

European Communities

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EUROPEAN PARLIAMENT

# Working Documents

1982-1983

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5 December 1982

DOCUMENT 1-996/82

REPORT

drawn up on behalf of the Committee on Agriculture

on horticulture in the European Community

Rapporteur: Mr W. VERNIMMEN

PE 78.785/fin.



At its sitting of 14.10.1982, the European Parliament referred the motion for a resolution tabled by Mr Cottrell and others on horticulture in the European Community (Doc. 1-603/81) pursuant to Rule 47 of the Rules of Procedure, to the Committee on Agriculture as the committee responsible.

At its meeting of 25 October 1981 the committee decided to draw up a report and on 7 January 1982 appointed Mr W. Vernimmen rapporteur.

The committee considered the draft report at its meetings of 24 and 25 May and 1 and 2 December 1982 and, at the latter meeting, unanimously adopted the motion for a resolution.

The following took part in the vote: Mr Curry, chairman; Mr Vernimmen, rapporteur; Mr Blaney, Mr Clinton, Mr Dalsass, Mrs Desouches (deputizing for Mr Thareau), Mr Diana, Mr Eyraud, Mr Jakobsen (deputizing for Mr Früh), Mr Gautier, Mr Goerens (deputizing for Mr Maher), Mr Harris (deputizing for Mr Battersby), Mr Herman (deputizing for Mr Marck), Mr Hord, Mr Kirk, Mrs Lizin (deputizing for Mr Sutra), Mr Mertens, Mr Provan, Mr Stella (deputizing for Mr Bocklet), Miss Quin, Mr Tolman, Mr Vitale and Mr Wettig.

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The Committee on Agriculture hereby submits to the European Parliament the following motion for a resolution together with explanatory statement:

MOTION FOR A RESOLUTION

on horticulture in the European Community

The European Parliament,

- having regard to the motion for a resolution tabled by Mr Cottrell and others on horticulture in the European Community (Doc. 1-603/81),
  - having regard to the motion for a resolution tabled by Mr Battersby and others on competition in the European Community horticulture industry (Doc. 1-635/81),
  - having regard to the motion for a resolution tabled by Mr Welsh and others on the subsidization of gas prices to Dutch horticulturists (Doc. 1-759/81),
  - having regard to the report by the Committee on Agriculture (Doc. 1-996/82),
- A having regard to the subsidization of natural gas prices to Dutch horticulturists, which distorts competition,
- B having regard to the considerable disparity in production conditions as between horticulturists in the North and those in the South of the Community,
- C having regard to the generally poor socio-economic situation in the Community,
- D considering the general policy of the Council and the Commission to reduce energy consumption in the Community,
- E whereas the degree of self-sufficiency in fruit and vegetables in the Community is stabilizing,
- F whereas the consumption of horticultural products in both fresh and processed form can be increased,
- G whereas the interests of consumers are better served by a wide range of high-quality products than by a limited range of products of lesser quality,

- H having regard to the growing demand for flowers and plants and to the scope for further expanding the market for these products,
- I having regard to the potential markets outside the Community for quality products from the European horticulture industry,
1. Regrets that the dispute over the price of natural gas to Dutch horticulturists has gone on for years and requests the Commission to take the necessary steps to compensate the horticulturists in other Member States who have been put at a disadvantage;
  2. Urges the Commission in future to show greater firmness in performing its role of guardian of the Treaties, so as to prevent unacceptable national support measures from upsetting the conditions of competition in the agricultural and horticultural sectors;
  3. Requests the Commission immediately to initiate a study of the differences between horticulture in the northern and southern production regions of the Community;
  4. Requests the Commission to examine to what extent the setting up of producer associations can contribute to maintaining the level of horticultural production in the northern countries, both in the open and in heated or unheated greenhouses, with particular reference to standardization of production and ways of improving sales and marketing;
  5. Requests the Commission to examine to what extent horticulture in the North and in the South can be developed along complementary lines, particularly as regards extending the period of availability of certain products;
  6. Requests the Commission to intensify the studies on changing over to alternative energy sources and reducing energy consumption in the horticultural industry through the use of energy-saving growing techniques and construction designs;
  7. Urges the Commission to contribute financially to campaigns to promote European horticultural products both within the Community and in third countries;
  8. Requests the Commission on the basis of the conclusions of the abovementioned studies to frame a horticultural policy which takes account of all the differences between northern and southern horticulture;

9. Instructs its President to forward this resolution to the Commission and the Council.

EXPLANATORY STATEMENT1. Content of the motions for resolutions

The tabling of the motions which are the subject of this report was prompted by the question of whether or not the introduction of a special natural gas tariff for horticulturalists in the Netherlands was admissible. Both the motion by Mr Battersby and others and that by Mr Welsh and others are based on the premise that horticulturalists in other Community countries will face severe financial difficulties unless the artificially low prices of natural gas supplied to Dutch horticulturalists are discontinued. In these resolutions the Commission is urged to fulfil its obligations under the Treaty by considering how the situation can be redressed.

In the motion by Mr Cottrell and others reference is also made to the wider framework of the horticultural industry and the Commission is urged to study the essential disparities between Northern horticulture and Southern horticulture and to draw the necessary conclusions on which specific measures can be based.



## 2. Horticulture in the Community

### 2.1. The fruit and vegetables sector

Fruit and vegetable production, which includes a wide range of products intended for consumption, both in fresh and processed form, represents approximately 12% of the value of agricultural production in the Community. Fruit production covers an area of some 1.1 million hectares, two-thirds of which are situated in Italy.

