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REPORT

on behalf of the Committee on the Environment, Public
Health and Consumer Protection

on agriculture and the environment

Rapporteur: Mr F. ROELANTS DU VIVIER

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The European Parliament, pursuant to Rule 47 of the Rules of Procedure, referred the following motions for resolutions concerning agriculture and the environment to the Committee on the Environment, Public Health and Consumer Protection as the committee responsible and to the committees indicated for their opinions:

- on 13 September 1984, the motion for a resolution by Ms QUIN (Doc. 2-455/84) to the Committee on Agriculture, Fisheries and Food;
- on 13 November 1984, the motion for a resolution by Mr TOGNOLI (Doc. 2-924/84) to the Committee on Agriculture, Fisheries and Food;
- on 12 December 1984, the motion for a resolution by Mrs LEHIDEUX and others (Doc. 2-1033/84) to the Committee on External Economic Relations and the Committee on Agriculture, Fisheries and Food;
- on 12 December 1984, the motion for a resolution by Mr ANTONY and others (Doc. 2-1037/84) to the Committee on Agriculture, Fisheries and Food;
- on 12 December 1984, the motion for a resolution by Mr ROELANTS DU VIVIER (Doc. 2-1061/84) to the Committee on Agriculture, Fisheries and Food;
- on 11 February 1985, the motion for a resolution by Mrs SCHLEICHER and others (Doc. 2-1349/84) to the Committee on Economic and Monetary Affairs and Industrial Policy, the Committee on Energy, Research and Technology, the Committee on Agriculture, Fisheries and Food and the Committee on Transport;
- on 11 March 1985, the motion for a resolution by Mr GRAEFE ZU BARINGDORF (Doc. 2-1761/84) to the Committee on Agriculture, Fisheries and Food;
- on 15 April 1985, the motion for a resolution by Mr FORD and others (Doc. B 2-15/85) to the Committee on Agriculture, Fisheries and Food;
- on 13 June 1985, the motion for a resolution by Mr KUIJPERS and Mr VANDEMEULEBROUCKE (Doc. B 2-374/85).

At its meeting of 20 November 1984 the committee decided to draw up a report and appointed Mr ROELANTS DU VIVIER rapporteur.

The committee considered the draft report at its meetings of 22 March, 26 November and 19 December 1985 and 22 January 1986. It adopted the motion for a resolution as a whole by 23 votes, with 2 abstentions.

The following took part in the vote: Mrs WEBER, chairman, Mrs SCHLEICHER, vice-chairman; Mr ROELANTS DU VIVIER, rapporteur; Mr AVGERINOS (deputizing for Mr Collins), Mrs BANOTTI, Mr BARRAL AGESTA, Mr BOMBARD, Mrs BRAUN-MOSER (deputizing for Mr Mertens), Mr ELLIOTT (deputizing for Mr Muntingh), Mr V. GARCIA (deputizing for Mrs Veil), Mrs GREDAL (deputizing for Mr Schmid), Mr HUGHES, Mrs JACKSON, Mr LAMBRIAS (deputizing for Mr Parodi), Mrs LENTZ-CORNETTE, Mrs LLORCA VILAPLANA, Mr NORDMANN, Mr V. PEREIRA, Mrs RENAU I MANEN, Mr SCHWALBA-HOTH (deputizing for Mrs Bloch von Blottnitz), Mr SHERLOCK, Mrs SQUARCIALUPI, Ms TONGUE, Mr VAN DER LEK and Mr VITTINGHOF.

The opinions of the Committee on Agriculture, Fisheries and Food and the Committee on Transport are attached. The Committee on Economic and Monetary Affairs and Industrial Policy, the Committee on External Economic Relations and the Committee on Energy, Research and Technology decided not to deliver an opinion.

The report was tabled on 27 January 1986.

The deadline for tabling amendments to this report will be indicated in the draft agenda for the part-session at which it will be debated.

