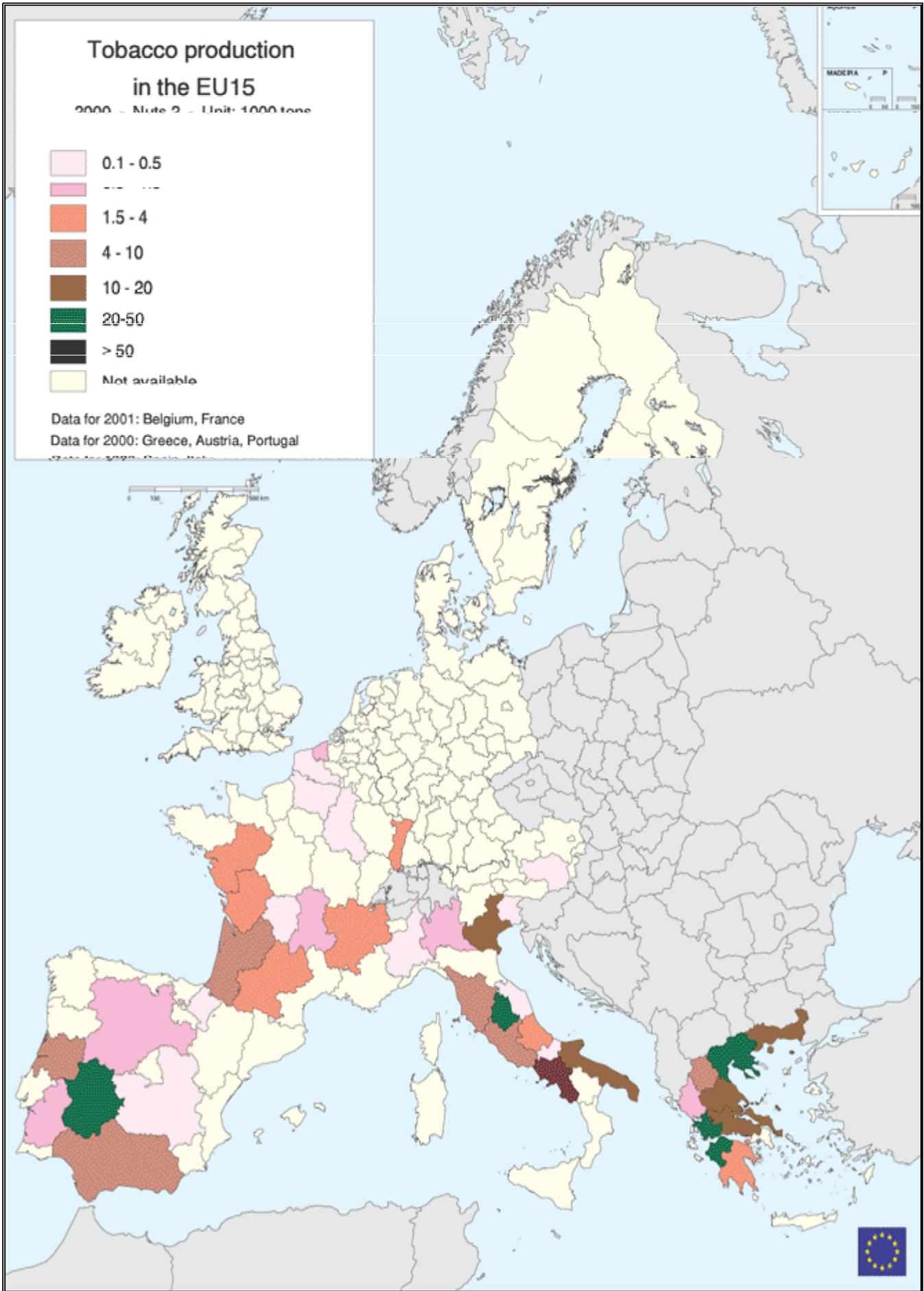
### 1.5.4. MAPS

The following maps illustrate the regional structure of the tobacco sector in the EU.









## 1.6. Income (from the FADN)

### 1.6.1. Profitability of tobacco production: analysis of production costs and margins

#### Methodology

This analysis of the profitability of tobacco production is based on FADN data for 1999 and 2000. As the cost items in the FADN are not computed separately for each individual crop but for the farm as a whole, the estimates of tobacco production costs are made on the basis of a sample of very specialised farms, as for these holdings it is more straightforward to allocate costs among the different crops. This further requirement in terms of specialisation reduces the available sample. No analysis was therefore possible for France, due to the low specialisation of tobacco farms, or Germany, for which the sample is particularly small.

Due to the different features of tobacco production within a single Member State in terms of tobacco varieties, intensity of production and farm structures, it is preferable to carry out the profitability analysis at regional level, selecting relatively homogeneous production conditions.

The five regions chosen for the analysis were Extremadura (Spain), Umbria (Italy), Makedonia-Thraki, Thessalia and Sterea Ellas-Nissi Egeaeou-Kriti (Greece).

Costs are defined as follows:

**Variable costs** = specific crop costs + farming overheads + wages paid

**Total inputs** = variable costs + rents paid + interest paid + depreciation

**Total economic costs** = total input + implicit costs (opportunity costs of family factors)<sup>7</sup>

Indicators of profitability include **Market margin** (tobacco output without premia) and **Total margin** (tobacco output with premia), both calculated over variable costs, over total inputs, and over total economic costs.

#### Costs and margins of tobacco production

A summary of the results of the analysis are presented in the table below, which gives an overview of costs and margins per ha of tobacco. More detailed results are available in the Annex.

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<sup>7</sup> The implicit costs of the family factors are estimated on the basis of the wages and the rents paid, proportionally to the share of unpaid labour and land in ownership. Due to methodological difficulties, the opportunity cost of own capital is not included, even because this item should not play a major role in the case of tobacco. Indicators of costs and margins including the implicit costs (total economic costs and margins over total economic costs) should be read with a certain caution.

*Tobacco production margins – average 1999-2000 (€/ha)*

	<b>Extremadura</b>	<b>Umbria</b>	<b>Makedonia-Thraki</b>	<b>Thessalia</b>	<b>Stereia Ellas</b>
<b>Without premia</b>					
Market margin over variable costs	-2677	-2668	1928	43	-504
Market margin over total inputs	-3280	-3935	784	-1821	-1499
market margin over total economic cost	-4749	-5509	-4094	-7668	-7176
<b>With premia</b>					
total margin over variable costs	3095	3555	7341	6503	6424
total margin over total inputs	2492	2289	6197	4639	5428
total margin over total economic cost	1024	715	1319	-1207	-248