Vegetable production covers 0.9 million hectares, approximately 2% under glass, and is largely situated in the Netherlands, Italy and France. Annex I contains a summary of production trends from 1973 to 1981 and of consumption and the degree of self-sufficiency in fruit and vegetables in the various Member States.

It is clear from these tables that vegetable production has increased principally in Italy and Greece, and to a lesser extent in Ireland, the United Kingdom, the Netherlands and France. Production has declined in Germany, Belgium, Luxembourg and Denmark. Over the same period fruit production increased substantially in Germany and to a lesser extent in Belgium and Greece. In the other Member States production remained roughly constant except in Denmark, where there was a marked fall-off.

The consumption of vegetables increased substantially in Ireland and to a lesser degree in Italy, Denmark and the United Kingdom. In the other Member States consumption remained more or less constant. Fruit consumption increased substantially in the Netherlands and to a lesser extent in Ireland. In the other Member States consumption fluctuated around the same level.

The degree of self-sufficiency, representing the relationship between production and consumption, increased most in the case of vegetables in the Netherlands, and to a lesser extent in Italy and France. In the other Member States self-sufficiency declined. In fruit it increased substantially in Germany and to a lesser extent

in Belgium and Greece. Self-supply remained more or less constant in France, Italy and the United Kingdom, declining substantially in the other Member States.

The tables in Annexes II and III provide a summary of the trend in imports and exports of fruit and vegetables in the various Member States. Intra-Community trade is compared with total trade.

It is clear from these tables that vegetable imports have increased in all countries except Italy. The largest increase took place in the three Member States which joined the Community in 1973, the United Kingdom, Ireland and Denmark, and in the Netherlands, Belgium and Luxembourg.

Imports from the other Member States have increased much more markedly in Ireland and Denmark than total vegetable imports. The same is true of Italy, where intra-Community imports have grown almost three times faster than total imports. Intra-Community exports show roughly the same trend as total vegetable exports except in the case of the United Kingdom, where exports to the other Member States increased at twice the rate of total exports. The fact that exports from Ireland showed a marked decline should also be noted.

Total imports of fresh fruit increased less rapidly in the same period than total imports of vegetables. Intra-Community imports did, however, increase, except in the case of Germany. It is worth noting with regard to the data on fresh fruit exports that exports from Germany increased fivefold while total exports and intra-Community exports of fresh fruit by the various Member States remained more or less constant.

The table reproducing the import export balance for the various Member States shows that France, Italy and the Netherlands in particular have succeeded in increasing substantially vegetable exports to the other Member States. In the case of Italy and the Netherlands this should of course be seen in the context of an overall export increase. In France exports to the other Member States have increased relatively more than total exports. Ireland, which in 1973 was a net exporter of vegetables, became a net importer in 1981.

In the case of fresh fruit only France and Italy are net exporters to the other Member States. On the overall balance, only Italy is a net exporter.

## 2.2. The flowers and ornamental plants sector

This sector, which is also known as the non-edible horticultural products sector, only represents a small part of European agricultural production, but one that has shown a sharp increase in recent years.

In 1980 the area under cultivation used for these products was approximately 90,000 hectares. The value of annual production for the period is estimated at roughly 11,000 m ECU.

However, the deteriorating world economic climate is severely affecting horticultural producers' profitability in virtually all the Member States. Apart from a rise in labour costs, interest rates and other costs, the rise in energy prices has undoubtedly created the greatest difficulties.

The number of industrial closures in the cut flowers sector is higher than in the other horticultural sectors, partly because investments are still seldom showing a profit and partly because of reduced demand for cut flowers.

The number of persons employed in the flowers and ornamental plants industry is estimated at approximately 250,000. Here again there are signs of a considerable decrease, with all the economic and social consequences that implies. Fortunately there is evidence of an increase in demand for pot plants, so that a number of producers have managed to adjust their production accordingly.

The difficulties experienced primarily by the cut flowers sector may be attributed in part to the general decline in demand for luxury goods, but also to large-scale imports, at low prices, of cut flowers from third countries.

In the period 1973/80 intra-Community trade in cut flowers increased by approximately 10% per annum (426 m ECU in 1980 as compared with 219 m ECU in 1973). Over the same period imports from third countries rose by an average of 33% per annum (196 m ECU in 1980 as compared with 25 m ECU in 1973).

The most spectacular increases were achieved by imports from Colombia (70% per annum), Israel (43% per annum), and Kenya (30% per annum).

### 3. Distortion of competition

#### 3.1. Differences in heating costs

This report was prompted by difficulties which some Member States claim to be experiencing following the introduction of the low price paid by Dutch horticulturalists for gas used for the heating of hothouses.

The Commission report to the Council on distortions of competition in hothouse agriculture (COM(80) 306 fin) shows that the net price paid by Dutch horticulturalists for gas is lower than the price producers in other Member States pay for fuel.

However, heating costs are determined by other factors as well as the price of fuel, such as fuel efficiency, the technical characteristics of the hothouse, the nature of the product cultivated and the number of production cycles in a given financial year. There is virtually no information on these aspects, making it impossible to compare real heating costs per product in the various Member States.

It is, however, clear that there are considerable differences in energy costs, not only between enterprises in a single area but also between enterprises in different regions.