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The Committee on the Environment, Public Health and Consumer Protection hereby submits to the European Parliament the following motion for a resolution together with explanatory statement:

A

MOTION FOR A RESOLUTION

on agriculture and the environment

The European Parliament,

- having regard to the motion for a resolution tabled by Ms QUIN on agriculture and the environment (Doc. 2-455/84),
- having regard to other motions for resolutions (Docs. 2-924/84, 2-1033/84, 2-1037/84, 2-1061/84, 2-1349/84, 2-1761/84, B 2-15/85 and B 2-374/85),
- having regard to the outcome of the public hearing on agriculture and the environment which was held by the Committee on the Environment, Public Health and Consumer Protection in Brussels from 16 to 18 September 1985,
- having regard to the opinion of the Committee on the Environment, Public Health and Consumer Protection¹ on the Commission's Green Paper (COM(85) 333 final), as a step towards the hoped-for reversal of the trend affecting the CAP,
- having regard to the report of the Committee on the Environment, Public Health and Consumer Protection and the opinions of the Committee on Agriculture, Fisheries and Food and the Committee on Transport (Doc. A 2-207/85),
- having regard to:
 - its resolution of 16 February 1982 on the contribution of rural development to the re-establishment of regional balance in the Community²,
 - its resolution of 14 October 1983 on the export of various dangerous substances and preparations³,
 - its resolution of 17 November 1983 on new guidelines for the Community's structural policy in the agricultural sector⁴,
 - its resolution of 15 December 1983 on a European regional planning scheme ,⁵

¹Doc. A 2-185/85

²OJ No. C 66, 15.3.1982, p. 21

³OJ No. C 307, 14.11.1983, p. 109

⁴OJ No. C 342, 19.12.1983, p. 98

⁵OJ No. C 10, 16.1.1984, p. 115

- its resolution of 14 March 1985 on regulations concerning the fixing of prices for certain agricultural products and certain associated measures¹,
- A. having regard to the Community's second² and third³ environment action programmes,
- B. whereas, in a period of great change as regards technology and production, such as the present, even agriculture cannot escape far-reaching change,
- 1. Calls for a revision of the common agricultural policy in terms of a more integrated approach to ecological concerns and an overall policy based on quantitative and qualitative objectives, with the following main aims:
 - (a) rational land use and long term land conservation, combined with protection of all natural riches and resources,
 - (b) the maintenance and development of rural life, starting with the maintenance of agricultural employment, inter alia through the introduction of new technologies, and of reasonable payment for such work,
 - (c) the production of good-quality food at the lowest possible prices in sufficient quantity to meet needs and to be marketed in accordance with the rules of international trade,
 - (d) closer cooperation between agriculture and industry to ensure the production of machines better suited to combine the needs of environmental protection and agricultural production,
 - (e) to change the concept of agricultural policy in such a way as to foster agriculture beneficial to the environment;
- 2. Stresses the need for a European land policy including the following:
 - a European regional policy,
 - the possible revision and extension of the ecological register to include Spain and Portugal,
 - a European network of biogenetic reserves,
 - the implementation of measures to combat soil erosion,
 - the (re)afforestation of hill and mountain areas, in particular,
 - aid for diversification of crops and agricultural activities so as to reduce monoculture,

¹J No. C 94, 15.4.1985

²J No. C 139, 13.6.1977

³J No. C 46, 17.2.1983

- a European programme to expand high protein and fibre crops so as to achieve self-sufficiency and improve soil structure and fertility,
 - the application of the procedure of environmental impact assessment to all major agricultural schemes, infrastructure schemes, with possible repercussions on agriculture and new, large-scale agro-industrial schemes such as bio-ethanol production;
3. Stresses the need for an integrated European land management policy which would encourage diversified activities and also the ecological balance of the environment, and which should be drawn up and implemented at regional level on the basis of cooperation between all the authorities in charge of regional planning and management of rural areas, and the professional and voluntary associations representative in the fields of agriculture, forestry and the protection of the environment;
 4. Stresses the need for a qualitative European agri-foodstuffs policy which recognizes the consumers' demands for good quality, healthy food at reasonable prices and which should also provide for improved consumer information, in connection with health and diet, about the following:
 - the quality of food products, by means of detailed labelling and the introduction of regulated guarantee standards and labelling which also take ecological considerations into account,
 - the benefits of a balanced and varied diet and the harmful effects of excessive consumption of fats, sugar, salt, meat, tobacco, alcohol and synthetic products,
 - the dangers of spoiled food products arising from e.g. the development of mildew or fungus,
 - the preservation of local plant species and varieties;
 5. Considers that the main alternatives for reform under consideration in the context of the review of European farm price policy should include detailed evaluation of their financial, socio-economic and environmental costs and, given the present stage of discussions of the Green Paper, requests the Commission, as a matter of urgency, to carry out such an evaluation;
 6. Considers that the fresh approach to European structural policy in the agricultural sector which was introduced by Regulation 797/85 should be pursued as follows:
 - (a) a larger percentage (up to 20%) of the agricultural budget should be allocated to the EAGGF-Guidance Section;
 - (b) structural funds should be channelled towards regional programmes for integrated rural development which include payments for certain agricultural practices beneficial to the environment;
 - (c) details should be worked out for a system of providing structural aid based on compliance with agreements on ecological agricultural practices;