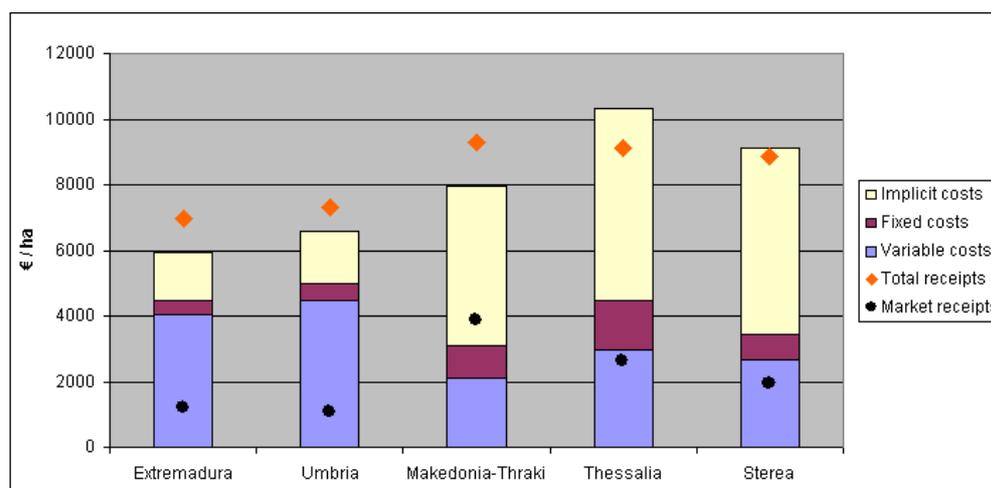
*Source: DG Agri, FADN*

Market margins over variable costs and over total inputs are in general negative in all the regions considered, except Makedonia-Thraki. This is because the producer price for tobacco is much too low to cover the labour-intensive production costs, clearly showing that the viability of tobacco production is highly dependent on subsidies. However, margins for tobacco production in Makedonia-Thraki are positive, which is in part explained by the fact that this region produces a large proportion of high price varieties (Group VI and to a lesser extent Group VII). It is interesting to note, however, that in Makedonia-Thraki most of the labour input comes from the farming family, and is therefore unpaid.

If all the economic costs (including unpaid family factors) are taken into account the market margins become decidedly negative also in Makedonia-Thraki.

The situation changes completely when the total margins - i.e. including premiums - are considered. These indicators represent the actual profitability of tobacco production under the rules of the current CMO. The total margins over variable costs, but also over total inputs, are largely positive in every region (and in particular in Greece, where the external factors are mainly unpaid), making tobacco production a very attractive agricultural activity. Margins remain, in most cases, very interesting even when the total economic costs are considered. Only in Thessalia and Stereia Ellas do they become negative, but this can be explained by the inefficient use of family labour input on small holdings, and can easily be absorbed by a slight under-remuneration of family factors.

Graph 53 – Average costs of production and margins per ha of tobacco on specialised farms in some European regions (average 1999 - 2000)



Source: DG AGRI, FADN

### Costs and margins of alternative crops to tobacco

In order to have a better understanding of the degree of profitability of tobacco production, the costs and margins for this crop were compared with those for other crops that could represent an alternative to tobacco production in the regions concerned. The first crop considered is durum wheat, which is widely cultivated in the Mediterranean countries, and in particular in almost all the tobacco-growing regions. It also benefits from a high level of public support through a crop-specific supplement, thus presenting some analogies with tobacco. In addition, two other alternative crops have been examined, even if they are not cultivated in all the regions considered: cotton, which is grown in all Greek regions, and sunflowers, particularly common in Umbria.

The summary results of this analysis are presented in the table below, which gives an overview of costs and margins per ha for the respective crops. More detailed results are available in Annexes 2a to 2c.

Market margins for durum wheat are, in all the regions for which a comparison was possible, considerably better than those for tobacco. In some cases they are even positive, as in Extremadura, and, if considering only margins over variable costs, in Thessalia. This result is due to the better balance between producer prices and production costs than exists for tobacco. Moving to total margins, thanks also to a crop-specific supplement, durum wheat proves to be quite profitable, even when considering margins over total economic costs (with the exception of Umbria). However, its level of profitability is decidedly inferior to tobacco production, except in Thessalia, if the margin over total economic costs is considered. Sunflowers show similar results to durum wheat, in terms of profitability.

The situation for cotton is different to all other crops, as there are no direct payments to producers under the cotton regime. The profitability of this crop in the Greek regions is anyway considerably higher than either durum wheat

or sunflowers, but still way below the profitability of tobacco. However, considering margins over total economic costs, in Thessalia and Sterea Ellas the comparison is favourable to cotton. Of course, the remark about the inefficiency of family labour on small-scale tobacco farms still applies.

*Margins for alternative crop to tobacco – av. 1999-2000 (€/ha)*

	Extremadura	Umbria	Makedonia-Thraki	Thessalia	Sterea Ellas
<b>DURUM WHEAT</b>					
<b>Without premia</b>					
market margin over variable costs	215	-145	-18	133	-
market margin over total inputs	195	-391	-226	-109	-
market margin over total economic costs	-96	-830	-411	-428	-
<b>With premia</b>					
total margin over variable costs	509	392	411	593	-
total margin over total inputs	489	146	203	351	-
total margin over total economic costs	199	-293	18	32	-
<b>SUNFLOWER</b>					
<b>Without premia</b>					
market margin over variable costs	-	17	-64	-	-
market margin over total inputs	-	-258	-308	-	-
market margin over total economic costs	-	-860	-472	-	-
<b>With premia</b>					
total margin over variable costs	-	514	292	-	-
total margin over total inputs	-	239	48	-	-
total margin over total economic costs	-	-363	-115	-	-
<b>COTTON</b>					
margin over variable costs	-	-	1343	1473	1630
margin over total inputs	-	-	573	864	914
margin over total economic costs	-	-	-238	-146	200

*Source: DG AGRI, FADN*

### 1.6.2. Income of tobacco farms

To analyse the income situation of tobacco producers, it is interesting to compare the revenue of tobacco specialists with that of other types of farm.

In this context, the most common income indicator for the agricultural activity is the Farm Net Value Added per Annual Work Unit (FNVA/AWU), where the Farm Net Value Added is defined as follows:

**Farm net value added** = Total farm output + Balance current subsidies and taxes - Intermediate consumption - Depreciation

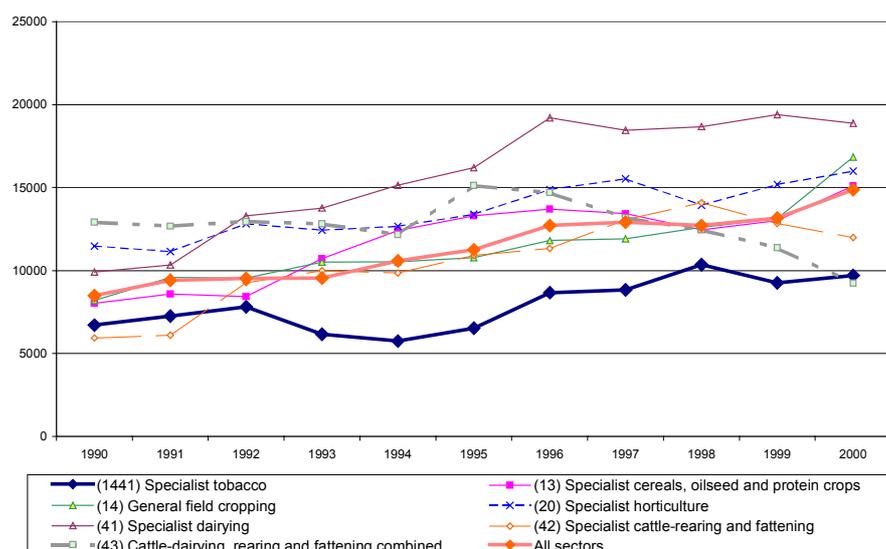
Taking into account that  $FNVA/AWU = (FNVA/UAA) \cdot (UAA/AWU)$ , it is evident that the two main elements playing a role in determining the profitability of the holdings are:

1. The level of margins per hectare expressed by the indicator FNVA/UAA;
2. the availability of agricultural area per annual work unit.