According to data from the Commission energy costs range from 17 to roughly 56% of operating costs, excluding labour costs and depreciation.

The following table provides a summary of prices excluding VAT, in EUA, for the volume of fuel equivalent to 1,000<sup>3</sup> of gas in June 1980.

	Gas	Heavy heating oil	Light heating oil
Netherlands	75.8	106.1	
Belgium		101.6	194.9
Denmark		107.9	194.3
Italy		102	186
United Kingdom		111.5	
France			184.8
Ireland			198.1
Federal Republic of Germany			189

Source: OJ N° C 316, 3.12.1980, p. 14

Consumers of light heating oil are particularly susceptible to the disadvantages of differences in fuel prices.

The difficulties experienced by horticultural production under glass as a result of the steep increase in energy prices have been emphasized by the Commission on many occasions. It has consequently notified the Member States of guidelines enabling public subsidies, limited in amount and duration (one year), to be applied in order to help horticulturalists adjust to the new situation in the market for energy products.

The price of Dutch natural gas, however, is a structural datum, and the rapporteur agrees with the Commission's conclusion that the price of natural gas in the Netherlands does result in distortion of competition, and that it must therefore be brought into line with natural gas supplied to industry.

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### 3.2. Other factors

In addition to the differences in fuel prices, there are a number of factors causing distortion between producers of horticultural products.

First, environmental conditions are not the same in the North and the South of the Community. There is also a difference in the geographical location and economic climate of horticultural enterprises. In such cases, however, structural policy, which is intended to take into account natural differences between agricultural regions, should gradually eliminate existing disadvantages of this sort.

Labour costs, interest rates and the prices of raw materials also reveal substantial differences from one Member State to another, but these cannot be regarded as specific to the horticultural sector, applying as they do to all sectors of the economy.

Another problem that is not specific to horticultural production under glass but certainly has an impact on that sector is the inadequate harmonization of provisions for the authorization of insecticides.

Thus the Belgian horticultural industry, for instance, is at a constant disadvantage because new and more efficient insecticides can be brought into use in the other Member States much more quickly than in Belgium, where a time-consuming approval procedure is required by the High Council for Agriculture.

The obduracy with which some Member States support their hothouse industry can lead to criticism from the other Member States. Thus West Germany takes the view that it is not just the excellence of the Dutch marketing system or cost advantages which explain the spectacular increase in the Dutch share of the West German market in cut flowers, at present 70% of total imports, but more especially unfair competition from 'flying Dutchmen' who account for roughly half of imports into West Germany without working through the German wholesale trade for flowers.

Finally, and with some reluctance, mention may also be made of the differences between Northern and Southern countries with regard to the employment of seasonal workers.

The fact that the relatively labour-intensive hothouse industry in the North is unable or at least less able than growers in the South of the Community to call on cheaper seasonal labour does make a substantial impact on the level of production costs.

#### 4. Review of cultivation techniques and marketing problems

The problems of the fruit and vegetable sector were described at length in a recent report by Mr Maffre-Baugé on two proposals for Council regulations amending the common organization of the market in fruit and vegetables.

However, little attention was devoted in this report to the specific problems of hothouse producers.

It seems incredible to the rapporteur to assume that hothouse horticulture in the Northern countries can be written off.

As the table 'Cultivation under glass' shows (see annex) there were around 50,000 glasshouse undertakings in the Northern countries in 1977. First of all, this is impossible for social reasons, bearing in mind the 70,000 workers employed on 10,000 hectares under glass in the Netherlands, but these products are also distributed in densely populated areas where there is substantial demand for quality products and where, as is clear from surveys, consumers are to some extent prepared to pay the price for such products.

Yet the difficulties of vegetable production under glass in the North of the Community will increase with the accession of Spain, in view of the fact that the production cycles of some vegetables overlap to some extent, and this overlap occurs at the beginning and end of the Northern supply period, and at the end and beginning of the Mediterranean supply period.

British surveys show that the energy input in vegetable production at present stands at a ratio of 20:1 when comparing North-Western Europe to Mediterranean areas, based on traditional production techniques. In the case of advanced production techniques, with the use of currently available methods and measures to save energy, the ratio is reduced to 5:1. When the energy input for transport to the consumption centre is taken into account the ratio of between 2 and 3 to 1 is arrived at.

It is also clear that research in this area is still very much in progress, so that further savings may be expected. On the other hand, it is doubtful whether appreciable energy savings can be achieved in road transport, while air transport cannot be considered in view of its high energy costs, and train transport is not flexible enough.

Consequently it is of crucial importance to the producers concerned that the Community should step up its efforts with regard to the research programmes aimed at reducing energy consumption and transferring to cheaper energy sources.

According to the Commission temporary measures to encourage the conversion to new energy sources and promote the more rational use of energy consumption may be regarded as reconcilable with Articles 92 and 93 of the Treaty provided that the period of application is limited to one year.



In addition to the continuing disadvantage in energy terms of the North-West-European producer account must also be taken of the competitive potential of Mediterranean producers, the essential issue being the need to meet consumer requirements. Consumers are at present used to regular supply, good quality, wide variety and attractive packaging.

In view of the concentration of hothouse horticulture in North-Western Europe, moreover in close proximity to a number of large areas of consumption, backed up by a well-organized production system and an efficient marketing and distribution organization, the competitive position of Northern hothouse producers would not appear to be under pressure in the short term.

