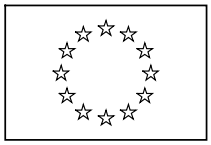

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 30.9.2003
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COMMISSION REPORT TO THE COUNCIL

on evolution of the hop sector

(under Article 18(2) of Council Regulation (EEC) No 1696/71
on the common organisation of the market in hops)

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INTRODUCTION

Article 18 of the basic Regulation (EEC) No 1696/71 on the common organisation of the market in hops[1] requires the Commission to send the Council, before 31 December 2003, an assessment report on the sector together with any appropriate proposals for the future. This is that report. Annex I gives the history of the CMO and Annex II technical information on hops.

1. STRUCTURE OF HOPS CMO REGULATIONS

The CMO at present in force is as reformed in 1997[2].

The key objectives of the reform were to make the rules more consistent and flexible in the context of the dynamics of the market and user requirements and to simplify their administration.

1.1 Production aid

The cornerstone of the CMO is the **production aid**. This was set for a period of five years at a single rate for all varieties. In 2001 this arrangement was extended for three years (to include the 2003 harvest).

The single aid rate was set at €480/ha with effect from the 1996 harvest and has not been changed since. At the moment it accounts for around 8**%** of a grower's average gross return.

Growers wishing to receive it must declare the areas planted by 31 May of the crop year (exception for United Kingdom: 30 June) and submit their aid application through their producer group by 31 October of that year.

Controls on hops fall within the scope of the Integrated Administration and Control System.

If the market is disturbed the aid can be modulated or granted on only a part of the area under hops the decision being taken by the Council acting on a proposal from the Commission.

1.2 Producer groups

The 1997 reform boosted **the role of producer groups** in order to pursue the aim of encouraging adjustment of production quality to market trends.

They have in fact a **double role**:

1. They carry out the **product marketing**. Some flexibility is however permitted at group level: a group can authorise its members to market some of their production themselves. In such cases it has a right to monitor the level of selling prices. In the event of disagreement on the prices proposed the group is obliged to buy the hops itself at a higher price and find a new buyer.

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[1] OJ L 175, 4.8.1971, p. 1. Regulation last amended by Regulation (EC) No 1514/2001 (OJ L 201, 26.7.2001, p. 8).

[2] Council Regulation (EC) No 1554/97 (OJ L 208, 2.8.1997, p. 1).

It may be of interest to mention the German national contract management system set up at producer group level to encourage quality production.
The buyer has to pay the group the price contracted with the grower. The group has a quality analysis carried out by an independent agency and part of the price is paid to the grower using a bonus/penalty system. The parameters set are water content, percentage of leaves, stems and waste matter, percentage of cone cover leaves and alpha acid content.

2. A **package of structural measures** is financed by means of a deduction on the production aid up to a maximum of 20%[3]. This resource is managed at producer group level.

   The money is used to support varietal conversion and for rationalisation and mechanisation of cultivation (notably harvesting), adoption of common production methods (cultivation techniques, fertiliser use, varieties etc), marketing and accompanying market measures, quality improvement, research etc. It can also be used to provide additional support for resting and grubbing-up.

1.3 Special measures

In 1998 the sector was confronted with a big imbalance between production and the market's actual quantitative and qualitative needs. It had become imperative to adjust production by selective cutting of the areas under hops in the Union.

Special temporary measures were adopted for five years (1998-2002)[4] and subsequently extended to include the 2003 crop. These measures are **temporary resting** and **grubbing-up** of hop plants. They are optional for both Member States and producer groups and participation by individual growers is voluntary.

Resting is decided on for one year at a time, the decision whether to keep in rest or return the hop field to production depending on the market situation and outlook. This measure permits qualitative adjustment of supply and can be selective by variety.

For **grubbing-up** there is a requirement that the area concerned cannot be replanted with hops before the end of 2003.

For both measures **compensation of €480/ha** is granted, i.e. the **production aid** rate. Certain good agricultural practice requirements must be met, notably for maintenance of fields being rested.

1.4 Product certification

The CMO requires that before being marketed **hops go through a certification procedure** to ensure that the minimum quality requirements have been met.

The certificate also states the location where the hops were grown and the crop year. It must be issued before any processing is carried out and before 31 March of the post-harvest year. It accompanies the hops and their derived products right along the production and marketing chain until the final stage, i.e. brewing.

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[3] It is compulsorily 20% in Germany since the producer groups do not market all their members' production. In the other Member States except France it is less than 20% and varies from year to year depending on need. In France there is no reduction, i.e. growers receive the full aid.

[4] Council Regulation (EC) No 1098/98 (OJ L 157, 30.5.1998, p. 7).

Imports into the Community can be made only under cover of a certificate recognised as equivalent to the Union's.

1.5 External trade

Ad valorem customs duties are imposed on hop imports into the Union and protective action can be taken in the event of market disturbance.

On exports there are no provisions.

However, hops and hop products cannot be imported or exported unless they present qualitative characteristics at least equivalent to those adopted for hops and hop products harvested and processed (and certified) in the Community. The quality guarantee for imported hops is provided by equivalent certification issued by the relevant department of the country concerned.

1.6 Budget costs

Budget expenditure on the hops CMO has been:

1997	€13.0 million	2001	€12.5 million
1998	€12.8 million	2002	€12.5 million
1999	€12.6 million	2003	€13.0 million
2000	€12.5 million		

Thus expenditure has been stable since the 1997 reform even though areas have been falling. The explanation is that the same payments are made on areas to which the special measures (resting, grubbing-up) have been applied as on those from which crops are taken.

2. GENERAL OVERVIEW OF SECTOR

2.1 World hop production

For the period 2000-2002 mean world production of hop cones was 97 125 tonnes, 25 467 tonnes (21%) lower than for 1995-1997 (see Table 1.B).

The world area under hops fell by 26% between these same periods (see Table 1.A).

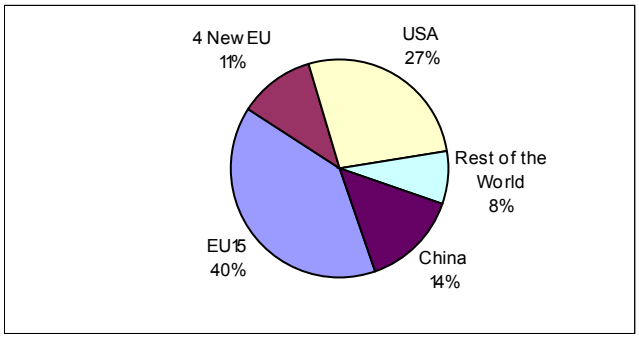
The Union of Fifteen is the leading world producer with 40% of production. The forthcoming enlargement will see this proportion rise to more than 50%.

In second place is the United States with 27% of production. Its areas fell by 22% between 1995-1997 and 2000-2002 (EU -17%). Its production of hop cones fell by 16% between these periods (EU -15%).

Preference is given in the United States to varieties that are very rich in alpha acid, some varieties yielding up to 15%.

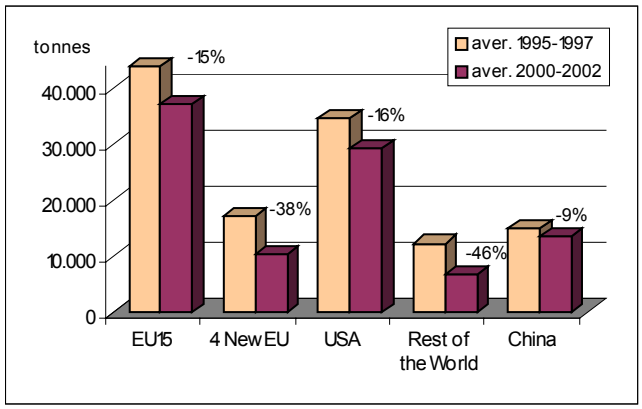
China is in third place, at present accounting for 14%. From the statistics available it appears that the mean quantity produced in the 2000-2002 period was 9% lower than for 1995-1997. Nonetheless China, which is increasingly opening up to world trade, has great potential for increasing its production.

Figure 2.1.a: Breakdown of world hop production in 2002



Source: Compiled by DG AGRI using IHGC (International Hop Growers Convention) figures

Figure 2.1.b: Trend of world hop production



Source: Compiled by DG AGRI using IHGC (International Hop Growers Convention) figures

2.2 Hop production in European Union

2.2.1 Areas

The **area** under hops in the Union fell between the periods 1995-1997 and 2000-2002 by 4 576 ha (17%).

Hopgrowing is in decline in all producing Member States except France. The fall is particularly marked in Ireland, Portugal and above all the United Kingdom (-43%) (see Table 1.A).

Special temporary measures. Five Member States have made use of both the resting and grubbing-up measures: Belgium, Germany, Austria, Portugal and the United Kingdom.

Grubbing-up. It appears that by the end of the fifth year of the programme (end 2002) 2 879 ha had been grubbed up. Expectations for 2003 bring the total to 3 224 ha, a **12% reduction** on 1997. To this must be added the area of some 1 454 ha grubbed up on which no aid has been granted.

Resting. There have been **big fluctuations from one year to another**, i.e. the measure has rendered production potential very flexible. The areas involved have however been relatively small. In the first year of application (1998) the area rested was 1 393 ha, i.e. 5**%** of cultivated area. It has subsequently been in the range 400 to 700 ha.