Finally, it should not be forgotten that the total farm income is not only determined by the crop or animal production in which the holding is specialised, but also by other possible “secondary” activities.

Because of the low sample size of specialists tobacco holdings, all the analyses focus only on the three main tobacco producing countries, that is Greece, Italy and Spain.

Graph 54 - Income development (FNVA/AWU) in the EU (for the three main producer Member States) by type of farm – 1990-2000 (current prices)

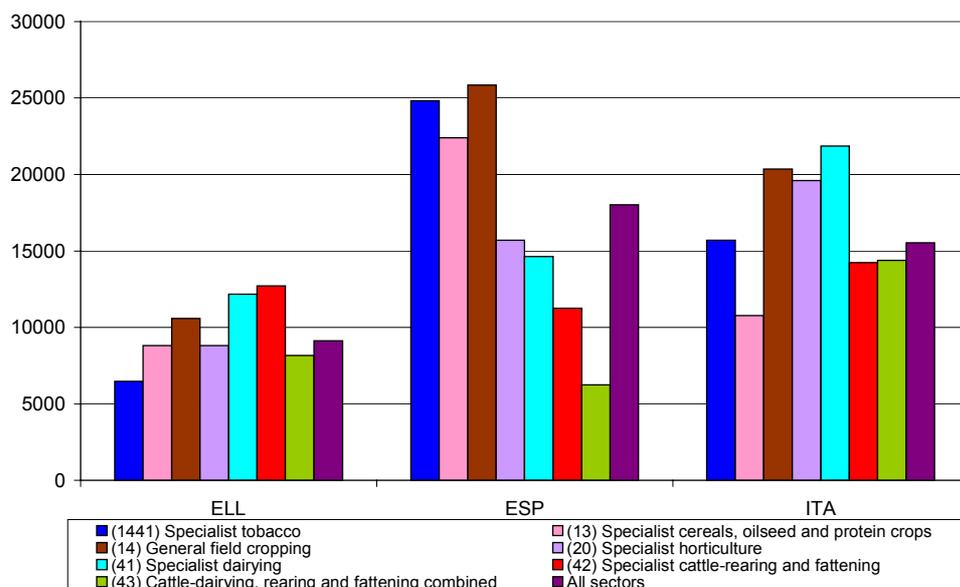


Source: DG AGRI, FADN

The evolution of the indicator between 1990 and 2000 shows that specialised tobacco producers in the EU suffer from a structural low level of income compared to other agricultural sectors (see graph above). In most cases, the revenue of tobacco holdings was the lowest among all farm types, with the exception of the specialised beef producers in the beginning of the period and of the mixed beef-milk in the last year. Not even the development of nominal revenue over the 10-years-period has been particularly favourable to tobacco farms (+45%) compared to the average of all sectors (+75%).

However, the income situation varies considerably in the different Member States (see graph below).

Graph 55 - Income (FNVA/AWU) by type of farm and Member State- 2000



Source: DG AGRI, FADN

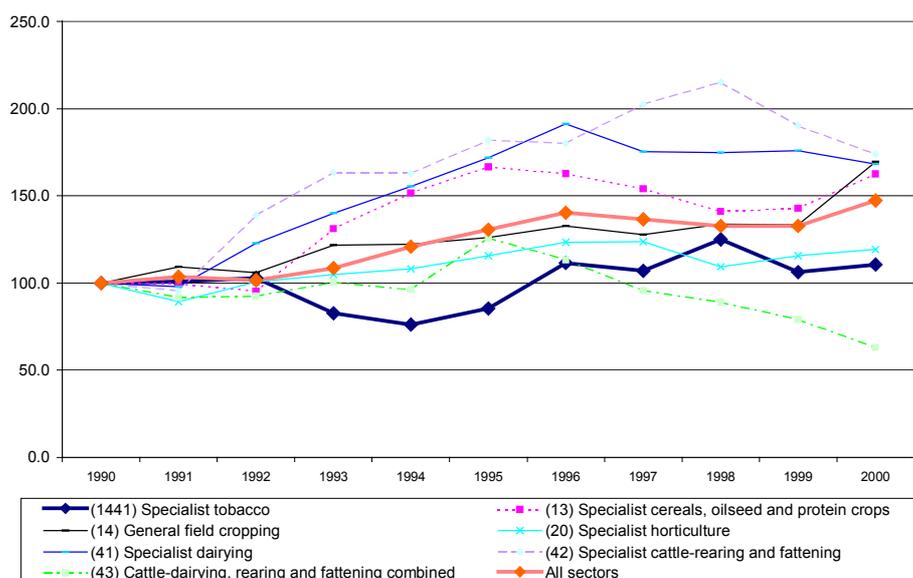
While in Italy and Spain, the income of specialised tobacco producers is respectively equal and higher than the average of agricultural holdings in those countries, and anyway higher than the average for all three countries, the profitability of tobacco farms in Greece is the lowest among all the sectors and all the countries.

The low revenue of tobacco farms in the EU is therefore mainly determined by the situation in Greece, which is the most important tobacco-producing country.

It is remarkable that, despite the fact that the highest level of margins per hectare of tobacco are attained for the high-price varieties cropped in Greece, the better level of income is registered in Italy and in Spain, where the margins over production costs are less important. This fact can be explained by the very small size of tobacco farms in Greece, where the availability of UAA per working unit, and in particular of tobacco area, is very low, and the use of labour input per hectare probably is not very efficient.

The analysis of the income development in real terms (at constant prices and constant currency rates) shows that the real revenue of tobacco producers of the three Mediterranean countries has increased by about 10% over a decade (see graph below). Nevertheless, this percentage is lower than for almost all other sectors, and anyway far distant from the general average (+47%).