7. Advocates action to encourage biological farming, which should lead to a special European action programme and include the following:
 - (a) the establishment of criteria, preferably by a committee of experts, for agricultural practices which are particularly beneficial to the environment;
 - (b) the introduction of a specific European label for the marketing of 'biological' products;
 - (c) the encouragement and establishment of experimental farms in typical geographical areas to apply biological techniques;
 - (d) better information on biological farming through the expansion of agricultural advisory services, improved training, particularly as regards the use of pesticides, fertilizers and integrated plant protection measures, and more research;
 - (e) financial support for farming practices beneficial to the environment, such as extensive methods and the non-use of some land, and for the purchase or leasing of agricultural land for the purpose of environmental and nature conservation;
 - (f) aid for vocational training and for farm incomes during the changeover to biological farming;

8. Advocates a foreign trade policy based on support for policies aimed at achieving food self-sufficiency in the various parts of the world and on respect for one another's environments and, in this context, stresses the following points:
 - (a) the need for special measures to counteract certain negative effects which may result from food aid;
 - (b) the urgent need to put a stop to the continuing mismanagement of tropical forests;
 - (c) the controls which need to be introduced on all exports of pesticides and other dangerous products to the Third World;
 - (d) the need to finance studies, to be carried out with the collaboration of local organizations, on the environmental impact of our exports of agri-foodstuffs products and technology to Third World countries;

9. Calls, as a matter of urgency, for a common agricultural policy as regards methods of production, including the following:
 - (a) the establishment of a register of agricultural practices which are harmful to the environment and public health and the publication of codes of good agricultural practice;
 - (b) serious efforts to disseminate information about ecological agricultural practices and to integrate them as part of agricultural teaching and training;

10. Calls for measures to combat the considerable risk of soil and water pollution associated with the production and excessive use of fertilizers, including the following:
- (a) the creation of a network to monitor soil and water pollution and to establish the extent to which such pollution is attributable to the use of substances such as nitrates, phosphorous, cadmium and copper in agriculture;
 - (b) a detailed study of the benefits and disadvantages of a general levy on the use of nitrogenous fertilizers, the revenue from which would be redistributed to farmers, e.g. in the form of compensation per hectare or according to a certain limit on fertilizer use;
 - (c) limits on the application of fertilizers according to natural soil characteristics and crop type;
11. Calls for measures to combat the risks of soil and water pollution associated with the production and excessive use of pesticides, including the following:
- (a) the preparation of a European programme with the aim of reducing the use of chemical plant protection products to a level consistent with the economic production of good quality food in sufficient quantity to meet needs;
 - (b) an immediate ban on the use of biocides and pesticides which have proved or are judged to be mutagenic, carcinogenic and/or teratogenic;
 - (c) a systematic review at European level of the conditions of approval for pesticides currently on sale;
 - (d) a re-evaluation of all existing rules on the manufacture, sale, transport and use of plant protection products;
 - (e) supporting measures using all available means, including a programme of industry-funded research into the application of pesticides by inclusion as 'soil black granula';
 - (f) an in-depth European-level study of:
 - the hazards experienced in the workplace by employees involved in the manufacture or use of pesticides and other plant protection products, this to be in full consultation with the relevant trade unions,
 - the risks associated with long-term exposure to even quite low levels of pesticides if continual exposure occurs to residents, their children and pets when pesticides are used in urban parks and small open spaces,
 - the extent of the presence of pesticide residues in human and animal foodstuffs and the degree of toxicological hazard arising thereby;

- (g) more frequent official checks on the distribution network for the most dangerous chemical substances used in agriculture;
 - (h) the constant provision of up-to-date information for farmers about pesticides being put on sale and the proper use thereof;
 - (i) a critical review of the effects of biotechnological methods with regard to:
 - the preservation of genetic diversity,
 - the cultivation of agricultural raw materials with industrial uses,
 - hitherto unknown consequences of the introduction into agriculture of genetically engineered bacteria;
12. Calls for measures to combat the pollution associated with factory farming, including the following:
- (a) measures designed to discourage intensive husbandry;
 - (b) limits on herd sizes in accordance with the yield from a farm's fodder acreage;
 - (c) the introduction of environmental impact assessments for all farms with large-scale livestock operations;
 - (d) a general ban on fattening substances based on hormones or antibiotics;
 - (e) the introduction of a range of binding standards designed to assure the requisite protection of public health and of animals;
13. Stresses the need for an appropriate European policy on forestry, which entails the following:
- (a) major programmes to rehabilitate and increase forestry resources which will take account of the likely development of the natural vegetation in the areas involved and of the need to preserve certain existing biotopes;
 - (b) stronger measures to protect forests against acid rain, fires, over-grazing and attacks by certain parasites;
 - (c) the promotion of forestry research, inter alia into species which have hitherto been regarded as of secondary importance;
 - (d) an investigation into how the principle of planting a tree for every tree cut down could be introduced as a requirement throughout the European Community;
14. Undertakes to consider all major Community decisions in the light of environmental interests;