Figure 2.2.1.a: Areas cropped and areas grubbed up under the special temporary measures

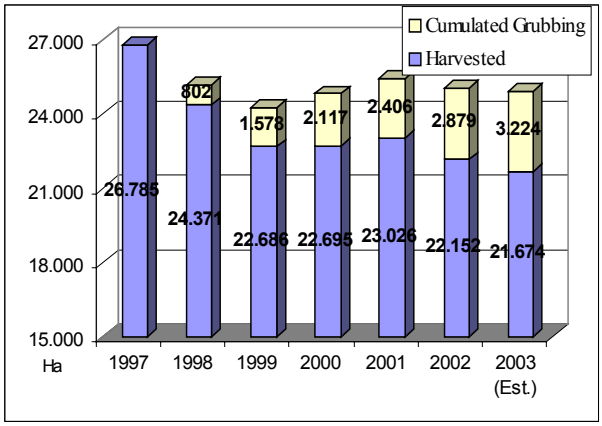
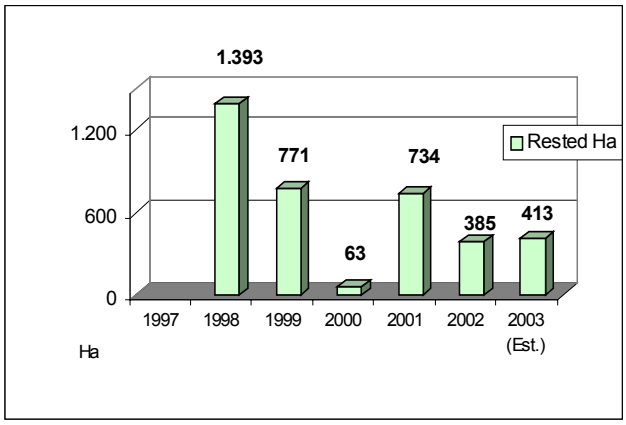


Figure 2.2.1.b: Areas rested under the special temporary measures:



Source: Member States' notifications

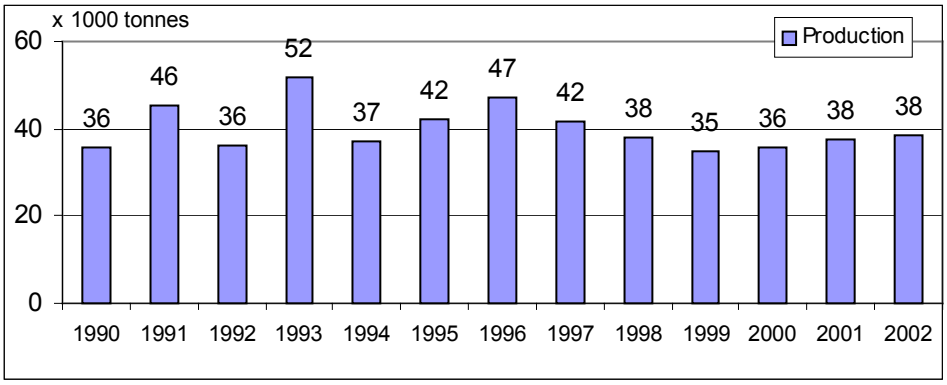
2.2.2 Production

In 2002 the **Union** produced 38 380 tonnes of hop cones. These gave 3 466 tonnes of alpha acid, a 9**%** yield (see Table 1.C).

Germany grew 32 271 tonnes of hops, 84**%** of Union production. The remainder was spread over seven Member States, mainly the United Kingdom (6**%**), Spain (4**%**) and France (3**%**).

The Union's **production has fallen constantly** in recent years but not so strongly as total world production. Mean production for the last three years (2000-2002) has been only some 86**%** of the mean for the period 1995-1997. But the actual production loss for alpha acid has been markedly lower, only 5**%** over the last six years (3 663 to 3 466 tonnes). The stabilisation of production from 2000 has been the outcome of a degree of optimism on market prospects that has lasted through 2001 and 2002. During the last three years the market has shown momentary signs of upturn, notably thanks to export opportunities under a favourable euro/dollar exchange rate.

Figure 2.2.2: Hop production trend in EU



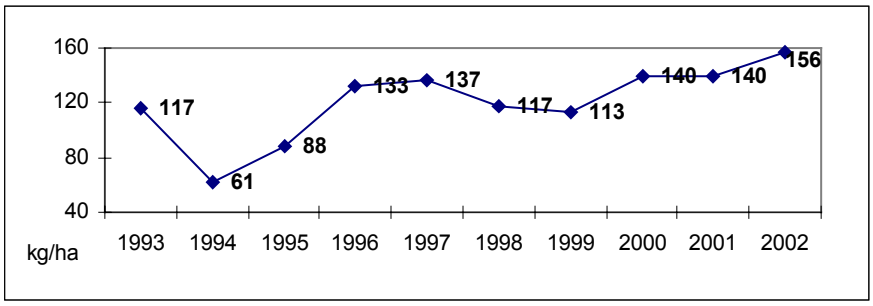
Source: Member States' notifications

2.2.3 Yields

Comparison of the periods 1995-1997 and 2000-2002 shows a 2**%** rise in **hop cone yields** in the Union, from 1.61 to 1.65 tonnes/ha. For the same periods the rise in the United States was 9**%**, from 1.96 to 2.14 tonnes/ha.

Comparison of **alpha acid yields** for the same periods shows a 22**%** increase in the Union and 28**%** in the USA. Average US alpha acid yields are much higher than in the Union (EU 156 kg/ha in 2002, USA 267 kg/ha) (see Table 1.D).

Figure 2.2.3: Trend of alpha acid yields in EU



Source: Member States' notifications

2.2.4 Structure of production

Although the **number of holdings** growing hops has been **in constant decline** (down 31**%** from 4 123 holdings in 1997 to 2 846 in 2002) the mean area per holding is increasing (up 20**%** from 6.5 ha in 1997 to 7.8 ha in 2002).

The figures vary very much from one Member State to another. The biggest holdings are in the United Kingdom (mean size 11.62 ha in 2002), Germany (9.45 ha) and France (7.49 ha) (see Table 2).

These are above all highly specialised family enterprises in which two thirds of the work is done by the family members and one third by employees.

The average age of growers is rising, from 47 in 1990 to 52 in 2000 according to FADN figures for Bavaria, the biggest production region in the Union.

2.2.5 Production costs and returns

FADN figures for the years 1998 to 2000 show[5] production costs in Bavaria, the most representative region for Community production, of €4 805/ha on average. Returns in the region were €5 537/ha (see Table 3).

2.2.6 Variety groups grown

Some 12 000 ha, i.e. 55**%** of the Union's present total hop area, is devoted to **aromatic varieties**.

The area planted with **bitter varieties** can be considered as stable in recent years (around 10 000 ha). Some bitter varieties have completely disappeared (these were of minor importance except for one in Spain) but the super alpha varieties have been rising strongly.

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[5] Figures calculated from the farm accounts collected by the FADN from a number of Bavarian holdings for which hops account for more than 40% of income.

Figure 2.2.6.a: EU production of aromatic and bitter varieties in 2002

2002 varieties	areas (ha)	*in %*	production (tonnes)	*in %*	yields (t/ha)	% alpha
aromatic	12 260	*55%*	20 721	*54%*	1,69	5,84%
bitter	9 835	*44%*	17 577	*46%*	1,76	12,81%
other	56	*0%*	82	*0%*	1,46	5,50%
Total	**22 151**	*100%*	**38 380**	*100%*	**1,73**	**9,03%**

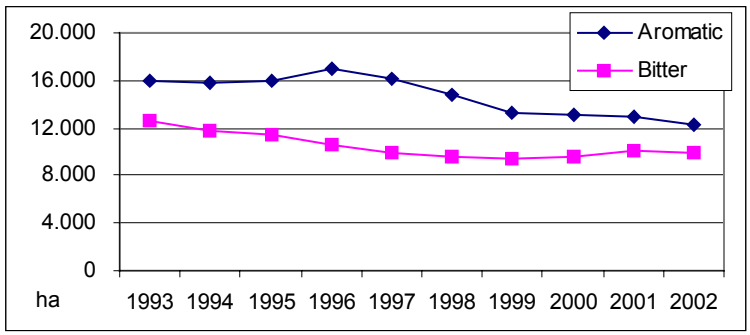
Source: Member States' notifications

CMO **varietal conversion** measures to boost the spread of the super alpha bitter varieties have had a decisive impact. The main result has been conversion away from the traditional bitter varieties Brewer's Gold and Northern Brewer, which were less and less able to compete with the American super alpha varieties on the world market. Germany has also grubbed up the aromatic variety Hersbrucker, for which there were no longer market outlets.

Over the period 1986 to 1997 3 241 ha, 12.4**%** of the 1987 Community area, was converted. On about 71**%** of this area the change was to alpha and super alpha varieties.

Table 4 in the Annex summarises the varietal conversions between 1997 and 2002.

Figure 2.2.6.b: Union trends for aromatic and bitter varieties



Source: Member States' notifications

3. MARKET SITUATION

3.1 Marketing

Hops are sold **either under contracts concluded in advance** generally for from three to five years **or on the free market.**

The volume of hops sold under contract in the Union fell from 72**%** in 1997 to 61**%** in 2002. The **"contract" market is declining** because users are finding increasingly abundant supplies on the free market at lower prices than the contract prices. The contract as a marketing tool continues however to be valued by growers mainly because the contract prices are stable over longer periods.