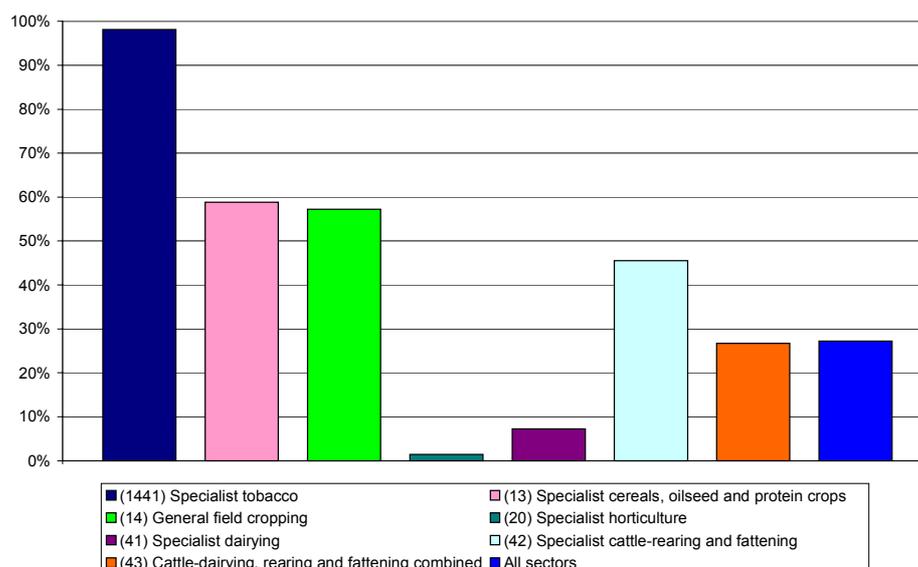
Graph 56 - Income development (FNVA/AWU) in EU (for the three main producer Member States) by type of farm – 1990-2000 (constant prices: 1990=100)



Source: DG AGRI, FADN

Finally, another interesting conclusion can be drawn from the ratio between the balance of current subsidies and taxes and the net value added: for year 2000, this indicator, which measures the dependence of the agricultural revenues on the public support, is equal to 98% for specialised tobacco producers of the three considered countries, by far the highest value compared to other agricultural sectors (see graph below).

Graph 57 - Ratio Balance current subsidies and taxes / Farm Net Value Added in EU (for the three main producer Member States) by type of farm - 2000



Source: DG AGRI, FADN

### *1.6.3. Conclusions*

The picture emerging from the FADN data confirms the results of the structural analysis. As a fact, tobacco production uses labour very intensively, in particular for the production of the oriental varieties in Greece. In the actual situation with low market prices, producers' income is mainly guaranteed by the high level of support, which allows positive margins per Ha. Without support only the oriental varieties in Greece could be cultivated. In this respect, the raw tobacco sector appears very fragile.

If on the one hand, the situation of Greek producers appears particularly precarious in terms of income, on the other hand the higher margins offered by the oriental varieties guarantee a better strength to the sector. The large use of labour force in Greece could be explained, both by the higher labour intensity needed for the oriental varieties and by the small size of holdings which determines an inefficient use of family labour.

## **2. THE RAW TOBACCO REGIME**

### **2.1. The Common Market Organisation for raw tobacco**

The Common Market Organisation for raw tobacco was set out in Council regulation (EEC) No 2075/92<sup>8</sup>, last amended by regulations 1636/98 and 546/2002. This CMO currently comprises a premium system, a system of production orientation and limitation (including an overall guarantee threshold per harvest for the EC, for each tobacco variety group and for each producing Member State and an individual quota regime) and measures to convert production (including the Community Tobacco Fund and a quota buy-back programme). Commission regulation (EC) No 2848/98<sup>9</sup> lays down detailed rules for the application of Council regulation 2075/92. Commission regulation (EC) No 2182/2002 sets out detailed rules for the application of Council Regulation (EEC) No 2075/92 with regard to the Community Tobacco Fund<sup>10</sup>.

#### *2.1.1. Current objectives of the CMO*

##### *General objectives*

1. based on art. 33 (previously art. 39) of the EC treaty, to achieve, in particular in the raw tobacco sector, the stabilization of markets and a fair standard of living for the agricultural population concerned;

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<sup>8</sup> of 30 Jun 1992 (OJ L 215, 30.7.1992, p. 70)

<sup>9</sup> of 22 December 1998 (OJ L 358, 31.12.1998, p. 17)

<sup>10</sup> of 6 December 2002 (OJ L 331, 7.12.2002, p. 16)

2. furthermore, the other objectives of art. 33 (previously art.39) are to assure the availability of supplies and to increase the individual earnings of persons engaged in agriculture.

#### *Specific Objectives*

1. to limit production in line with the requirements of the market and the demands of the budget;
2. to support traditional tobacco producers with a premium system, in the context of strong world competition;
3. to contribute towards the improvement of the organization and management, quality of production, environmental requirements and the respect of EC regulations, through a specific aid for producer groups;
4. to facilitate the voluntary departure from the sector by individual producers, a quota buy-back programme with a corresponding reduction of the guarantee thresholds has been set up, combined with actions aimed at helping tobacco growers switch to other crops or other economically viable activities;
5. to encourage an improvement in the quality and value of Community production, and at the same time provide income support to producers, payment of part of the premium has been linked to the value of the tobacco produced;
6. to ensure a high level of human health protection in the definition and implementation of the CMO; to take into account the economic, social and environmental consequences of this policy by implementing actions aimed at developing new sources of income and economic activity for growers;
7. to enhance information to the public on the harmful effects of tobacco consumption.

#### *2.1.2. Premium system*

Before the 1992 reform, the tobacco premium was determined separately for each of the 34 tobacco varieties. Following the reform, the raw tobacco varieties were classified into 8 groups. A single premium in €/kg was fixed for each variety group, with a supplement for the Flue-cured, Light air-cured and Dark air-cured variety groups in Belgium, Germany, France and Austria. This amount aimed to compensate part (50% until 1998 and 65% after 1999) of the premium lost as a result of the reform exercise. The second increase to 65% had a neutral budgetary impact, thanks to a reduction of the national guarantee threshold.

In order to encourage the creation of producer groups, between 1993 and 1998 an additional 10% of the premium (specific aid) was assigned to producer groups concluding a contract with a first processor. From 1999 onwards, this specific aid was included in the premium. Between 1999 and 2001, the amount of the premium per group of varieties and the supplementary amounts for certain regions were as follows:

PREMIUMS FOR LEAF TOBACCO FOR THE 1999, 2000 AND 2001 HARVESTS								
	I	II	III	IV	V	VI	VII	VIII
	Flue-cured	Light air-cured	Dark air-cured	Fire-cured	Sun-cured	Basmas	Katerini	Kaba Houlak
EUR/Kg	2.98062	2.38423	2.38423	2.62199	2.38423	4.12957	3.50395	2.50377

PREMIUMS FOR LEAF TOBACCO FOR THE 2002, 2003 AND 2004 HARVESTS								
	I	II	III	IV	V	VI	VII	VIII
	Flue-cured	Light air-cured	Dark air-cured	Fire-cured	Sun-cured	Basmas	Katerini	Kaba Houlak
EUR/Kg	2.98062	2.38423	2.38423	2.62199	2.14581	4.12957	3.50395	2.50377

SUPPLEMENTARY AMOUNTS	
Varieties	EUR/kg
Badischer Geudertheimer, Pereg, Korso	0,5509
Badischer Burley E and its hybrids	0,8822
Virgin D and its hybrids, Virginia and its hybrids	0,5039
Paraguay and its hybrids, Dragon vert and its hybrids, Philippin, Petit Grammont (Flobecq), Semois, Appelterre	0,4112

The premium for the 2002 to 2004 harvests is identical, except for group V (Sun-cured), whose premium was made less attractive (10% decrease) to reflect of the low demand for this group.

Since 1999 the premium paid to producers comprises the fixed and a variable part. Producers who are not part of an association receive only the fixed part of the premium. The variable part is modulated by producer groups according to the prices contracted with the processing industry. Variable premiums range between 30% and 45% of the total premium.