15. Instructs its Committee on the Environment to take part, together with its Committee on Agriculture, in the consultation procedure which the Commission has been invited to initiate on the conclusions of the Green Paper and the proposals based thereon;
16. Instructs its President to forward this resolution to the Commission and the Governments of the Member States.

EXPLANATORY STATEMENTPreliminary note

In this report, agriculture is taken to include forestry. The term environment is also used in a very broad sense, covering the following:

- the various elements of nature (water, air, soil, fauna and flora),
- the various elements forming the living environment (landscape, conditions and quality of life).

However, this report only touches briefly on the question of the energy costs and social costs associated with the development of agriculture.

The explanatory statement is set out as follows:

I. GENERAL PROBLEMS OF RURAL DEVELOPMENT

- A. The deterioration of the rural environment has many causes
- B. Problems of land use and land protection
- C. Food problems

II. THE NEED TO REVISE THE COMMON AGRICULTURAL POLICY

- A. The basic mechanisms of the CAP take no account of the environment
- B. The results achieved by the CAP to date leave a lot to be desired
- C. Future prospects look bleak

III. A DIFFERENT POLICY ON FARM PRICESIV. A DIFFERENT POLICY ON AGRICULTURAL STRUCTURES

- A. Development
- B. A new approach

V. POLICY ON METHODS OF PRODUCTION

- A. Various negative effects on the environment
- B. Intensive use of chemical fertilizers
- C. Intensive use of pesticides
- D. Factory farming
- E. Biological farming

VI. FORESTRY AND THE ENVIRONMENT

- A. General comments
- B. The many threats to woodlands
- C. Unsuitable forestry practices
- D. European forestry policy

I. GENERAL PROBLEMS OF RURAL DEVELOPMENT

A. The deterioration of the rural environment has many causes

First of all, it must be emphasized that agriculture is not an enemy of the environment. On the contrary: agriculture is a potential ally when it comes to protecting and improving the environment. If pursued in a certain way, agriculture meets a vital need while also creating pleasant surroundings and enhancing the value of natural resources.

Having said this, agriculture nonetheless has many negative repercussions on the environment when it develops along certain lines.

Agricultural development which is not subject to certain constraints may cause the disruption or even destruction of productive capacity itself, in terms of either employment or natural resources.

Intensive farming (i.e. the productivist agriculture which is currently predominant in Europe) is rather like a steamroller which it is essential to bring under control.

Apart from serious problems of pollution, intensive agriculture leads to structural surplus production, which by definition represents a waste of raw materials.

Intensive farming also causes the disappearance of an increasing number of jobs in agriculture, and goes hand in hand with rural depopulation and urban concentration, with all their associated problems of living conditions and quality of life.

In addition, there are various problems linked to a decline in the quality of land. However, it must be recognized that intensive farming is not the only cause of the deterioration of the rural environment.

In particular, the rural environment currently suffers from serious problems arising from inadequate local and regional planning, such as the following:

- urban development has generally been allowed to proceed in chaotic fashion to the detriment of agricultural land;
- huge tourist developments have been built without any regard for needs of farmers, and even without any regard for unspoilt natural areas and landscapes;
- major infrastructure projects (especially motorways) have been carried out with no regard for their impact on the environment.

The rural environment also suffers from the lack of rational management of soil resources. Hitherto there has been virtually no policy on the use of the soil, although, irrespective of agricultural activities, various protective measures are needed to combat soil erosion and soil pollution. For example, measures are urgently needed to combat the following:

- precipitation of acid rain on land,
- the discharge of toxic waste on land,
- the uncontrolled spreading of sewage sludge on land,
- the deforestation of certain types of soil.