Demand depends on breweries that are becoming ever larger and are changing their buying policy in line with consumer taste. In addition they often have stocks from previous crops about which the growers have no information.

3.2 Prices

We look at the trend of prices of the hop varieties sold under contract and on the free market during the period 1993-2002 (see figure 3.2 and Table 5).

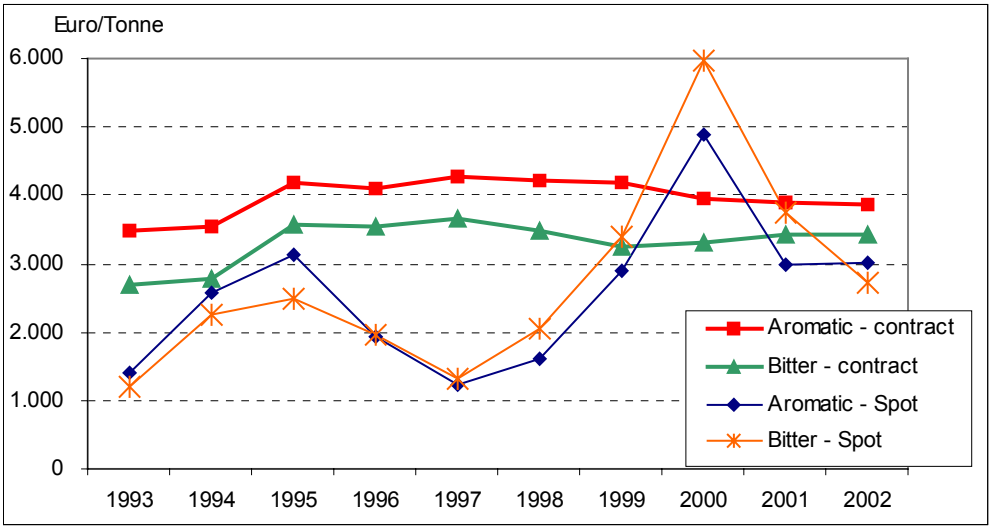
Contract prices for the aromatic varieties rose until 1999, when the volume of sales under contract began to fall, and have themselves continued to fall up to 2002. For bitter varieties under contract there was some price recovery in 2001 and 2002 owing to a more positive assessment of them and reduced availability on the world market[6].

Free market prices varied more markedly for all varieties and more than doubled between 1993 and 2002. As already indicated, the free market was more active since the brewers, enjoying reduced dependence on hops were increasingly inclined to make spot market purchases.

It should be noted that **free market prices have grown much closer to those for contract transactions.** The average free market price rose from 41**%** of the average contract price in 1993 to 79**%** in 2002.

The aromatic varieties, giving lower yields and more difficult to grow, have traditionally commanded higher prices than the bitter. But the gaps between the two types is tending to narrow since demand for the aromatics is dropping and the new super alpha varieties have a higher alpha acid yield and hence a higher market value.

Figure 3.2: Trend of Community prices by variety group



Source: Member States' notifications

3.3 Stocks held by growers

The figures sent in by the Member States show a **strong rise in 2001 and 2002**. Before this stocks were insignificant (Table 6).

The increase is even more marked in 2002, accounting for 36.1**%** of production, which on its part remained relatively stable. The stocks were divided equally between aromatic and bitter varieties.

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6 A fire destroyed part of the stocks held by the pools in the USA.

It should be noted that the stock figures are for the situation recorded in the month of March each year. It appears from more recent hop trade information[7] that these stocks have finally been sold. The situation in 2001 and 2002 was certainly new and no doubt was the outcome of marketing difficulties in recent years. That said, according to the trade there may also be big stocks at present at the breweries.

3.4 Trend of trade

Since 1993 the Union's **exports** have been in the range 20 000 to 24 000 hop cone equivalent tonnes[8]. More than half the exports have been in the form of compressed hops (pellets) or extracts.

Imports on the other hand have fallen steadily but have levelled out since 2000 at around 11 500 cone equivalent tonnes (see Tables 7 and 8).

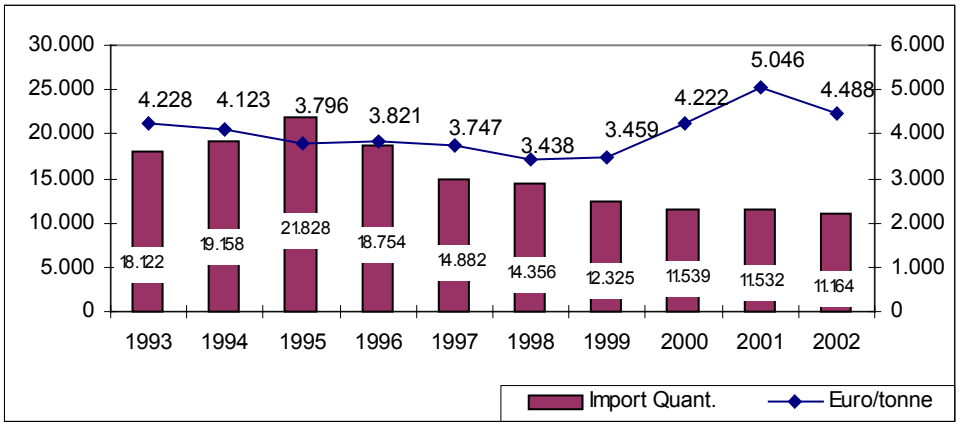
The Union is thus traditionally a net exporter and above all is the **hub of the world hop market**. The positive balance increased in 1998 and 1999 and since then has been around 10 000 tonnes.

The USA is the Union's main trading partner and hence the second player on the world market. It accounts for 45**%** (5 049 tonnes in 2002) of our imports and 17**%** (3 673 tonnes in 2002) of our exports. Around 50**%** of our exports are small quantities sent to a multitude of countries whereas our imports come essentially from four countries.

The two other main purchasers of Community hops are Russia (3 733 tonnes in 2002) and Japan (2 732 tonnes in 2002).

The Czech Republic, Australia and Slovenia with 2 000, 1 100 and 1 000 cone equivalent tonnes respectively are our other big suppliers.

Figure 3.4.a: Community hop imports



Source: EUROSTAT

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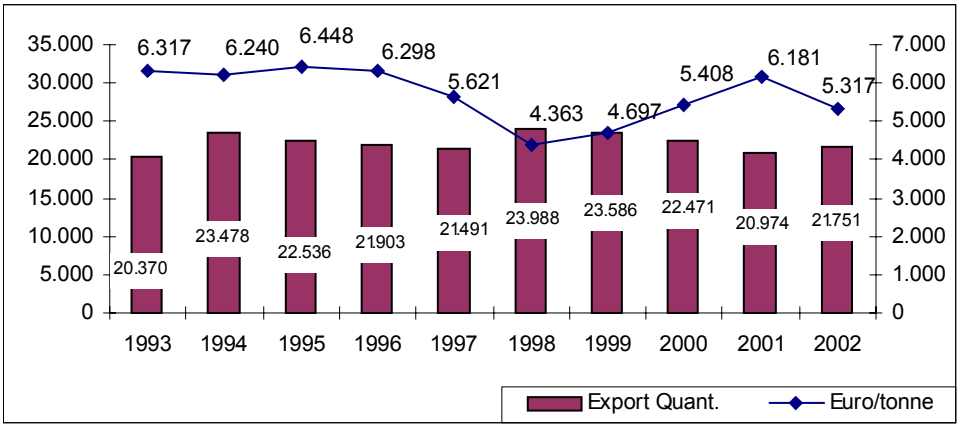
7 Given by the growers at the Standing Group meeting on 12.6.2003.

8 Volumes of pellets and hop extracts are turned into their equivalent in hop cones in order to keep production figures comparable.

Figure 3.4.b: Community hop exports



Source: EUROSTAT

4. POST-ACCESSION OUTLOOK

Accession of 10 new Member States, including **four producers** (Czech Republic, Poland, Slovenia, Slovakia) means a rise in the Community hop area of about 50**%** (10 000 ha) and in production of about 29**%** (11 000 tonnes)..

The new Member States' production is primarily of aromatic varieties but the trend is to an increase in varieties rich in alpha acid. In Poland these are in fact now predominant.

Between 1997 and 2002 the area under hops in the 4 producers fell by 18**%**, a similar fall to that recorded in the Union of 15, and actual production fell by 32**%**. The production share of the alpha varieties rose from 5.4**%** to 13**%**.

5. ASSESSMENTS

5.1 Operation of market

The nub of the hop market problem lies in the two outstanding trends of the last decade that have become more acute in recent years.

1. The consumer's preference has moved to more lightly hopped beers. Hence demand for hops has fallen.

2. Conversion to the high alpha acid varieties has led to an abundant supply of them on a market where demand is in marked decline. The growers have been weakened by introduction of the new alpha rich varieties, which have brought them marginal benefits whereas the users have been able to acquire hops with a richer alpha acid content without paying a proportionately higher price.

It is this situation that brought about the need to reduce hop areas.

Nevertheless, in 2001 and 2002 the growers (and/or producer groups) were clearly somewhat reluctant to follow this course. The immediate result was greater difficulty of disposal on the market and a build-up of stocks.

Price movements on the "contract" market (share about 60%) and the free market (which has risen to 40%) continue to be connected. The outcome is a balance between the two marketing types that both allows a viable price base to be guaranteed to the growers (the contract prices) and allows the users to purchase supplies on the free market at attractive prices. They continue to cover a large proportion of their requirements through contracts.