The variable part of the premium is intended to promote the production of quality tobacco and is granted only to producer groups.

Evaluation report indicate that the ratio of variation of the variable part of the premium in some cases, for some group of varieties and in some producing Member States has been very low and in other cases very high.

For most variety groups in the important producing regions, however, the ratio of variation decreased between 1999 and 2000.

Where a low ratio of variation in the variable part of the premium has occurred, two explanations are possible: 1. There was an absolute homogeneity of tobacco quality or 2. Payment of the variable part of the premium was managed inadequately.

*Source: COGEA*

The producer groups pay the premium to the producer by bank or postal transfer.

The premium is paid if the raw leaf tobacco has been produced in a specific area for each group of varieties, if the minimum quality level is respected and if the producer delivers the raw tobacco to the processing industry on the basis of a sale contract.

A further maximum of 2% of the total premium is granted to producer groups for their activities in improving quality, environmental protection and management of the regulations.

The tobacco is cultivated under a contract concluded between a single producer or producer group and a first processing industry. Member States may decide whether or not to apply the auction scheme to selling production contracts of producer groups that wish to participate, to another first processing industry. For a price at least 10% higher than the previous one a first processor may take over a contract from the initial processor up to 20 days before deliveries are due to start.

However, this auction system has not been applied for various practical and organisational reasons.

### 2.1.3. Measures to orient and limit production

#### 2.1.3.1. Guarantee threshold system

The Council set an overall guarantee threshold per harvest for the EC and, within that quantity, individual guarantee thresholds for each group of varieties and for each producing Member State. To ensure the respect of guarantee thresholds, the Council imposed a regime of production quotas. The guarantee thresholds by Member State and variety for the 1999-2004 harvests are given below.

GUARANTEE THRESHOLDS FOR 1999									
	I Flue-	II Light	III Dark	IV Fire-	V Sun-	Autres			Total
	cured	air-cured	air-cured	cured	cured	VI Basmas	VII Katerini	VIII Kaba Koulak	
Italy	48 125	46 655	18 056	7 173	12 000		500		132 509
Greece	30 700	12 400			14 800	26 100	22 250	20 407	126 657
Spain	29 000	2 470	10 800	30					42 300
Portugal	5 500	1 200							6 700
France	9 500	8 300	8 548						26 348
Germany	3 000	4 125	4 500						11 625
Belgium		191	1 662						1 853
Austria	30	446	100						576
	125 855	75 787	43 666	7 203	26 800	26 100	22 750	20 407	348 568

GUARANTEE THRESHOLDS FOR 2000									
	I Flue-cured	II Light air-cured	III Dark air-cured	IV Fire-cured	V Sun-cured	Autres			Total
						VI Basmas	VII Katerini	VIII Kaba Koulak	
Italy	48 500	47 000	17 900	6 965	10 100		1 500		131 965
Greece	31 200	12 400			12 640	26 330	22 750	20 788	126 108
Spain	29 000	2 470	10 800	30					42 300
Portugal	5 500	1 200							6 700
France	9 500	8 300	8 548						26 348
Germany	3 000	4 125	4 500						11 625
Belgium		191	1 662						1 853
Austria	30	446	100						576
	126 730	76 132	43 510	6 995	22 740	26 330	24 250	20 788	347 475

GUARANTEE THRESHOLDS FOR 2001									
	I Flue-cured	II Light air-cured	III Dark air-cured	IV Fire-cured	V Sun-cured	Autres			Total
						VI Basmas	VII Katerini	VIII Kaba Koulak	
Italy	48 500	47 000	17 900	6 965	10 100		1 500		131 965
Greece	31 900	12 400			11 000	26 330	23 270	20 788	125 688
Spain	29 000	2 470	10 800	30					42 300
Portugal	5 500	1 200							6 700
France	9 500	8 300	8 548						26 348
Germany	3 000	4 125	4 500						11 625
Belgium		191	1 662						1 853
Austria	30	446	100						576
	127 430	76 132	43 510	6 995	21 100	26 330	24 770	20 788	347 055

GUARANTEE THRESHOLDS FOR 2002									
	I Flue-cured	II Light air-cured	III Dark air-cured	IV Fire-cured	V Sun-cured	Autres			Total
						VI Basmas	VII Katerini	VIII Kaba Koulak	
Italy	49 002	49 436	16 256	6 255	9 157		498		130 604
Greece	35 781	12 276			7 192	27 114	24 014	16 696	123 073
Spain	29 472	5 748	6 622	30					41 872
Portugal	4 981	1 066							6 047
France	10 650	9 602	5 359						25 611
Germany	4 800	2 683	3 868						11 351
Belgium		154	1 455						1 609
Austria	30	442	99						571
	134 716	81 407	33 659	6 285	16 349	27 114	24 512	16 696	340 738

GUARANTEE THRESHOLDS FOR 2003 AND 2004									
	I Flue-cured	II Light air-cured	III Dark air-cured	IV Fire-cured	V Sun-cured	Autres			Total
						VI Basmas	VII Katerini	VIII Kaba Koulak	
Italy	48 263	47 689	15 682	6 255	8 833		498		127 220
Greece	35 242	11 842			6 938	27 114	24 014	16 696	121 846
Spain	29 028	5 545	6 388	30					40 991
Portugal	4 906	1 028							5 934
France	10 490	9 262	5 170						24 922
Germany	4 728	2 588	3 731						11 047
Belgium		149	1 404						1 553
Austria	29	426	96						551
	132 686	78 529	32 471	6 285	15 771	27 114	24 512	16 696	334 064

### 2.1.3.2. Functioning of quota regime

To ensure the application of the quota regime it is possible:

- 1) to move guaranteed quantities from one variety group to another. In this transfer of thresholds allocations, one ton is exchanged for a maximum of one ton and each exchange has to be neutral with regard to the budget. The operation must be authorised by the Commission with a regulation. This measure has permitted a shift of production towards varieties that are more demanded on the market and that obtain better market prices. In 2001 the Member States recorded the following transfers:

#### TRANSFERRING OF QUANTITIES IN 2001

MEMBER STATE	GROUP OF VARIETES OF ORIGIN TRANSFERT	GROUP OF VARIETES OF DESTINATION
FRANCE	3134.9 tons of dark air cured (group III)	1203.7 tons of flue-cured (group I)
		1398.6 tons of light air cured (group II)
GERMANY	15.5 tons of dark air cured (group III)	11.4 tons of flue-cured (group I)
		1.8 tons of light air cured (group II)
GREECE	895 tons of sun cured (group V)	715.9 tons of flue-cured (group I)
SPAIN	4111.2 tons of dark air cured (group III)	620 tons of flue-cured (group I)
		3336.2 tons of light air cured (group II)
ITALY	1000 tons of Katerini and similar varieties (group VII)	365 tons of flue-cured (group I)
		365 tons of light air cured (group II)
		270 tons of fire cured (group IV)