Consequently, problems attaching to the environment and agriculture must be resolved in the overall context of a policy based on quantitative and qualitative objectives, with the following main aims:

- (a) rational use and long-term conservation of the soil, combined with the protection of all natural riches and resources;
- (b) the maintenance and development of rural life, starting with the maintenance of agricultural employment and the opportunity for those who work the land to receive a reasonable income;
- (c) the production of food of good quality in sufficient quantity to meet needs.

B. Problems of land use and land protection

It is necessary to recall the principles listed in the European Soil Charter which was adopted in 1972 by the Committee of Ministers of the Council of Europe - principles which are still far from being effectively upheld.

- '1. Soil is one of humanity's most precious assets. It allows plants, animals and man to live on the earth's surface.
2. Soil is a limited resource which is easily destroyed.
3. Industrial society uses land for agriculture as well as for industrial and other purposes. A regional planning policy must be conceived in terms of the properties of the soil and the needs of today's and tomorrow's society.
4. Farmers and foresters must apply methods that preserve the quality of the soil.
5. Soil must be protected against erosion.
6. Soil must be protected against pollution.
7. Urban development must be planned so that it causes as little damage as possible to adjoining areas.
8. In civil engineering projects, the effects on adjacent land must be assessed during planning, so that adequate protective measures can be reckoned in the cost.
9. An inventory of soil resources is indispensable.
10. Further research and interdisciplinary collaboration are required to ensure wise use and conservation of the soil.
11. Soil conservation must be taught at all levels and be kept to an ever-increasing extent in the public eye.
12. Governments and those in authority must purposefully plan and administer soil resources.'

The following table also illustrates a dangerous development.

Table 1

Usable agricultural area (UAA)
in the Community, 1962 - 1984

Member States	Usable agricultural area (000 ha)		Changes, 1962-1984		
	1962	1984	000 ha	%	ARC* %
Germany	14 149	12 044	- 2 105	- 14.9	- 0.7
France	34 418	31 550	- 2 868	- 8.3	- 0.4
Italy 20 093	17 552	- 2 541	- 12.6	- 0.6	
Netherlands	2 319	2 026	- 293	- 12.6	- 0.6
Belgium	1 695	1 450	- 245	- 14.5	- 0.7
Luxembourg	137	128	- 9	- 6.6	- 0.3
United Kingdom	19 205	18 690	- 515	- 2.7	- 0.1
Ireland	4 615	5 657	+ 1 042	+ 22.5	+ 0.9
Denmark	3 126	2 873	- 253	- 8.1	- 0.4
EEC of 9	99 757	91 970	- 7 787	- 7.8	- 0.4
Greece ¹	8 960	9 234	+ 274	+ 3.1	+ 0.1
EEC of 10	108 717	101 204	- 7 513	- 6.9	- 0.3

Source: Eurostat

*ARC = annual rate of change

¹ Source: Nat. Statistic. Service of Greece

With regard to non-agricultural use of land, the following points, which were brought out at the public hearing of experts held in Brussels on 16-18 September 1985, are particularly worth noting:

- 10% of land as protected sites, in various categories, forming part of an overall network of biotopes, is a reasonable objective;
- European forests should be developed, subject to certain ecological criteria.

With the exception of the Grand Duchy of Luxembourg, all the Member States are net importers of wood and wood-based products. The shortfall is about 52% at Community level, but varies widely from one Member State to another.

The figures, expressed in 1 000 m³ round timber equivalent, are given in the following table.

Table 1a

Country	Consumption	Production	Shortfall
Federal Republic of Germany	29 885	28 451	1 400
Belgium	9 944	2 450	7 500
Denmark	7 894	1 596	6 300
France	45 481	29 392	16 000
Greece	3 316	2 880	430
Italy	34 446	6 941	27 500
Ireland	2 769	393	2 400
Luxembourg	173	251	+ 80
Netherlands	12 220	937	11 300
United Kingdom	44 823	4 280	40 500
EEC	190 831	77 554	113 360

With regard to soil pollution, the points set out below, which were raised at the public hearing, may be highlighted.

(a) At various places in the province of Gelderland, the top-soil has already reached saturation point with regard to phosphates, very high levels of which are also found in groundwater. Nearly one-fifth of investigated grazing land on alluvial clay soil proved to have such a high copper content that farmers have had to be advised against sheep farming (J. Swart).

(b) About one-third of the increased level of cadmium in soil is due to fertilizers and the rest to exhaust gasses from motor vehicles, metals, emissions from paint and battery factories and sewage sludge.