The players' positions have shifted. The users are in a stronger position. Their lower needs and continuing abundant supply have allowed them to reduce their commitments on the market and disinclined them from entering into longer term contract links with suppliers.

The Union market continues nonetheless to display a coherent dynamic in that supply is adjusting to gradually declining use. A new balance involving varietal conversion appears to be attainable that will reflect changing industrial requirements.

The Union will not lose its importance as hub of the world market and enlargement is expected to boost this role. In the new hopgrowing Member States the need for conversion will be accentuated. Integration into the Community market will bring marked advantages to these countries' growers.

5.2 Operation of CMO

The **production aid** has certainly been a highly appreciated support to growers.

Its importance lies in the possibility it affords of growing hops at an attractive level of profitability given both the structural and managerial investment that the crop demands. Maintenance of a level of profitability acceptable to the grower has restricted abandonment and preserved the sector's viability.

Any assessment must also give due weight to the fact that the aid has had a decisive role in

- the survival of a crop that is a distinctive feature of the landscape of certain regions
- maintenance of a thriving local economy, and notably of employment on family farms, at an aid rate acceptable from the budget standpoint (aid about 8% of return) and favourable from the economic and social standpoint.

Producer groups are the mainspring of the CMO's operation.

Theirs is a preponderant role in providing technical assistance and guidance on growing and marketing. They are a channel of dialogue between growers and users and in that capacity are leading market players.

That said, the possibility afforded to growers of themselves marketing all or part of their production has been widely appreciated and helped reaffirm the main market scenario.

Turning to the **deduction from the aid** and use of that resource, approaches have differed from one Member State to another and this raises the question whether the provision should be retained. In fact it is only in one Member State that this option of deducting and using part of the aid at producer groups level has been regularly used. Even if a positive judgment can be made on how the deduction has been used, doubts remain whether the provision gives the Community any added value. It is pointed out that

- for transparency and simplicity payment of the entire aid to the grower is desirable.
- the same aims and results could be pursued and achieved voluntarily. If necessary producer groups could decide, in line with their own rules of organisation and national civil law, to make the deduction from the price to be paid to the growers. This would significantly simplify administration of the measure, notably on the verification side.

The requirement of payment of the aid via producer groups would remain inviolable. This would be quite sufficient to guarantee the grower's ongoing interest in being a member of a group.

Certification has been a feature of the CMO since it was launched in 1971. Hop quality improvement is one of the CMO aims designed to ensure respect for minimum quality standards.

The certification procedure gives a guarantee of the quality of the products marketed and contributes to market transparency. It is important to the grower since the price obtained on the market depends on the quality and is also of great interest to the industrial user.

The **special measures** have indisputably had a role to play in the face of the need to

– cope with the volatility of market demand

– provide ongoing structural adjustment of production to market requirements.

Giving the same aid rate as for actual production has allowed part of the grower's shortfall and conversion costs to be covered.

The sole reason for the **grubbing-up** measure was a vital need for structural adjustment of production to demand on two counts: quantity and varietal range. This unavoidable need to seek balance is undoubtedly the reason why in some Member States additional grubbing-up has occurred without support under this special measure.

The question whether there would have been the same volume of movement out of the sector without the measure is certainly relevant. The impression is that conversion to e.g. arable crops has been possible because the hopgrower has with the grubbing-up compensation received a slightly higher degree of support than that provided by the direct aids received for arable crops.

The grower's major problem over conversion is to find an alternative offering comparable utilisation opportunities. Conversion to arable crops is attractive since it does not require big investment or pose technical difficulties but it entails a marked scaling down in intensity of utilisation and hence in income.

Resting has been used more locally and more sporadically. It has nonetheless been genuinely useful in resolving short-term market disposal difficulties owing to its selective impact on the supply side. But its attraction to growers has been limited since temporary abandonment of production involves maintaining the hop field and raises the problem of the substitute use and the market income reduction.

The two special measures (each with its own purpose) have **in combination provided an effective response to the need for balance** in the sector.

Are they still relevant as at presently defined? The answer is probably that in their present form they are obsolete but could be relaunched on a different basis better geared to the sector's future requirements.

6. CONCLUSIONS

The **hop market** is oriented above all to the needs of the brewing industry, which is reducing its requirements. This dominant trend of the past decade also dominates the immediate outlook and will probably be a constant in the future.

Producers, heavily dependent on returns from the market, have no alternative but to adjust and continually seek new market equilibria.

The **common market organisation** has played a role consistent with market dynamics. The production aid has been set at a level well geared to the principal aim of supporting producers without creating a situation of dependence on the aid.

The **special measures** have facilitated both the short-term adjustment (through resting) and the structural adjustment (through grubbing-up) required for rebalancing of supply and demand.

The **producer groups** have played an important role in marketing and orientation of production.

Certification and **quality standards** have allowed the high quality of Community hops to be maintained and permitted constant verification of the products put on the Community market.

Having a common organisation of the hop market becomes of even greater interest in the context of enlargement of the Union: the sector will be bigger in terms of both production and world trade.

Against the background of declining market demand the **overall assessment** on application of the regulatory provisions for the hop sector and on operation of the market is **positive.**

The question that arises is essentially how to enable the market organisation to cope adequately with the projected medium and long-term situation.

The future system must meet three crucial requirements.

1. Maintain the viability of production

   Hopgrowing must continue to be viable on two counts; production quality and critical marketing volume. For success on both counts we need to **retain**:

   a) the **product certification provisions**, which are a benchmark for both the Community and the world markets;

   b) the **central role of the producer groups** in marketing and orientation of production. This does not rule out some flexibility in accommodation of producer group members who wish to sell some of their production themselves.

2. Ensure economic conditions favourable to production

The present economic position of hopgrowing, in particular the **profitability of the crop,** should be maintained in order to ensure its financial interest to growers. This second requirement is also of great importance in the context of sustainable rural development, in particular for upkeep of the countryside and maintaining jobs. Thus it will be necessary to ensure that hopgrowing has medium and long-term prospects by safeguarding the **stability of present returns** by means of an aid equivalent to the present aid and **more efficient and direct transfer of the support.** This will encourage growers to maintain investment in hop fields and to pursue varietal conversion.

3. Accommodate the market trend

Alternatives for producers must be available as they also are of importance for responding to short-term and structural market crises. The grower must be able both to halt production temporarily and to quit it altogether to use the land for other types of production.

The **future arrangements** should integrate these various components into a system that as far as growers are concerned is **simple, flexible and sustainable**.

1. Integration of hop production aid into the single payment system

Integration of the production aid into the single payment system introduced by the CAP reform would allow the objectives indicated above to be attained. **Total decoupling of the aid** guarantees stable support to the grower. Were the market situation to deteriorate for either structural or short-term reasons he would be able freely to decide to halt production temporarily or grub up his hop fields and change to other crops.

Member States would however have the **option of maintaining a coupled aid up to a maximum of 25% of the production aid** in order to enable them to cater for particular production conditions or specific features of a more regional character. To encourage growers to organise Member States could decide to make part or all of the coupled aid conditional on membership of a producer group.

2. Modification of present CMO

The rules on certification and trade links with other countries would be retained. Provisions on the role of producer groups should be included but in simplified form.

ANNEX I

HISTORY OF THE CMO (1971 – 1997)

1. FIRST 20 YEARS

Common organisation of the hop sector market commenced in 1971 in order to improve product quality and guarantee an equitable standard of living to growers.

The primary features of the basic Regulation, which were then detailed in separate Council and Commission Regulations, were the **production aid** and aid for varietal conversion, the certification procedure, producer groups and the provisions on external trade.

1.1 Production aid

Each year the Council set a direct aid per hectare differentiated by variety group: aromatic, bitter, other. The rate was set with reference to the market situation, projected trends, prices on the external markets and costs. It was paid in the year following that of the harvest.

1.2. Varietal conversion aid

To encourage growing of the varieties most in line with market requirements a varietal conversion aid was introduced in 1987. This special aid[9] was ECU 2 500/ha and it was restricted to a maximum area of 1 000 ha per Member State. Its period of availability was extended to the end of 1996.

1.3. Certification procedure

Right from the beginning the CMO incorporated a certification procedure for quality purposes. Certification gave proof that all hops marketed met minimum quality standards.

1.4. Producer groups

These played a central role in hop marketing. A start-up aid for new producer groups was available for a maximum period of ten years (until August 1981). It was jointly financed from national budget resources. When Spain and Portugal acceded the aid was available for five years, and likewise for the east German Länder and for Austria. This support was available up to 31 December 1999.

1.5. External trade

Ad valorem customs tariff duties are levied on imports. Safeguard measures can be adopted if on account of imports or exports the Community market is seriously disturbed. There are no provisions on exports.

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[9] Council Regulation (EEC) No 2997/87 of 22 September 1987 (OJ L 284, 7.10.1987, p. 20). Regulation last amended by Regulation (EC) No 423/95 (OJ L 45, 1.3.1995, p. 1).

2. ADJUSTMENTS MADE IN 1992

One of the recognition requirements for producer groups was that they marketed all the production of their members.

It turned out in reality that a large proportion of producers had difficulty in conforming with this provision. To avoid the need to go through recognition withdrawal procedures for the groups in default the provisions were made more flexible in 1992 but with penalisation by progressive reduction of the aid.