Source: Regulation (EC) n° 1032/2001

MEMBER STATE	GROUP OF VARIETES OF ORIGIN TRANSFERT	GROUP OF VARIETES OF DESTINATION
GREECE	1518 tons of Kaba Koulak classic (group VIII)	920 tons of Basmas (group VI)
		865 tons of Katerini (group VII)
		1074 tons of flue-cured (group I)
		2271 tons of flue-cured (group I)
ITALY	1467.3 tons of dark air cured (group III)	1467.3 tons of light air cured (group II)
		498.6 tons of fire cured (group IV)
		605.3 tons of sun cured (group V)
		393.2 tons of flue cured (group I)
GERMANY	577.6 tons of dark air cured (group III)	1326 tons of flue cured (group I)
		486.6 tons de flue cured (group I)

Source: Regulation (EC) n° 601/2001

- 2) to sell quota to the EC, when individual producers decide to definitively abandon the sector (buy-back programme) (EC regulation n° 2848/1998). In the two months before the quota buy-back takes effect, other producers can buy the quota (from 1-31 December in 2002). Following the buy-back, the national guarantee thresholds are reduced accordingly. Over the last few years the buy-back price has gradually been increased in order to approach the effective quota market price. In 2002, with EC regulation n° 1983/2002<sup>11</sup>, the buy-back price was fixed as a percentage of the premium and is paid for five subsequent years. The buy-back price has been markedly increased for Group V and Group III quota. The total price, over five years, comprises between 80% and 375% of the premium for the different variety groups and the harvest year (2002 or 2003). The total price percentage depends on the level of the producer's quota (less than 10 tons, between 10 and 40 tons, equal to or more than 40 tons).

For 2001 the buy-back price was fixed at 25% of the year's premium and was paid for three years, except for group V, for which 75% of the premium was paid in the first and second years and 50% in the third year.

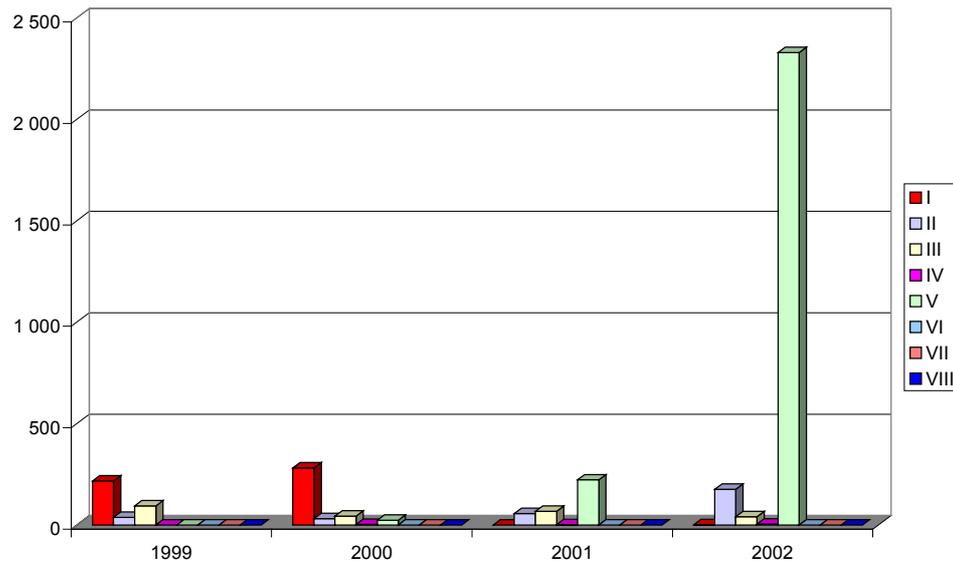
Requests to sell quota are accepted within the limits of resources allocated each year for this purpose. In 1999, 39 producers left the sector, in 2000 66, in 2001 3,604 and in 2002 4,067. In 1999 the EC bought 81% (348 tons) of the quota offered for buy-back. In 2000, the percentage fell to 55% (381 tons). In 2001 the figure was only 6% (346 tons) but in 2002 it increased to 33% (2,551 tons). In Greece no quota was bought-back between 1999 and 2001 because producers bought all the quota that was put up for sale at a price higher than that offered by the EC. In 2002 quota bought-back in Greece represented 28% of the quota offered (1,004 tons) and in Italy 92% (1,449 tons).

In conclusion, the quantity of quota withdrawn from the market has been very marginal. However, results are gradually improving, as buy-back prices get closer to the real market value.

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<sup>11</sup> of 7 November 2002 (OJ L 306, 8.11.2002, p. 8)

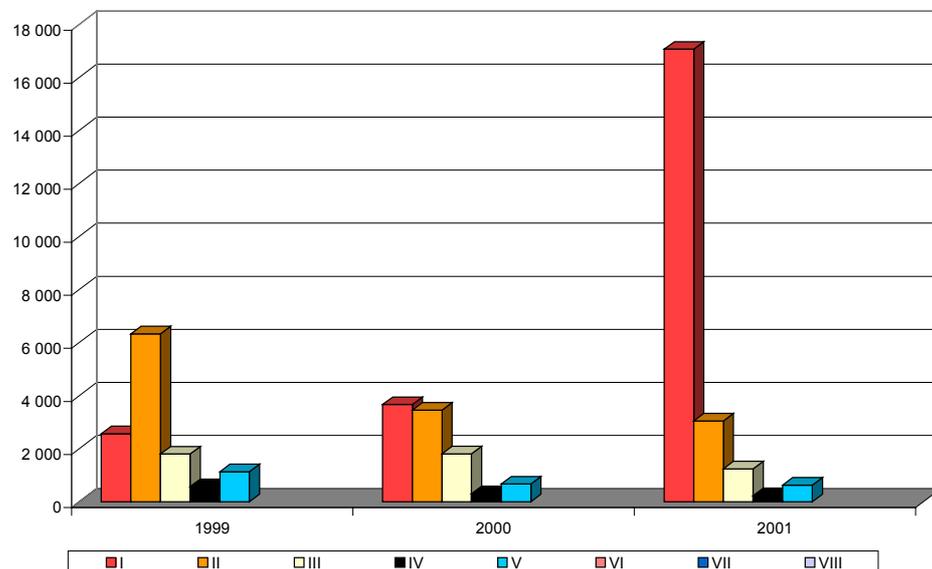
Graph 58 – Evolution of quota buy back by group of varieties for 1999, 2000, 2001 and 2002 (in tons)



Source: Member States

- 3) to buy and sell quotas from other producers within each producing Member State and inside of a same group of varieties. In total, 12,934 tons of tobacco quota were traded in 1999, 9,896 tons in 2000 and 22,205 tons in 2001. The most active Member State in this case has been Italy, in particular for Group I varieties (Flue Cured).

Graph 59 – Evolution of quotas traded definitively between producers (in tons)



Source: Member States

### Distribution of quotas

The Member State administrations distribute quota, by variety, among the producer groups or individual producers (not belonging to a producer group). The assigned quotas are proportional to the average quantity of tobacco delivered to the first processing industry in the three years preceding the most recent harvest.

Any quantity produced over quota does not receive the premium, but a derogation allows a compensation of 10% between two consecutive harvests.

#### National reserve

Producing Member States may create a national quota reserve (since 2002 this is not compulsory). The quantities available in this reserve amount to 0.5-2% of the total national guarantee threshold and are calculated as a linear reduction of the quotas allocated to all producers. This quantity may be increased by an amount equivalent to the quota that was not contracted in the previous year.