The experience of Northern hothouse horticulturalists over the last few years shows that the heating season is getting longer as a result of a reduction in the periods of sunshine. This is yet another reason to endeavour to maximize the use of the solar heat available.

One advantage of hothouse producers in the Northern countries is the availability of adequate supplies of clean water. In the Mediterranean countries the water required often has to be transported considerable distances, creating the need for an expensive infrastructure network which in some cases in turn requires a certain amount of energy.

The difference in wage levels between the North and South will gradually diminish so that the present labour cost advantage of the Southern countries will also decline. Moreover efficiency is lower in the South, so that its cost advantage per unit of production will rapidly fall in significance.

One very important factor which applies to all horticulturalists in the Community is the support they receive in the orientation and rationalization of their production. In some countries this assistance is extremely well-organized while in other countries, for various reasons, horticulturalists are largely left to their own devices.

Horticulturalists in the Northern regions, like those throughout the Community, would all benefit from a dynamic policy geared to improving knowledge of cultivation and to the development of new cultivation techniques, enabling productivity to be increased and production costs to be curbed. On the other hand there is also a need to assess how far the con-

version to other, and more specifically smaller, vegetable crops can be any alternative for Northern hothouse producers competing with Southern producers. Here the possibility of conversion to flower crops should be investigated, and in the light of market prospects, more particularly to pot plants, in order to use the area under glass as efficiently as possible.

Nor should it be forgotten that hothouse cultivation is far less dependent on climatic conditions than other crops. Hence there is a need to ensure that consumer supply in the Community is safeguarded in the event of a harvest failure of field crops as a result of climatic conditions.

#### 5. The new situation

On 6 May 1982, Mr Dalsager, Member of the Commission of the European Communities, wrote to the President of the European Parliament informing him that an agreement had been reached between the Commission and the Netherlands authorities regarding the natural gas tariff applied to Dutch horticulturists (see copy of this letter in annex).

Under this agreement the price of natural gas to horticulturists was to be brought into line on 1 April 1983 with the tariff applied to industry.

Previously, of course, for several growing seasons the Dutch growers have been in a situation where they have enjoyed a considerable advantage over their counterparts in the surrounding Member States.

This situation, which has distorted competition, has undoubtedly resulted in closures and other difficulties, and it is impossible to put the clock back.

Your rapporteur therefore feels that the Commission should submit proposals designed, on the one hand, to compensate hothouse growers for the losses sustained and, on the other, to provide them with an opportunity to adapt their undertakings to the new situation.

#### 6. Conclusions

The Committee on Agriculture has been asked to deliver an opinion for the Committee on Economic and Monetary Affairs on the motions for resolutions tabled by Mr Battersby and others (Doc. 1-635/81) and by Mr Welsh and others (Doc. 1-759/81) which concern the subsidization of natural gas prices in the Netherlands.

Since this problem has now been resolved, albeit with some years' delay, your rapporteur submits that there is no need to consider this matter any further. He would again emphasize, however, that the Commission must formulate and put forward concrete proposals aimed at putting an end to the handicaps experienced in the past and still being experienced by hothouse growers in the other Member States.

As regards the motion for a resolution tabled by Mr Cottrell and others, which deals with the disparities between horticulture in the North and in the South of the Community, this report makes it clear that these differences need not signify the decline of horticulture in the open and under glass in the Northern regions. There is undeniably a complementary relationship between the Northern and Southern growing regions, there is above all a need for thorough research and judicious specialization if growers in the North of the Community wish to remain competitive vis-à-vis their Southern counterparts.

## ANNEX I

## VEGETABLES (1000 t)

	Production				Consumption				Degree of self-supply			
	1973	1977	1981	Index 1973 100	1973	1977	1981	Index 1973 100	1973	1977	1981	Index 1973 100
Deutschland	1.743	1.451	1.489	85,4	4.486	4.674	4.335	96,6	38,9	31,0	34,3	88,2
France	6.324	5.912	6.858	108,4	6.562	6.305	7.025	107,1	96,4	93,8	97,6	107,2
Italia	10.601	11.005	13.403	126,4	9.596	9.538	11.637	121,7	110,8	115,4	115,2	104,0
Nederland	2.145	2.193	2.409	112,1	1.167	1.084	1.210	103,7	183,8	202,3	199,1	108,3
Belgique/België Luxembourg	1.077	915	936	86,9	889	856	865	97,3	121,1	106,9	108,2	89,3
United Kingdom	2.961	2.565	3.287	111,0 (1)	3.934	3.722	4.455	113,2 (1)	75,3	68,9	73,8	98,0 (1)
Ireland	254	296	287	113,0	216	275	340	157,4	117,6	107,6	84,4	71,8
Danmark	199	173	191	96,0	239	254	291	121,7	83,3	68,1	65,6	78,7
EUR 9	25.304	24.510	28.921	114,3 (1)	27.062	26.708	30.166	111,5 (1)	93,5	91,8	95,9	102,6 (1)
Ellas	2.607	2.842	3.622	138,9 (1)	2.489	2.650	-	-	104,7	107,2	-	-
EUR 10	27.911	27.352	32.543	116,6	29.551	29.358	-	-	94,5	93,2	-	-