Thus the basic Regulation as amended in 1992[10] stipulated that if the aid was granted to a recognised producer group that did not market all of its members' production it was to be reduced by 4**%** for the 1992 crop, 8**%** for 1993, 12**%** for 1994, 15**%** for 1995 and 15**%** for 1996. Producer groups had to be marketing all of their members' production by 1 January 1997 at the latest.

The temporary provisions required that at least 15**%** of the aid granted be used for market stabilisation action and for schemes for adjustment to market requirements and improvement of production.

[10] Regulation (EEC) No 3124/92 (OJ L 313, 30.10.1992, p. 1).

ANNEX II

TECHNICAL DATA ON HOPS

1. Product description

Botanically the hop *(Humulus lupulus)* belongs to the same family as hemp, i.e. *Cannabinaceae,* and to the order *Urticaceae*. It is a dioecious plant, i.e. each plant carries only female or only male flowers. Only the female plants form fruits, known as cones. These contain lupulin, a yellow substance easily seen when a ripe cone is crushed between the fingers.

The root system remains functional for very many years (generally around 20) and the part of the plant above the ground is cut each year at cropping time. It is a climbing plant that can reach 7 metres hence needs a support structure (poles, wire, trellis). Dwarf varieties (reaching around 2.5 m) have also been developed in recent years.

It has certain climatic and soil requirements, hence is generally grown between the 35th and 55th degrees of latitude of the northern and southern hemispheres.

The quality of the fresh hop deteriorates rapidly through oxidation and it can lose up to 30% of its power of imparting bitterness in the 6 months following cropping. For that reason it is immediately dried after cropping and either compressed and baled or processed into pellets or hop extract. As the latter type of product is easier to store and handle given its low volume and is qualitatively very stable, more and more brewers are opting for it.

2. Hop varieties

These are in commercial practice divided into three groups:

– aromatic (low average alpha acid content),

– bitter (high, sometimes very high, average alpha acid content),

– other varieties including experimental varieties; these account for only 0.25% of the Community hop area.

At present some 25 aromatic and 18 bitter varieties are listed in the Union. The new varieties are the outcome of years of research and selection. It takes more than twelve years to develop a new variety; a further three years to reach full production gives a total of 15.

Selection is targeted at yield per hectare (affecting the grower's income), improved disease resistance (contributing to high yield and lowering production costs) - for new plantings growers are increasingly using virus-free plants - technical features (e.g. time of ripening, some varieties being early, some being late, so allowing cropping to be staggered), good growth qualities (climbing ability, ease of training) and content of aromatic and bitter substances.

3. Utilisation

Hops are used principally for beer production and secondarily for production of soaps, shampoos and herbal teas of the calming type and to fill pillows.
In discussing hop use in beer the most important terms are **alpha acid** (a bitter component of lupulin) and hopping rate (amount of alpha used per hectolitre of beer). Varietal characteristics are also very important for production of beers with particular tastes and aromas.

Although hops are important for conferring bitterness and flavour and for preservation of the beer, very small quantities are required: between 40 and 200 grams of hops per hectolitre of beer, depending on the alpha content of the hops (up to 14**%** for super alpha varieties) and the hopping rate chosen.

Technical progress means that hopping rates are falling year on year: the figure calculated for 2002 is 5.3 grams of alpha per hectolitre. For world beer production estimated at 1 455 million hectolitres in 2003 around 7 566 tonnes of alpha acid is therefore required. Beer consumption is rising slightly each year, the trend being particularly marked in Asia and Latin America. In Western Europe it is falling slightly.

Consumer taste is moving to decreasingly bitter beers requiring ever less hops. It is interesting to note that hops account for about 0.3**%** of beer production costs, taxes excluded (source: HOPS USA, June 2003).

ANNEX III

STATISTICAL TABLES

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TABLE 1 A

Hop Areas in the European Community and in the Rest of the World

Evolution 1993-2002

	Area under hops (ha)											
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	change 95-97/00-02	*% change* 95-97/00-02
EC - Total	**28.885**	**27.648**	**27.499**	**27.324**	**26.785**	**24.371**	**22.686**	**22.709**	**23.019**	**22.151**	**-4.576**	***-17%***
Belgium	409	384	374	341	305	264	255	255	251	232	-94	*-28%*
Germany	23.015	21.930	21.885	21.813	21.381	19.683	18.299	18.598	19.020	18.352	-3.036	*-14%*
Spain	1.142	1.156	1.102	930	883	814	808	822	815	670	-203	*-21%*
France	670	670	670	710	774	799	814	815	816	816	98	*14%*
Ireland	13	13	8	7	7	7	7	2	2	2	-5	*-71%*
Austria	211	238	244	247	248	250	225	216	220	217	-29	*-12%*
Portugal	96	100	121	128	123	104	64	42	37	37	-85	*-69%*
United Kingdom	3.329	3.157	3.095	3.148	3.064	2.450	2.214	1.959	1.858	1.825	-1.222	*-39%*
Candidate Countries - Total	**16.441**	**16.161**	**19.941**	**15.219**	**12.481**	**10.160**	**10.574**	**10.421**	**10.482**	**10.331**	**-5.469**	***-34%***
Czech Rep.	10.400	10.200	10.070	9.355	7.036	5.697	5.991	6.095	6.075	5.968	-2.774	*-31%*
Poland	2.391	2.341	6.401	2.500	2.480	2.080	2.200	2.200	2.250	2.197	-1.578	*-42%*
Slovakia	1.200	1.200	1.100	1.000	800	450	450	350	350	350	-617	*-64%*
Slovenia	2450	2420	2370	2364	2.165	1.933	1.933	1.776	1.807	1.816	-500	*-22%*
Other countries - Total	**45.795**	**42.977**	**38.693**	**34.424**	**31.024**	**25.581**	**24.592**	**25.892**	**25.004**	**23.518**	**-9.909**	***-29%***
Australia	1.178	1.178	1.073	1.017	1.053	646	842	813	782	862	-229	*-22%*
Bulgaria	695	685	625	505	385	250	300	350	380	239	-182	*-36%*
China	8.000	8.500	7.050	6.600	4.392	4.276	4.385	4.708	4.813	5.642	-960	*-16%*
New Zealand	320	345	355	355	354	349	360	381	394	406	39	*11%*
Russia	3.600	3.500	3.500	2.788	1.697	1.330	1.640	1.587	1.100	862	-1.479	*-56%*
South-Africia	730	720	640	656	651	601	491	475	500	500	-157	*-24%*
U.S.A.	17.442	17.174	17.479	17.871	17.524	14.829	13.901	14.744	14.536	11.776	-3.939	*-22%*
Ukraine	6.580	5.363	5.033	3.545	1.900	1.200	1.334	1.572	1.428	1.809	-1.890	*-54%*
Yugoslavia	556	576	600	584	584	584	584	461	500	493	-105	*-18%*
Other Countries	6.905	4.936	2.338	503	2.484	1.516	755	801	571	929	n/a	*n/a*
World total	**91.121**	**86.786**	**86.133**	**76.967**	**70.290**	**60.112**	**57.852**	**59.022**	**58.505**	**56.000**	**-19.954**	***-26%***

Source: Elaboration by DG Agri., based on MS communications, CICH, Hop Growers of America, Barth report

TABLE 1 B

Hop Production in the European Community and in the Rest of the World

Evolution 1993-2002

	Cone production (Tonnes)											
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	change 95-97/00-02	*% change* 95-97/00-02
EC - Total	**52.036**	**37.053**	**42.004**	**47.578**	**41.873**	**37.795**	**34.620**	**35.909**	**37.562**	**38.380**	**-6.535**	***-15%***
Belgium	585	562	603	584	550	510	432	481	416	434	-135	*-23%*
Germany	42.428	28.434	34.054	38.704	34.052	30.859	27.912	29.298	31.576	32.271	-4.555	*-13%*
Spain	2.093	2.068	1.692	1.184	1.158	1.436	1.569	1.413	1.396	1.220	-2	*0%*
France	1.071	1.105	1.104	1.420	1.149	1.269	1.317	1.683	1.212	1.550	258	*21%*
Ireland	19	17	10	8	9	10	8	4	2	3	-6	*-67%*
Austria	341	331	336	339	379	385	316	289	347	301	-39	*-11%*
Portugal	39	97	127	158	102	56	59	42	53	57	-78	*-61%*
United Kingdom	5.460	4.440	4.078	5.181	4.476	3.271	3.007	2.700	2.559	2.545	-1.977	*-43%*
Candidate Countries - Total	**16.925**	**15.820**	**18.023**	**17.897**	**15.037**	**10.433**	**12.664**	**9.440**	**11.071**	**10.971**	**-6.491**	***-38%***
Czech Rep.	9.603	9.220	9.913	10.126	7.412	4.930	6.454	4.865	6.621	6.442	-3.174	*-35%*
Poland	2.872	2.200	3.265	3.400	3.175	2.100	2.650	2.550	2.200	2.127	-988	*-30%*
Slovakia	940	900	1.035	825	800	400	400	220	300	302	-613	*-69%*
Slovenia	3.510	3.500	3.810	3.546	3.650	3.003	3.160	1.806	1.950	2.100	-1.717	*-47%*
Other countries - Total	**68.457**	**68.450**	**68.094**	**61.990**	**55.282**	**46.383**	**48.166**	**51.263**	**50.509**	**46.271**	**-12.441**	***-20%***
Australia	3.132	3.132	2.549	2.924	2.545	1.557	2.238	2.116	2.181	2.384	-446	*-17%*
Bulgaria	595	595	506	415	312	200	305	220	306	303	-135	*-33%*
China	13.500	13.750	17.000	16.000	11.746	12.057	11.300	13.909	13.511	13.389	-1.313	*-9%*
New Zealand	630	766	756	833	769	644	741	831	725	884	27	*3%*
Russia	3.650	3.500	2.250	2.483	847	624	1.052	824	460	440	-1.286	*-69%*
South-Africia	1.320	1.330	1.210	1.008	985	955	821	882	775	616	-310	*-29%*
U.S.A.	34.538	32.845	35.767	34.006	33.961	27.011	29.747	30.653	30.315	26.461	-5.435	*-16%*
Ukraine	4.000	3.300	3.784	1.454	740	625	390	688	739	746	-1.269	*-64%*
Yugoslavia	841	704	762	628	595	600	600	361	750	616	-86	*-13%*
Other Countries	6.592	8.529	3.509	2.240	2.781	2.110	973	782	748	432	-2.189	*-77%*
World total	**137.417**	**121.323**	**128.121**	**127.465**	**112.192**	**94.610**	**95.450**	**96.612**	**99.143**	**95.622**	**-25.467**	***-21%***