#### *2.1.4. The Community Tobacco Fund*

The CMO provides for the creation of a Community Tobacco Fund. Before the 2002 harvest, this Fund could be used to finance agricultural research on tobacco varieties and production methods and information campaigns to increase public awareness of the harmful effects of smoking. As from 2003, in accordance with EC regulation 2182/2002<sup>12</sup>, the agricultural research element has been transferred to the 6<sup>th</sup> framework research programme. The Fund may now, instead, finance actions that assist tobacco producers to convert to other crops or economic activities that generate employment, and studies into the possibilities for producers to switch to other crops or activities.

This possibility of conversion is combined with leaving the tobacco sector (buy-back programme).

At first (from 1993 to 1998) the Tobacco Fund was financed by 1% of the premium. As from the 1999 harvest the percentage was increased to 2% and in 2003 to 3% of the premium. The European Commission has to submit a report to the EU Council before the end of 2003 about the utilisation of Tobacco Fund credits and may at that time propose increasing the amount to 5% for the 2004 harvest.

The Directorate General for Agriculture (DG AGRI) managed expenditure on the agricultural research aspects and the Directorate General for Health and Consumer Protection (DG SANCO) manages expenditure on information campaigns to combat smoking.

From 1993-2001 a total of €86.9 million was deducted from premiums in order to finance the Tobacco Fund. The total EU contribution to the 28 projects agreed under the terms of the three calls for tenders published, has amounted to €43.8 million (€12.4 million for 9 research projects managed by DG AGRI + €31.4 millions for 19 information projects managed by DG SANCO). A total of €19.7 million was actually spent, up to the 2002 EAGGF financial year.

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<sup>12</sup> of 6 December 2002 (OJ L 331, 7.12.2002, p. 16)

In the past the Tobacco Fund has not been used completely. However, starting by 2000, with the regulation's management n° 1648/2000<sup>13</sup> of the tobacco Fund, the part destined to the information against tobacco consumption, has been relaunched. In 2001, a three-year campaign to discourage teenagers from smoking was launched by DG SANCO. The annual budget available for this campaign is € 6 million per year. In parallel, DG SANCO is developing new initiatives that will improve communication skills in the field of preventing the use of tobacco and also to support its political and legislative initiatives.

According to media experts, an information campaign must have a critical level of impact and therefore adequate financial resources in order to be effective. The current budget of €6 million a year is considered too small for a Europe wide media campaign; the budget available for information campaigns should be significantly increased.

The impact of the research aspects of the Tobacco Fund is difficult to gauge; it will be some years before it is possible to evaluate what effect and how widely results have influenced the sector.

#### *Measures to reconvert production*

Producers that have participated in the buy-back programme and whose quota has been irrevocably bought-back (at least 500 kg) can profit from the conversion measures, starting in 2003 with the new Tobacco Fund regulation.

Producers may present individual projects - switching to other crops, training for diversification, establishing infrastructure for marketing quality products – which can receive up to 75% EU financing. Public authorities in tobacco-producing areas and public research bodies in agronomy and/or rural economy may present projects of general interest (studies, guidance and advisory services, innovative demonstration projects) which can receive 100% EU financing.

#### *2.1.5. External trade regime*

Products with CN code 2401 are subject to the application of the common import duty within the customs territory of the EC. In 2002 this common duty was 18.4% of the imported value, with a minimum of €22 and a maximum of €24/100 net kg for tobacco of the “Flue Cured (Virginia)”, “Light Air Cured (Burley and its hybrids)” and “Fire Cured” variety groups. For the groups “Other Light Air Cured”, “Sun Cured”, “Dark Air Cured”, “Flue Cured”, “Others varieties” and “Refuse of tobacco”, the common duty applied in 2002 was 11.2% of the imported value, with a minimum of €22 and a maximum of €56/net kg.

For this sector there are no preferential import quotas at WTO level.

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<sup>13</sup> of 25 July 2000 (OJ L 189, 27.7.2000, p. 9)

Export subsidies have been agreed in the WTO up to a limit of 110,800 tons and €40.2 mio for 2000. However, export subsidies have been abolished under EEC legislation since 1993.

Concerning bilateral or unilateral tariff preferences, the EU has granted a zero duty on imports from ACP countries, OCT, and least developed countries in the SPG system with the exception of Myanmar and the Andean/Central America group. A reduced duty has been granted to Mexico and South Africa and to the other SPG countries. Finally, Moldova, Hungary, Bulgaria and Romania benefit from a reduced customs duty within a preferential import quota.

#### *Tobacco support in the USA*

In the USA, the sector currently benefits from a price support loan of \$1.656/lb (\$3.65 /kg) for Flue Cured and \$1.835 /lb (\$4.04 /kg) for Burley varieties, the two major US tobacco types. If the market price falls below these two levels the US public administration intervenes with funds via storage cooperatives. This support exists only in the framework of the national quota fixed for the two varieties mentioned. This quota, de facto, restricts production and at farm level is linked to land. The quota land may be sold or rented. Flue Cured and Light Air Cured tobacco may be imported within a tariff-rate quota. Quantities exceeding the tariff-rate quota may be imported at a higher customs rate.

*Source: Report for Congress – July 31, 2002*

### **3. THE FIRST- PROCESSING INDUSTRY**

The first processing industry is located proportionately to production in each producing Member State (75% of the total in Italy and Greece). Tobacco delivered by producer groups or individual producers must be processed before being used by the manufacturing industry for cigarettes, cigars or pipe tobacco. The first processing can be described as follows:

- separating the leaves by quality to obtain homogeneous lots to give to the manufacturing sector;
- beating the leaves to separate borders from stems (for some varieties);
- re-drying tobacco to permit its stabilisation and long storage;
- re-sorting for constitution of homogeneous lots,
- ageing or fermentation for long conservation;
- preparation of the strips for industry (for some varieties)
- packaging for delivery to the industry.

The final products of the first processing stage are bales of homogeneous tobacco and by-products (tobacco refuse). In some cases the first processing industry processes the by-products to obtain reconditioned tobacco or does a pre-mixing of different types or qualities of tobacco on the basis of the manufacture's indications.

The first processing enterprises are recognised by Member State administrations on the basis of the tobacco CMO<sup>14</sup>.

*First processing industry in the EU (in 2001)*

Member States	DEU	BEL	FRA	ITA	ELL	ESP	POR	ÖST*
Number of enterprises	4	9	2	61	33	5	3	0

Source: Member States communication  
Austria process your tobacco

The average quantities processed by each enterprise and Member State are very different. Taking into consideration the average processed tobacco by enterprise - that is, the ratio between the maximum quantity allowed at national level and the number of enterprises, Italy had the lowest level in 2001 (2%) followed by Greece (3%), Belgium (11%), Spain (20%), Germany (25%), Portugal (33%) and France (50%). In Italy and Greece there are an important number of small enterprises.

The activity of first processing entails a loss of weight between 12% and 15%. In 1999 total production was 293,901 tons of tobacco. On the basis of the Tobacco House survey of July 2002, turnover - that is, the net revenue of the sector after taxes, was in 1999 € 779 million and the added value € 292 million.