## FRUIT (1000 t)

Deutschland	2.216	2.573	3.051	137,7	5.489	5.678	5.437	99,0	40,4	45,3	56,1	138,9
France	3.220	3.250	3.246	100,8	3.345	3.538	3.357	100,3	96,3	91,9	96,7	100,4
Italia	6.243	6.583	6.530	104,6	4.916	4.861	5.142	104,6	127,0	135,4	127,0	100,0
Nederland	598	575	630	105,3	946	1.137	1.309	138,4	63,2	50,6	48,1	76,1
Belgique/België Luxembourg	385	376	456	118,4	643	663	726	112,9	59,9	56,7	62,8	104,8
United Kingdom	578	513	575	99,5 (1)	1.807	1.780	1.822	100,8 (1)	32,0	28,8	31,6	98,7 (1)
Ireland	22	25	22	100,0	98	92	118	120,4	22,4	27,2	18,6	83,0
Danmark	119	91	81	68,1	213	195	186	87,3	55,9	46,7	43,5	77,8
EUR 9	13.381	13.986	14.397	107,6 (1)	17.457	17.944	18.185	104,2 (1)	76,7	77,9	79,2	103,2 (1)
Ellas	1.092	1.371	1.283	117,5 (1)	712	777	774	105,7	149,2	176,4	165,8	111,1
EUR 10	14.473	15.357	15.214	105,1 (1)	18.189	18.721	18.833	103,5 (1)	79,6	82,0	80,8	101,5 (1)

(1) - 1980

-: no data available

Source: CHRONOS

COMMUNITY IMPORTS  
OF VEGETABLES (1000 t)

COMMUNITY EXPORTS  
OF VEGETABLES

	I M P O R T S								E X P O R T S							
	Total				Intra-Community				Total				Intra-Community			
	1973	1977	1981	Index 1973= 100	1973	1977	1981	Index 1973= 100	1973	1977	1981	Index 1973= 100	1973	1977	1981	Index 1973= 100
Deutschland	2.800	3.345	2.982	106,5	2.037	2.426	2.177	106,9	57	122	136	238,6	39	90	97	248,7
France	885	1.303	1.027	116,0	377	685	526	139,5	647	910	860	132,9	561	780	757	134,9
Italia	261	230	200	76,3	50	40	113	226,0	1.293	1.697	1.966	152,0	817	1.143	1.240	151,8
Nederland	400	463	567	141,7	209	207	272	130,1	1.378	1.572	1.766	128,1	1.220	1.363	1.603	131,4
Belgique/België	270	411	430	159,2	226	357	389	172,1	458	470	501	109,4	431	444	478	110,9
Luxembourg																
United Kingdom	1.022	1.269	1.807 (1)	176,8 (1)	416	500	624 (1)	150,0 (1)	49	112	639	1.304,1	19	66	531	2.794,7
Ireland	32	51	70	218,7	13	19	54	415,4	70	72	17	24,3	30	67	16	53,3
Danmark	59	102	130	220,3	14	42	73	521,4	19	21	30	157,9	7	5	16	228,6
EUR 9	2.387	2.897	3.097 (1)	129,7 (1)	3.342	4.277	4.723 (1)	141,3 (1)	629	699	1.852	294,4	-	-	-	-
Elles	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(1) = 1980

--: no data available

Source: CHRONOS

COMMUNITY IMPORTS  
OF FRESH FRUIT (1000 t)

COMMUNITY EXPORTS  
OF FRESH FRUIT

	I M P O R T S								E X P O R T S							
	Total				Intra-Community				Total				Intra-Community			
	1973	1977	1981	Index 1973 = 100	1973	1977	1981	Index 1973 = 100	1973	1977	1981	Index 1973 = 100	1973	1977	1981	Index 1973 = 100
Deutschland	3.399	3.337	3.006	88,4	1.807	1.879	1.589	87,9	129	245	607	470,5	94	212	546	580,8
France	901	1.055	1.147	127,3	153	242	349	228,1	776	767	1.036	133,5	687	652	828	120,5
Italia	494	395	489	99,0	34	7	76	223,5	1.821	2.117	1.877	103,1	1.377	1.746	1.581	114,8
Nederland	589	874	1.115	189,3	306	489	722	235,9	256	312	436	170,3	230	282	391	170,0
Belgique/België	386	435	475	123,1	-	241	272	-	128	148	205	160,2	-	140	179	-
Luxemburg																
United Kingdom	1.266	1.342	1.322 (1)	104,4	296	438	532 (1)	179,7	37	75	67 (1)	181,1 (1)	28	47	52 (1)	185,7 (1)
Ireland	86	81	120	139,5	24	31	60	250,0	10	14	24	240,0	9	13	24	266,6
Danmark	109	132	130	119,3	-	52	69	-	15	28	25	166,7	-	8	5	-
EUR 9	-	4.272	4.157 (1)	-	-	3.379	3.676 (1)	-	-	327	387	-	-	-	-	-
Ellas	4	2	-	-	-	-	-	-	321	596	-	-	-	-	-	-

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(1) = 1980

-: no data available

Source: CHRONOS

## Trends in the non-edible horticultural products sector 1980/1981

	Imports			Exports			Surface cultivated			Price to producer				Consumption				Profitability of holdings		
	F	P	G	F	P	G	F		P	O	F		P	O	G	F	P		O	G
							under glass	open air			under glass	open air								
BRD	-	+	-	+	-	-	-	-	+	=	=	=	-	-	=	=	=	+	=	-
F							=	=	+	=										
It.																				
NL.	+	-	-	+	+	+	+	+	+	+	+	=	-	-	=	+	+	+	+	-
B/Lux	+	+	+	-	+	+	-	-	-	-	-	=	+	+	-	-	+	+	-	-
UK	+	+	=	=	=	=	-	-	-	+	+		=	+	+	-	-	-	-	-
Ir.																				
Dk.	-	=	=	=	+	+	-						=	=	+	=	=	=	=	-
Hell																				