Source: Elaboration by DG Agri., based on MS communications, CICH, Hop Growers of America, Barth report

TABLE 1C

Alpha Production in the European Community and in the Rest of the World

Evolution 1993-2002

	Alpha production (tonnes)											
	1993	1994 *	1995	1996	1997	1998	1999	2000	2001	2002	change 95-97/00-02	*% change* 95-97/00-02
EC - Total	**3.369**	**1.696**	**2.419**	**3.631**	**3.663**	**2.854**	**2.554**	**3.181**	**3.213**	**3.466**	**49**	***2%***
Belgium	53	41	48	54	54	50	35	51	39	50	-5	*-10%*
Germany	2.597	1.082	1.814	2.945	3.025	2.299	2.074	2.666	2.726	2.967	192	*7%*
Spain	183	165	140	88	120	154	161	150	153	137	31	*26%*
France	31	28	27	36	42	40	25	63	30	44	11	*30%*
Ireland	2	1	1	1	1	1	1	1	1	0	0	*-23%*
Austria	25	17	22	23	29	28	21	21	24	20	-3	*-13%*
Portugal	4	11	12	16	12	6	6	4	5	5	-9	*-64%*
United Kingdom	474	351	355	468	380	276	231	225	235	243	-167	*-42%*
Candidate Countries - Total	**729**	**527**	**714**	**854**	**750**	**489**	**597**	**505**	**617**	**459**	**-246**	***-32%***
Czech Rep.	346	240	317	405	289	189	226	188	269	217	-112	*-33%*
Poland	159	72	152	207	203	128	146	171	183	107	-34	*-18%*
Slovakia	33	23	31	33	20	14	15	8	10	10	-19	*-67%*
Slovenia	191	192	214	209	238	158	210	138	155	126	-81	*-37%*
Other countries - Total	**5.024**	**5.626**	**5.451**	**4.910**	**4.370**	**3.902**	**4.139**	**4.334**	**4.918**	**4.886**	**-198**	***-4%***
Australia	309	309	262	260	277	152	246	256	299	317	24	*9%*
Bulgaria	36	36	35	30	22	14	26	23	28	29	-2	*-8%*
China	n/a	825	935	880	705	784	678	839	813	862	-2	*0%*
New Zealand	84	98	99	105	100	80	90	106	90	95	-4	*-4%*
Russia	n/a	123	81	224	32	27	47	34	22	21	-87	*-77%*
South-Africia	n/a	141	123	102	102	92	88	93	87	118	-10	*-9%*
U.S.A.	3.523	3.532	3.351	3.355	3.335	2.912	2.980	3.290	3.467	3.140	-48	*-1%*
Ukraine	136	255	117	65	66	57	36	34	56	27	-44	*-53%*
Yugoslavia	44	30	30	26	26	27	27	22	51	35	9	*32%*
Other Countries	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	*n/a*
World total	**9.097**	**7.849**	**8.584**	**9.395**	**8.783**	**7.245**	**7.290**	**8.020**	**8.748**	**8.811**	**-394**	***-4%***

* 1994: particular climate conditions (draught) in Germany and Central Europe
Source: Elaboration by DG Agri., based on MS communications, CICH, Hop Growers of America, Barth report

TABLE 1 D

Alpha Yields in the European Community and in the Rest of the World

Evolution 1993-2002

	Alpha yields/ha (Kg)											
	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	change 95-97/00-02	% change 95-97/00-02
EC - Total	**117**	**61**	**88**	**133**	**137**	**117**	**113**	**140**	**140**	**156**	**26**	***22%***
Belgium	130	107	128	158	177	189	137	200	155	215	35	*23%*
Germany	113	49	83	135	141	117	113	143	143	162	30	*25%*
Spain	160	143	127	95	136	189	199	182	188	204	72	*61%*
France	46	42	40	51	54	50	31	77	37	54	8	*16%*
Ireland	154	77	125	143	143	143	143	500	500	134	241	*176%*
Austria	118	71	90	93	117	112	93	97	109	90	-1	*-1%*
Portugal	42	110	99	125	98	58	94	95	135	143	17	*16%*
United Kingdom	142	111	115	149	124	113	104	115	126	133	-4	*-3%*
Candidate Countries - Total	**44**	**33**	**36**	**56**	**60**	**48**	**56**	**48**	**59**	**44**	**0**	***0%***
Czech Rep.	33	24	31	43	41	33	38	31	44	36	-1	*-4%*
Poland	66	31	24	83	82	62	66	78	81	48	6	*10%*
Slovakia	28	19	28	33	25	31	33	23	29	29	-2	*-7%*
Slovenia	78	79	90	88	110	82	109	78	86	69	-19	*-19%*
Other countries - Total	**109**	**131**	**141**	**143**	**141**	**153**	**168**	**167**	**197**	**208**	**49**	***35%***
Australia	262	262	244	256	263	235	292	315	382	368	101	*40%*
Bulgaria	52	53	56	59	57	56	87	66	74	121	29	*51%*
China	n/a	97	133	133	161	183	155	178	169	153	24	*17%*
New Zealand	263	284	279	296	282	229	250	278	228	234	-39	*-14%*
Russia	n/a	35	23	80	19	20	29	21	20	24	-19	*-47%*
South-Africia	n/a	196	192	155	157	153	179	196	174	235	34	*20%*
U.S.A.	202	206	192	188	190	196	214	223	239	267	53	*28%*
Ukraine	21	48	23	18	35	48	27	22	39	15	0	*-1%*
Yugoslavia	79	52	50	45	45	46	46	48	102	71	27	*59%*
Other Countries	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	*n/a*
World total	**100**	**90**	**100**	**122**	**125**	**121**	**126**	**136**	**150**	**157**	**32**	***28%***

Source: Elaboration by DG Agri., based on MS communications, CICH, Hop Growers of America, Barth report

TABLE 2

HOPS: Structure of production in different hop regions of production (1997-2002)

June 2003

Country	Hop production areas	Number of producer groups 1997	Number of producer groups 2002	Number of holdings 1997	Number of holdings 2002	% variation 1997/2002	Average area per holding (ha) 1997	Average area per holding (ha) 2002	% variation 1997/2002
Belgium	Oost-Vlaanderen, Hainaut West-Vlaanderen, Vlaams-Br.	4	2	64	49	*-23%*	4,80	4,73	*-1%*
Germany	Tettnang, Baden Hallertau, Spalt, Hersbruck "Elbe-Saale" Rheinpfalz, Bitburg	5	2	2.790	1.943	*-30%*	7,70	9,45	*23%*
Spain	Castilla y León La Rioja	2	2	829	502	*-39%*	1,10	1,33	*21%*
France	Nord Alsace	2	2	131	109	*-17%*	5,90	7,49	*27%*
Ireland	Kilkenny			2	1	*-50%*	3,50	2,00	*-43%*
Austria	Niederösterreich Steiermark Oberösterreich	2	2	81	73	*-10%*	3,10	2,97	*-4%*
Portugal	Braga, Bragança	1	1	32	12	*-63%*	3,80	3,08	*-19%*
U.K.	Kent Hereford and Worcestershire	5	4	194	157	*-19%*	15,80	11,62	*-26%*
EU		**21**	**15**	**4.123**	**2.846**	***-31%***	**6,50**	**7,78**	***20%***

Source: Elaboration by DGAGRI based on Member States communications

TABLE 3

Hops - changes in returns and production costs in Bavaria (1997 - 2000)

June 2003

Holdings specialising in hops

This Table relates to a limited number of Bavarian holdings with at least 40% of output from hops *

EUR *(current prices)*	1997	1998	1999	2000	Average 1998-2000	% change 97-99/98-00
Number of holdings examined	24	28	14	15	19	-14%
Degree of specialisation in hops	65%	65%	70%	77%	71%	6%
Area of holding (ha)	22,3	21,3	20,9	19,7	20,6	-4%
Area under hops (ha)	10,3	9,1	9,9	10,1	9,7	-1%
Total labour force (in labour units)	2,40	2,41	2,20	2,24	2,28	-2%
of which "family" labour	1,62	1,75	1,38	1,44	1,52	-4%
Hop-growing (per hectare)						
Total costs**	4.308	4.402	4.898	5.115	4.805	6%
Returns (excl. aid)	5.045	5.061	5.170	6.379	5.537	9%
Margin per hectare	738	659	271	1.264	731	32%
Margin per holding - hops	7.573	6.011	2.684	12.762	7.152	32%
Margin per labour unit	3.155	2.494	1.220	5.697	3.137	37%

* The degree of specialisation is calculated on the basis of the share of returns for each crop grown on the holding; the costs for each crop are calculated on the same basis.