*Quantity of tobacco produced by first processing industry in the EU (in 1999)*

Member States	DEU	BEL	FRA	ITA	ELL	ESP	POR	ÖST*
Output in tons	13 000	3 000	18 021	111 160	108 035	35 852	4 625	207

Source: Tobacco House survey  
Leaf tobacco produced in one country can be partially processed in another country.

The employment generated by this activity was estimated, in the Tobacco House survey, at around 13,372 full time equivalent units<sup>15</sup> a total of 26,193 persons, in 1999. Employment in Greece and Italy represents over 90% of the total.

The prices of processed tobacco sold to the manufacturing industry are not available because tobacco regulations oblige only communication of the contractual prices between producer groups or individual producers and first processing enterprises.

<sup>14</sup> EC regulation n. 2075/1992 article 17 and EC regulation 2848/1998 article 7

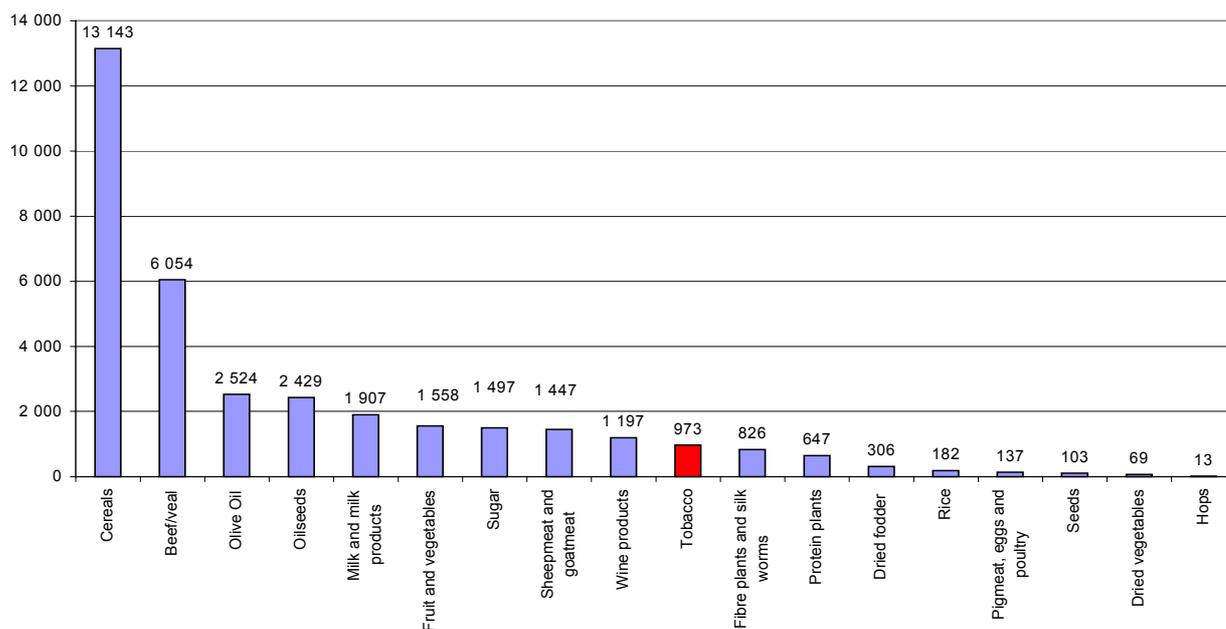
<sup>15</sup> Full-time equivalent is calculated on the basis of an average annual full-time employment. In the case of tobacco cultivation, the full-time equivalents are calculated according to the number of man-hours worked per ha, which varies according to the variety grown and the number of ha cultivated per variety. The total number of hours worked is then divided by the number of annual man hours corresponding to a full-time job.

## 4. EAGGF EXPENDITURE

### 4.1.1. Evolution of expenditure

At € 973.4 million in the 2001 budget year, EAGGF spending on raw tobacco represented 2.6% of total EAGGF expenditure under subheading 1a) and 2.3% of total EU agriculture budget expenditure. Raw tobacco production represents, in value, only 0.4% of the EU's final agricultural production.

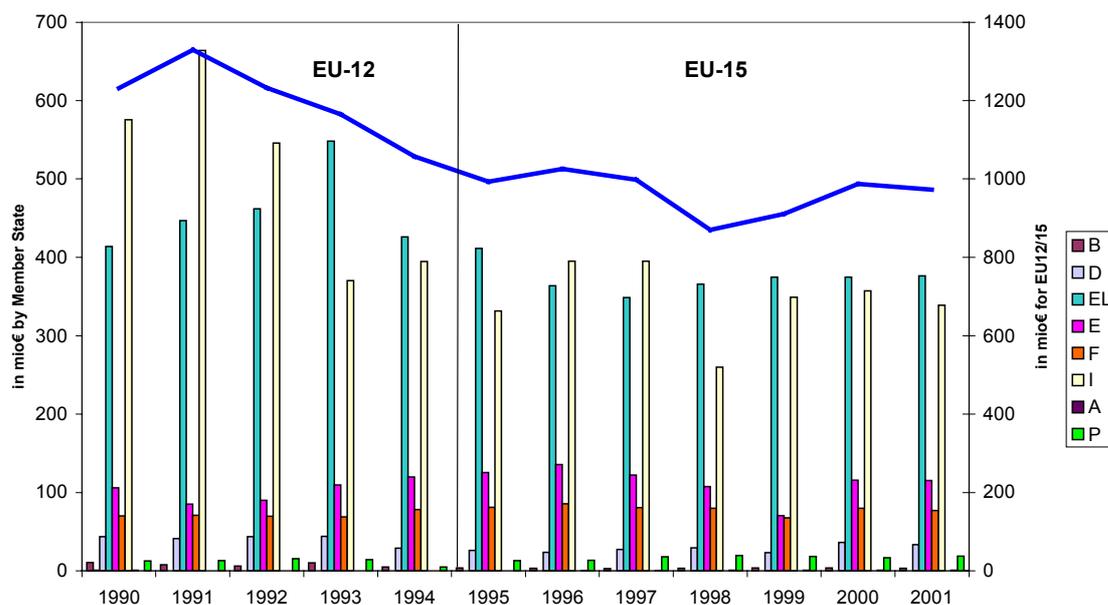
Graph 60 – EAGGF Expenditure by product in 2001 (in mio €)



Source: EAGGF

### 4.1.2. Breakdown by Member State

Graph 61 – EAGGF Expenditure on tobacco by Member State



Source: EAGGF – the line of total expenditure for the EU includes the Community Tobacco Fund

In 2001, Greece was the producing Member State that benefited most from the tobacco CMO, with 38.6% of the total expenditure, followed by Italy with 34.8%, Spain with 11.8%, France with 7.9% and the others (P, D, B, AU) together totalling 5.8%. The expenditure position of Greece and Italy is inverted compared to their production levels because the premium for oriental varieties cultivated by Greece is higher than for the other groups cultivated in Italy.

*Taxes*

In this context it is interesting to remember that excise duties collected by Member States on tobacco consumption reached € 45 billion in 1999 (source: Commission report, 14.3.2001). To this amount should be added VAT. In a non-specified year, the overall amount of taxes on cigarettes collected by Member States reached €63 billion, according to UNITAB.