F = cut flowers  
P = pot plants  
G = arboriculture  
O = bulbs

+ : increase  
- : decrease  
= : no change

Source: 1981 annual report of the IAHP (International Association of Horticultural Producers)

## Import-export balance of fresh fruit and vegetables (1,000 tonnes)

	Fresh fruit						Vegetables					
	Total			Intra-Community			Total			Intra-Community		
	1973	1981	Index 1973 = 100	1973	1981	index 1973 = 100	1973	1981	Index 1973 = 100	1973	1981	Index 1973 = 100
BRD	+ 3,270	+ 2,399	73,4	+ 1,713	+ 1,043	60,9	+ 2,743	+ 2,846	103,7	+ 1,998	+ 2,080	104,1
F	+ 125	+ 111	88,8	- 534	- 479	89,7	+ 238	+ 167	70,2	- 184	- 231	125,5
It	- 1,327	- 1,388	104,6	- 1,343	- 1,505	112,1	- 1,032	- 1,766	171,1	- 767	- 1,127	146,9
Nl	+ 333	+ 679	203,9	+ 76	+ 331	435,5	- 978	- 1,199	122,6	- 1,011	- 1,331	131,6
B Lux }	+ 258	+ 270	104,6	-	+ 93	-	- 188	- 71	37,8	- 205	- 89	43,4
UK	+ 1,229	+ 1,255 (1)	102,1 (1)	+ 268	+ 480 (1)	179,1	+ 973	+ 1,168 (1)	120,0 (1)	+ 397	+ 93 (1)	23,4 (1)
Irl.	+ 76	+ 96	126,3	+ 15	+ 36	240,0	- 38	+ 53	239,5	- 27	+ 38	240,7
Dk	+ 94	+ 105	111,7	-	+ 64	-	+ 40	+ 100	250,0	+ 7	+ 57	814,3
EUR 9	+ 4,058	+ 3,770 (1)	92,9	-	-	-	1,749	1,245 (1)	71,2	-	-	-

(1) = 1980



Cultivation under glass

	BRD	F	It	Nl	B	Lux	UK	Irl	Dk	EUR-9	Hel
No. of holdings (x 1,000)											
1966/67	23,9	23,4	15,3	21,1	14,7	0,25	-	-	-	-	-
1977	13,8	19,6	15,2	16,3	7,6	0,07	9,4	0,6	2,8	85,4	11,
Area (1,000 ha)											
1966/67	2,5	4,9	5,8	6,6	2,0	0,02	-	-	-	-	-
1977	2,9	7,7	7,3	8,0	1,7	0,01	2,2	0,1	0,6	30,5	2,

Source: Community structural surveys

Holdings per category of area under glass

Number in 1977 (x 1,000)	BRD	F	It	Nl	B	Lux	UK (1975)	Irl	Dk	EUR-9 (1975)
0 - 0,05 ha	2,0	3,2	1,7	1,9	1,4	0,02	2,2	0,4	0,8	17,4
0,05 - 0,2 ha	6,8	7,1	4,2	3,5	3,1	0,04	3,2	0,0	1,1	33,2
0,2 - 0,5 ha	3,8	5,0	5,2	4,3	2,1	0,01	1,6	0,1	0,7	22,8
0,5 - 1 ha	1,0	2,5	2,4	4,6	0,8	0,00	0,3	0,0	0,2	11,4
1 ha	0,3	1,8	1,7	2,0	0,2	-	0,3	0,0	0,1	5,8
Total	13,8	19,6	15,2	16,3	7,6	0,07	9,4	0,6	2,8	85,4

Source: Community structural surveys

Area (in ha) under glass per sector (1979)

	BRD	F	It	Nl	B	Lux	UK	Irl	Dk	EUR-9	Hel
Vegetables	1,080	3,928	10,422	4,400	900	-	1,300	300	152	22,482	3,200
Flowers and orn. plants	2,594	1,622	2,882	3,662	500	-	500	30	344	12,134	8
Table fruit	-	-	2,849	223	300	-	19	13	-	3,404	-

TECHNICAL ASPECTS OF ENERGY SAVING IN HOTHOUSE HORTICULTURE

As a result of the replacement of old hothouses by new ones, improvements in labour productivity, more selective growing methods and a number of other measures, costs in the hothouse horticulture sector have risen less rapidly than the increase in energy prices would lead one to suppose. In view of the continuing upward trend of energy prices and the steady rise in the percentage of total hothouse growers' costs accounted for by energy costs, it is vitally important for this sector to make use of every opportunity to reduce energy costs. In the past few years research into energy-saving measures in the hothouse cultivation of both vegetables and ornamental plants has become a central issue in the Member States concerned. The aim of this paper is to summarize briefly the findings presented in one of the publications dealing with this type of research.