** there has in fact been very little investment in the past few years.

Sources: Elaborated by DGAGRI based on FADN farm accountancy data, no data available from 2001

TABLE 4

Hops: changes in varieties 1997-2002

June 2003

Aromatic hops		AREA HARVESTED (HA)				AVERAGE PRICE per tonne (EUR)			
		1997	2002	change 1997/02	% change	1997	2002	change 1997/02	% change
	EU 15	**16.183**	**12.260**	**-3.923**	***-24%***	**3.605**	**3.809**	**204**	***6%***
TOTAL AROMATIC VARIETIES	B	90	34	-56	*-62%*	3.423	3.780	357	*10%*
	D	13.311	10.169	-3.142	*-24%*	3.195	3.370	175	*5%*
	Fr	708	771	63	*9%*	4.961	5.502	541	*11%*
	A	247	210	-37	*-15%*	4.969	4.553	-416	*-8%*
	UK	1.827	1.076	-751	*-41%*	7.035	6.026	-1.009	*-14%*

Bitter hops		AREA HARVESTED (HA)				AVERAGE PRICE per tonne (EUR)			
		1997	2002	change 1997/02	% change	1997	2002	change 1997/02	% change
	EU 15	**9.984**	**9.835**	**-149**	***-1%***	**2.850**	**3.402**	**552**	***19%***
TOTAL BITTER VARIETIES	B	214	197	-17	*-8%*	1.261	2.107	846	*67%*
	D	7.454	8.143	689	*9%*	2.644	3.462	818	*31%*
	ES	883	670	-213	*-24%*	2.860	2.953	93	*3%*
	FR	66	46	-20	*-31%*	3.241	3.004	-237	*-7%*
	IRL	7	2	-5	*-67%*	7.680	6.690	-990	*-13%*
	A	1	7	6	*554%*	4.780	5.200	420	*9%*
	P	123	37	-86	*-70%*	1.860	780	-1.080	*-58%*
	UK	1.236	733	-503	*-41%*	5.071	3.924	-1.147	*-23%*

Other varieties		AREA HARVESTED (HA)				AVERAGE PRICE per tonne (EUR)			
	EU 15	**310**	**56**	**-254**	***-82%***	**3.224**	**3.167**	**-57**	***-2%***
TOTAL OTHER VARIETIES	B	0	0	0	*0%*	1.460	3.470	2.010	*138%*
	D	308	40	-268	*-87%*	3.224	3.410	186	*6%*
	A	0	0	0	*0%*	4.880			
	UK	2	15	13	*663%*	4.320	2.991	-1.329	*-31%*

Source: Elaborated by DGAGRI based on Member States communications

TABLE 5

Hops average contract and spot market prices 1993-2002

June 2003

EC	Sales under contracts			Average prices		Aromatic varieties		Bitter varieties	
						Average prices		Average prices	
	Total Production Tonnes	Under contract Tonnes	Under contract %	Under contract EUR/Tonne	Spot Market EUR/Tonne	Under contract EUR/Tonne	Spot Market EUR/Tonne	Under contract EUR/Tonne	Spot market EUR/Tonne
1993	51.695	31.982	62%	3.166	1.311	3.491	1.416	2.682	1.206
1994	37.038	29.742	80%	3.220	2.460	3.540	2.580	2.780	2.260
1995	42.004	34.293	82%	3.940	2.800	4.200	3.140	3.580	2.500
1996	47.303	32.897	70%	3.880	1.960	4.100	1.940	3.540	1.960
1997	41.873	29.986	72%	4.040	1.280	4.260	1.240	3.660	1.320
1998	37.795	27.510	73%	3.940	1.840	4.220	1.620	3.480	2.060
1999	34.620	25.825	75%	3.820	3.120	4.200	2.900	3.260	3.400
2000	35.907	24.921	69%	3.682	5.400	3.957	4.899	3.295	5.971
2001	37.562	23.639	63%	3.692	3.445	3.902	2.996	3.427	3.745
2002	38.380	23.268	61%	3.667	2.908	3.861	3.001	3.429	2.731

* Not including unsold quantities

Source: Elaborated by DGAGRI based on Member States communications

Table 6:

Evolution of hops production & unsold quantities

June 2003

Harvest year	Production Tonnes	Unsold production		Unsold Aromatic		Unsold Bitter	
		Tonnes	%	Tonnes	%	Tonnes	%
EU							
1990	35.750	17	0,0%	1	0,0%	7	0,0%
1991	45.539	89	0,2%	23	0,0%	64	0,1%
1992	36.367	135	0,4%	2	0,0%	128	0,4%
1993	51.695	170	0,3%	129	0,3%	43	0,1%
1994	37.038	148	0,4%	3	0,0%	145	0,4%
1995	42.004	221	0,5%	22	0,1%	193	0,5%
1996	47.303	1.345	2,8%	388	0,8%	942	2,0%
1997	41.873	1.036	2,5%	468	1,1%	567	1,4%
1998	37.795	260	0,7%	210	0,6%	48	0,1%
1999	34.620	135	0,4%	113	0,3%	19	0,1%
2000	35.907	400	1,1%	335	0,9%	61	0,2%
2001	37.562	**6.882**	**18,3%**	**3.651**	**9,7%**	**3.191**	**8,5%**
2002	38.380	**13.853**	**36,1%**	**7.075**	**18,4%**	**6.703**	**17,5%**

Source: Elaborated by DGAGRI based on Member States communications

Table 7. Development of EU Hops Imports

7.1. Imports : Quantity (tonnes - equivalent hop cones) June 2003

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	*%imp. 2002*	var. 2002/ 1993
EXTRA-EU	**18.122**	**19.158**	**21.828**	**18.754**	**14.882**	**14.356**	**12.325**	**11.539**	**11.532**	**11.164**	***100%***	***-38%***
Main countries												
U.S.A.	5.629	6.115	9.014	6.991	6.608	6.337	5.905	6.692	6.037	5.049	*45%*	*-10%*
Czech Republic	3.514	4.231	3.813	4.382	2.643	2.575	2.087	1.388	1.953	2.386	*21%*	*-32%*
Australia	1.468	1.387	1.547	1.594	1.079	692	716	972	937	1.113	*10%*	*-24%*
Slovenia	1.765	3.499	2.813	2.280	1.943	3.187	2.006	1.451	1.323	989	*9%*	*-44%*
China	2.630	704	1.245	880	430	40	26	128	185	537	*5%*	*-80%*
Poland	1.042	1.468	1.122	1.425	1.355	876	1.018	280	790	385	*3%*	*-63%*
Rest of world	2.074	1.754	2.274	1.202	824	649	567	628	307	705	*6%*	*-66%*

7.2. Imports : Value (x 1000 Euro)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	*%imp. 2002*	var. 2002/ 1993
EXTRA-EU	**76.618**	**78.995**	**82.863**	**71.664**	**55.762**	**49.354**	**42.635**	**48.718**	**58.189**	**50.100**	***100%***	***-35%***
Main countries												
U.S.A.	28.411	28.936	35.530	29.038	27.176	27.593	22.946	31.816	39.182	25.455	*51%*	*-10%*
Czech Republic	19.888	20.699	19.094	18.091	9.828	8.727	8.249	5.652	7.412	10.301	*21%*	*-48%*
Australia	4.474	5.098	5.450	5.640	4.055	1.777	1.992	3.008	3.916	5.816	*12%*	*30%*
Slovenia	7.036	11.657	9.425	7.855	6.842	6.447	4.551	4.672	4.023	3.153	*6%*	*-55%*
China	4.337	1.110	1.862	1.131	643	22	14	82	471	1.791	*4%*	*-59%*
Poland	4.356	4.984	4.000	4.699	3.746	2.159	2.448	746	2.009	1.151	*2%*	*-74%*
Rest of world	8.116	6.511	7.502	5.210	3.472	2.629	2.435	2.742	1.176	2.433	*5%*	*-70%*

7.3. Imports : Average value (Euro/tonne)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		var. 2002/ 1993
EXTRA-EU	**4.228**	**4.123**	**3.796**	**3.821**	**3.747**	**3.438**	**3.459**	**4.222**	**5.046**	**4.488**		***6%***
Main countries												
U.S.A.	5.047	4.732	3.942	4.154	4.113	4.354	3.886	4.754	6.490	5.042		*0%*
Czech Republic	5.660	4.892	5.008	4.128	3.719	3.389	3.953	4.072	3.795	4.317		*-24%*
Australia	3.048	3.676	3.523	3.538	3.758	2.568	2.782	3.095	4.179	5.226		*71%*
Slovenia	3.986	3.332	3.351	3.445	3.521	2.023	2.269	3.220	3.041	3.188		*-20%*
China	1.649	1.577	1.496	1.285	1.495	550	538	641	2.546	3.335		*102%*
Poland	4.180	3.395	3.565	3.298	2.765	2.465	2.405	2.664	2.543	2.990		*-28%*
Rest of world	3.913	3.712	3.299	4.334	4.214	4.051	4.295	4.366	3.831	3.451		*-12%*