1. Important principles

The nutrient balance and the climate in the hothouse determine the growing conditions of every hothouse product. Climate is determined by the energy balance, in other words the balance of humidity and heat. In order to calculate the heat balance it is necessary to estimate the quantity of heat entering the glass house and the quantity of heat lost. The heat input is composed of solar radiation and the additional heat generated by the heating installation. Heat is lost through transmission through the walls and through (necessary) ventilation. To save energy, therefore, the heat input must be used efficiently and heat losses kept to a minimum. Heat is lost mainly by transmission through walls, and through ventilation and leaks. Heat loss by transmission increases in proportion to:

- the increase in wall surface;
- the increase in the difference between inside and outside temperature;
- the increase in the conductivity coefficient.

One should distinguish between controlled and uncontrolled ventilation. Uncontrolled ventilation takes the form of heat loss through cracks, broken and displaced panes of glass and badly fitting ventilators and doors. Controlled ventilation is the regulation of airflow to suit the method of cultivation.

2. Ways of saving energy

From the literature there appear to be four main areas in which energy can be saved:

- in the generation of heat;
- by avoiding energy wastage;
- by energy-saving hothouse designs;
- by growing alternative produce which requires less energy.

### 2.1. In the generation of heat

Heat generation entails heat losses which adversely affect boiler efficiency. When the burner is working the heat loss is the sum of losses through the stack and through the boiler by radiation, convection, and conduction. When the burner is off, heat losses are caused on the one hand by the cooling of the external boiler walls, through radiation, convection and conduction and, on the other, by the cooling of the internal boiler walls due to the air which is drawn through the boiler by the draught from the flue.

These heat losses can be reduced to some extent by properly insulating the boiler and ancillary appliances, thereby increasing boiler efficiency, which is equal to the combustion efficiency minus the heat given off by the boiler to the environment. Other possible ways of saving energy in heat generation are:

- control of flue gas temperature to avoid condensation of water vapour which causes corrosion of the internal boiler walls;
- fitting of retarders in the fire-tubes of the heating boiler (natural gas-fired). This increases the transfer of heat to the boiler and can reduce the flue gas temperature by around 70°C, thereby achieving a 3 to 3.5% increase in combustion efficiency;
- fitting of flue gas condenser; this allows the flue gases to exchange their heat with water at low temperature, e.g. water in the primary heating circuit. A flue gas condenser can increase heating efficiency by an average of 10%;
- fitting the boiler with a proper insulating jacket and insulating all pipework.

### 2.2. Avoiding energy wastage

Energy wastage is caused primarily by what was described above as uncontrolled ventilation. This is due mainly to cracks, broken and displaced panes of glass and badly fitting ventilators and doors. Generally speaking, the older the hothouse the higher the heat losses. Considerable losses can also occur at the point where the gutter joins the glass. 10 to 30% of the energy can be saved if the glasshouses

are carefully checked for defects and if they are properly designed.

### 2.3. Energy-saving hothouse designs

Under this heading one automatically thinks first of the various possible ways of insulating hothouses using both glass and synthetic products such as coated glass, double-glazing, double thickness glass, PMMA, PVC, PP and so on. The properties of these various types of glazing with regard to conductivity of the various kinds of radiation and the length of time for which these properties are retained vary. Research has shown that the use of coated glass produces a 25% saving in annual energy costs and the use of double-thickness glass of which one pane is coated gives a saving of 55%.

The use of sunshields and energy screens is another way of reducing heating costs. The studies consulted indicate that further research is necessary before a clear picture can be given of these techniques.

One must remember that all these energy-saving techniques have a direct bearing on the quantity and composition of the light, humidity, CO<sub>2</sub> content and ventilation flows in the glasshouses and thus, indirectly, on the conditions of growth.

### 2.4. Growing alternative produce which requires less energy

A number of research centres are investigating the possibilities of growing alternative products. Experiments are being conducted with varieties of vegetables from other climatic zones and promising results have already been achieved in certain cases. Preparations are currently being made to bring these vegetables into production. In the ornamental plant sector, a large number of growers have already changed over to house plants, while research is also going on into the possibility of breeding varieties of pot plants which require less energy.

## 3. Investment - research - management training

Obviously the most important question for growers is whether any investment in energy-saving measures will be profitable. Given the gross income from growing vegetables under glass and the type of products grown, the scope in this sector is more limited than in the ornamental plant sector. Whereas in the ornamental plant sector, because of the gross income level, most of the energy-saving methods described can be applied profitably, vegetable growers are limited to improvements in the heating system, the growing period, the varieties grown and growing methods.

Ornamental plant growers can also invest profitably in protective shades, energy screens, roller blinds and insulating materials.

Research into certain specific aspects of energy-saving techniques is already quite far advanced and in certain cases has led to quantifiable results. However, further research into already known and new methods is urgently necessary, just as important as the research itself is the need to pass on the knowledge acquired to the growers. Further training of glasshouse managers is therefore increasingly necessary.

They need to be kept informed of the opportunities but also educated in the principles of costing, which is the essential basis of all investment. They must be in a position to identify accurately all the variables which influence the cost price and to decide which of them should be adjusted in order to reduce costs.

Letter from Mr P.DALSAGER, Member of the Commission of the European Communities,  
to Mr P. DANKERT, President of the European Parliament

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Brussels, 6 May 1982

Subject: National aid granted by the Netherlands to horticulturists

Dear Mr President,

The question of the preferential tariff for natural gas granted to Dutch horticulturists has repeatedly occupied the attention of the European Parliament and Council. The Commission having initiated the procedure referred to in Article 93(2) of the Treaty in respect of this measure, a decision was given on 15 December 1981 to the effect that this measure constituted an incompatible national aid.