Source: Eurostat - Comext - May 2003

Table 8. Development of EU Hops Exports

8.1. Exports : Quantity (tonnes - equivalent hop cones) June 2003

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	*%imp. 2002*	var. 2002/ 1993
EXTRA-EU	**20.370**	**23.478**	**22.536**	**21.903**	**21.491**	**23.988**	**23.586**	**22.471**	**20.974**	**21.751**	*100%*	*7%*
Main countries												
Russia	437	375	1.594	1.349	1.852	2.357	3.557	3.026	3.169	3.733	*17%*	*754%*
U.S.A.	2.495	5.007	4.772	5.399	4.069	4.351	5.071	4.730	3.874	3.673	*17%*	*47%*
Japan	5.824	5.753	4.811	4.476	4.455	3.702	3.494	3.347	3.017	2.732	*13%*	*-53%*
Czech Republic	676	757	796	644	739	942	964	984	1.104	945	*4%*	*40%*
Rest of world	10.938	11.586	10.563	10.035	10.376	12.636	10.500	10.384	9.810	10.668	*49%*	*-2%*

8.2. Exports : Value (x 1000 Euro)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	*%imp. 2002*	var. 2002/ 1993
EXTRA-EU	**128.671**	**146.501**	**145.317**	**137.949**	**120.804**	**104.661**	**110.781**	**121.534**	**129.636**	**115.647**	*100%*	*-10%*
Main countries												
Russia	2.157	1.602	7.280	5.563	6.253	7.567	13.200	16.546	22.240	20.049	*17%*	*829%*
U.S.A.	13.074	26.294	26.584	29.880	23.028	23.100	26.357	27.521	22.286	21.430	*19%*	*64%*
Japan	38.463	38.038	36.739	33.618	29.938	23.688	21.146	18.715	17.196	15.541	*13%*	*-60%*
Czech Republic	3.655	4.235	4.322	3.646	4.246	3.011	3.213	5.282	7.966	4.651	*4%*	*27%*
Rest of world	71.322	76.332	70.392	65.242	57.339	47.295	46.865	53.470	59.948	53.976	*47%*	*-24%*

8.3. Exports : Average value (Euro/tonne)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002		var. 2002/ 1993
EXTRA-EU	**6.317**	**6.240**	**6.448**	**6.298**	**5.621**	**4.363**	**4.697**	**5.408**	**6.181**	**5.317**		*-16%*
Main countries												
Russia	4.936	4.272	4.567	4.124	3.376	3.210	3.711	5.468	7.018	5.371		*9%*
U.S.A.	5.240	5.251	5.571	5.534	5.659	5.309	5.198	5.818	5.753	5.834		*11%*
Japan	6.604	6.612	7.636	7.511	6.720	6.399	6.052	5.592	5.700	5.689		*-14%*
Czech Republic	5.407	5.594	5.430	5.661	5.746	3.196	3.333	5.368	7.216	4.922		*-9%*
Rest of world	6.521	6.588	6.664	6.501	5.526	3.743	4.463	5.149	6.111	5.060		*-22%*

8.4. Balance Import and Export

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	*Average 93-02*	var. 2002/ 1993
EU Balance												
(tonnes)	**2.248**	**4.320**	**708**	**3.149**	**6.609**	**9.632**	**11.261**	**10.932**	**9.442**	**10.587**	**6.263**	*371%*
(value)	**52.053**	**67.506**	**62.454**	**66.285**	**65.042**	**55.307**	**68.146**	**72.816**	**71.447**	**65.547**	**58.782**	*26%*
with U.S.A.												
(tonnes)	-3.134	-1.108	-4.242	-1.592	-2.539	-1.986	-834	-1.962	-2.163	-1.376	-1.903	*-56%*
(value)	-15.337	-2.642	-8.946	842	-4.148	-4.493	3.411	-4.295	-16.896	-4.025	-5.139	*-74%*

Source: Eurostat - May 2003

TABLE 9
Special Temporary Measures (STM) 1997 - 2003

country	year	harvested areas (in hectares)	change in harvested areas	grubbed areas (Yearly) with STM	grubbed areas (cumulated) with STM	rested areas with STM	change in planted areas (Yearly) outside STM	change in planted areas (cumulated) outside STM
Total EU15	**1997**	**26.785**						
	1998	**24.371**	**-2.414**	**802**	**802**	**1.393**	**-219**	**-219**
	1999	**22.686**	**-1.685**	**776**	**1.578**	**771**	**-1.531**	**-1.750**
	2000	**22.695**	**+ 9**	**539**	**2.117**	**63**	**-160**	**-1.910**
	2001	**23.026**	**+ 331**	**289**	**2.406**	**734**	**+ 1.291**	**-619**
	2002	**22.152**	**-874**	**473**	**2.879**	**385**	**-750**	**-1.369**
	2003*	**21.674**	**-478**	**345**	**3.224**	**413**	**-105**	**-1.474**
Belgium	1997	305						
	1998	264	-41	**27**	**27**	**11**	-3	-3
	1999	255	-9	**7**	**34**	**2**	-11	-14
	2000	246	-9	**14**	**48**	**7**	10	-4
	2001	251	5	**11**	**59**	**7**	16	12
	2002	233	-18	**56**	**115**	**2**	33	45
	2003*	198	-35	**34**	**149**	**0**	-3	42
Germany	1997	21.381						
	1998	19.683	-1.698	**569**	**569**	**1.053**	-76	-76
	1999	18.299	-1.384	**587**	**1.156**	**588**	-1.262	-1.338
	2000	18.598	299	**384**	**1.540**	**0**	95	-1.243
	2001	19.020	422	**208**	**1.748**	**706**	1.336	93
	2002	18.352	-668	**356**	**2.104**	**345**	-673	-580
	2003*	17.952	-400	**300**	**2.404**	**400**	-45	-625
Austria	1997	248						
	1998	250	2	**0**	**0**	**0**	2	2
	1999	225	-25	**4**	**4**	**8**	-13	-11
	2000	216	-9	**6**	**10**	**9**	-2	-13
	2001	220	4	**5**	**15**	**1**	1	-12
	2002	217	-3	**1**	**16**	**3**	0	-12
	2003*	210	-7	**3**	**19**	**3**	-4	-16
Portugal	1997	123						
	1998	104	-19	**15**	**15**	**4**	0	0
	1999	64	-40	**17**	**32**	**23**	-4	-4
	2000	42	-22	**4**	**36**	**18**	-23	-27
	2001	37	-5	**4**	**40**	**1**	-18	-45
	2002	37	0	**0**	**40**	**0**	-1	-46
	2003*	37	0	**-40**		**0**	-40	-86
United Kingdom	1997	3.064						
	1998	2.450	-614	**191**	**191**	**325**	-98	-98
	1999	2.214	-236	**161**	**352**	**150**	-250	-348
	2000	1.959	-255	**131**	**483**	**29**	-245	-593
	2001	1.864	-95	**61**	**544**	**19**	-44	-637
	2002	1.825	-39	**60**	**604**	**35**	37	-600
	2003*	1.790	-35	**46**	**650**	**10**	-14	-614
Spain* *	1997	883						
	1998	814	-69	**0**	**0**	**0**	-69	-69
	1999	808	-6	**0**	**0**	**0**	-6	-75
	2000	815	7	**0**	**0**	**0**	7	-68
	2001	816	1	**0**	**0**	**0**	1	-67
	2002	675	-141	**0**	**0**	**0**	-141	-208
	2003*	670	-5	**0**	**0**	**0**	-5	-213
France* *	1997	774						
	1998	799	25	**0**	**0**	**0**	25	25
	1999	814	15	**0**	**0**	**0**	15	40
	2000	817	3	**0**	**0**	**0**	3	43
	2001	816	-1	**0**	**0**	**0**	-1	42
	2002*	811	-5	**0**	**0**	**0**	-5	37
	2003*	817	6	**0**	**0**	**0**	6	43
Ireland* *	1997	7						
	1998	7	0	**0**	**0**	**0**	0	0
	1999	7	0	**0**	**0**	**0**	0	0
	2000	2	-5	**0**	**0**	**0**	-5	-5
	2001	2	0	**0**	**0**	**0**	0	-5
	2002	2	0	**0**	**0**	**0**	0	-5
	2003*	0	-2	**2**	**2**	**0**	0	-5

* estimations for 2003 ** Spain, France, Ireland do not apply special temporary measures

Source: Elaborated by DGAGRI based on Member States communications

Table 10

EU Hops Consumption 1993-2002

10. Production/Imports/Exports (tonnes - equivalent hop cones): June 2003

		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Ø 1993-1995	Ø 2000-2002	?% 1993-1995/ 2000-2002
EU 15	**Production**	51.695	37.038	42.004	47.303	41.873	37.795	34.620	35.907	37.562	38.380	**43.579**	**37.283**	**-14%**
	Import	18.122	19.158	21.828	18.754	14.882	14.356	12.325	11.539	11.532	11.164	**19.703**	**11.412**	**-42%**
	Export	20.370	23.478	22.536	21.903	21.491	23.988	23.586	22.471	20.974	21.751	**22.128**	**21.732**	**-2%**
	Total = "Usage"	**49.447**	**32.718**	**41.296**	**44.154**	**35.264**	**28.163**	**23.359**	**24.975**	**28.120**	**27.793**	**41.154**	**26.963**	**-34%**

Source: Elaborated by DGAGRI based on Member States communications and EUROSTAT