The Netherlands Government and horticulturists appealed against this decision to the Court of Justice, contesting the soundness of the Commission's arguments. However, the discussions between the Netherlands authorities and the Commission on this subject were continued. The Commission instructed me and Mr Davignon to conduct new negotiations with the Netherlands authorities in order to bring them significantly closer to the position adopted by the Commission in its decision of 15 December 1981.

I am pleased to be able to inform you that, following these meetings, an agreement has been reached. On 23 April 1982 the Netherlands authorities submitted new proposals to the Commission containing the following elements:

- (a) On 1 April 1983 the horticultural gas tariff is to be brought into line with the industrial gas tariff, which corresponds to the calorific value of heavy fuel oil to be fixed by the central statistical office. On the same date the horticultural gas tariff will also be increased by the standard rate of 0.5 cents per cubic metre.
- (b) From this same date the tariff is to be adjusted every three months to the price for heavy fuel oil defined by the central statistical office.
- (c) This horticultural tariff applies to consumption of more than 30,000 cubic metres per year; consumption of up to 30,000 cubic metres per year is governed by the tariff for small consumers laid down by VEGIN (Netherlands Gas Authority).

If for the year concerned the small consumers tariff (consumption up to 30,000 cubic metres per year) is higher than the horticultural tariff, a refund is to be granted from 1.1.1983 onwards on supplies of up to 30,000 cubic metres to undertakings eligible for the horticultural tariff and using more than 30,000 cubic metres; this refund shall be equivalent to the difference for the year concerned between the small consumers tariff and the horticultural tariff, up to a maximum of 41/3 cents per cubic metre.

- (d) The difference which existed on 1 April 1982 of 30.6 cents per cubic metre between the horticultural tariff and the industrial tariff referred to above is to be phased out in 3 equal stages, on 1 May 1982, 1 October 1982 and 1 April 1983.

- (e) Initially on 1 October 1982 and again on 1 April 1983 the horticultural tariff is to be increased or reduced by the same amount as the industrial tariff; in any case on 1 October 1982 the difference shall not exceed 10%.

The Commission took a favourable view of the proposal on tariffs submitted by the Netherlands Government, particularly in view of the not insignificant efforts made by the Netherlands authorities to come into line with the Commission's position and the current situation with regard to the Community's energy tariff policy and recent trends in the energy markets.

However, it will request the Netherlands Government to draw up the implementing provisions for new tariff arrangements in such a way that, by 1.1.1983 at the latest, the price reduction for supplies of up to 30,000 cubic metres will be included in the price per cubic metre.

It will also ask the Netherlands Government to provide information on:

- the quarterly reference price for heavy fuel oil (PCBS), both provisional and final, as soon as this price has been fixed.
- changes in the formula used for determining the gas price which were to be introduced according as progress was made with heating technology and as changes occurred in the economic situation.
- the factors involved in the calculations of any future adjustments.

I believe that, thanks to these changes in the horticultural gas tariff, the distortions of competition that have been observed will soon be eliminated.

Yours sincerely

(sgd) P. Dalsager

MOTION FOR A RESOLUTION (DOCUMENT 1-603/81)

tabled by Mr COTTRELL, Mr BATTERSBY, Mr DANKERT, Mr MAHER, Mr DE KEERSMAEKER, Lord HARMAR-NICHOLLS, Mr SELIGMAN and Mr PURVIS  
pursuant to Rule 47 of the Rules of Procedure  
on horticulture in the European Community

The European Parliament,

- noting the recent demonstrations in Brussels by horticulturalists concerned about subsidized natural gas permitted to growers in Holland by the Dutch government,
  - recognizing the frustration and anger which led to this demonstration and will lead to others unless effective action is taken by the Commission,
  - recognizing the very real difficulties currently faced by the horticulture industry throughout the Community,
  - noting with concern the increasing number of disputes between Member States involving food and drink products and which concern both protectionism and claims of irregular and illegal subsidies paid by national governments,
  - believing that the frequency of these disputes will increase unless practical measures are taken,
1. Considers that so far as horticulture is concerned the difficulties lie in the lack of a framework for horticulture within the Common Agricultural Policy;
  2. Considers that the accession of Greece has changed the economic balance of horticulture within the Community and that this process will accelerate under enlargement;
  3. Notes that the essential disparities between Northern horticulture, relying principally on energy, and Southern horticulture, which flourishes naturally in a warmer climate, are not being approached as part of a general Community policy;



4. Urges the Commission, therefore, to commence an immediate study to create the framework of a horticultural policy which will recognize those economic and geographical disparities within the Community which affect the industry;
5. Urges the Commission to recognize that it is not in the best interests of consumers, Member States or the Community in general to allow horticulture in the North to stagnate and that therefore an effective policy must be developed which will allow the industry to develop and flourish throughout the Community;
6. Urges the Commission to act firmly and without hesitation in enforcing the principles of free and fair competition and to remove all national aids which distort the market;
7. Urges the Commission to begin urgent discussions with the horticulture industry as to how these problems can be solved within a Community framework and to propose in such a framework that massive intervention will not be the answer and to balance the advantages and disadvantages such as transport costs, involving horticulture in the South against that in the North, which is energy dependent;
8. Urges the Commission to approach this problem before the Community is further enlarged;
9. Instructs its President to forward this resolution to the Council and the Commission.