Unlike many other heavy metals cadmium does not break down in plants or organisms living in the soil, so that it may find its way into the food chain. In addition, increased cadmium pollution in soil hampers nitrification and nitrogen fixing (E. von Weizsacker).

(c) The normal cadmium content of soil is 0.1 - 1 ppm or 300 - 3000 g/ha. Cadmium is toxic to plants from 10 ppm. Fertilizers account for 3 - 4 g/ha of cadmium per year, or 0.3% of the soil's cadmium content (therefore leading to problems in the longer term).

Aerosols account for 2 g/ha per year. The cadmium content of sewage sludge is 12 - 60 ppm (see Bourguignon).

C. Food problems

The quality of what is produced by intensive farming poses problems, as do nutritional developments themselves.

Farming practices may create mineral imbalances in plants, and thus have repercussions on human health in the form of various deficiencies.

Generally speaking, food is becoming increasingly artificial and therefore contains more and more unaccustomed substances. There are no systematic studies of changes in the level of nitrates, residues of plant protection agents and other undesirable chemical substances in food products, but it is certainly not reassuring to find that standards set by law or recommended by scientists are rarely complied with in practice.

For example, tests recently carried out by consumers' organizations have shown the following:

- lettuce and green vegetables sometimes contain up to three times the maximum permitted level of nitrate;
- tomatoes generally have an excessive bromide content (in this connection, the following anecdote is worth reporting: in December 1980, the Belgian organization Test Achat revealed that 82% of tomatoes which it had tested did not comply with the rules on inorganic bromide levels; nearly 20% of the tomatoes tested contained 20-38 times as much bromide as the permitted limit (5 mg/kg); the Royal Decree of 15.12.1981 increased the maximum permitted bromide content from 5 mg to 30 mg/kg);
- 50% of flour contains dangerous traces of pesticides (lindane);
- 3 out of 17 chickens contain antibiotics residues;
- prepared minced steak is very often treated with sulphite, which is banned.

There are few studies of the comparative quality of products originating from conventional farming and biological farming. The following table may nonetheless be given as an example.

Table 2

Pesticide residues in products grown by traditional and biological methods - samples taken in Switzerland

	Conventional farming		Biological farming
	Abroad	Switzerland	
Total number of samples	76	25	51
Tolerable residues	25	5	0
Non-tolerable residues	3	1	0
Proportion containing residues	37%	24%	0%

Source: M.R. Schurbach, 1979, quoted in Biocide Report, Switzerland 1984

General dietary developments are disturbing in themselves. No one can really dispute the fact that the inhabitants of the industrialized world nowadays eat too much and have a diet containing too much fat, sugar and salt. The average calorie intake is considerably in excess of requirements. The incidence of obesity increases with age, as does that of diet-related diseases.

In particular, it should be noted that a diet increasingly based on meat costs a great deal in terms of cereals, land and oil: it takes between 3 lbs (for poultry) and 10 lbs (for beef) of cereals to produce 1 lb of meat; on average, 7 calories of vegetable origin are required to produce 1 calorie of animal origin.

The proportion of world cereal production fed to livestock increased from 37% in 1961-65 to 41% in 1975-77. In addition, industrial production of animal feedstuffs is one of the main features of agricultural development since the beginning of the 1950s: the current level of production in France is 15-16 million tonnes per year, or one-third of the total cereal crop. These figures constitute a problem in relation to hunger in the world, especially since Europe imports, on average, 42.4 m tonnes p.a. (1980-82) of animal fodder. To some extent, therefore, we use land in the Third World to feed our livestock, mainly at the expense of subsistence crops. For example, soya cultivation has spread in Brazil at the expense of black beans (see Y. Chavagne, *L'Agriculture industrielle en crise (Industrial Agriculture in Crisis)*, Syros, Paris 1984; B. Carton, 'Frères des hommes').

Table 3

Account of non-Community-produced fodder in livestock production		
	%	Equivalent area (production using non-Community fodder divided by national or Community cereals yield per hectare)
F.R.G.	23	3 000 000 ha
France	9	1 200 000 ha
Italy	26	2 200 000 ha
Netherlands	52	2 400 000 ha
Belgium/Luxembourg	38	900 000 ha
United Kingdom	17	1 300 000 ha
Ireland	10	200 000 ha
Denmark	23	700 000 ha
Community of 9	18	9 700 000 ha

Source: Dr Thiede in Agriculture Series No. 13, DG Research and Documentation, PE

II. THE NEED TO REVISE THE COMMON AGRICULTURAL POLICY

A. The basic mechanisms of the CAP take no account of the environment

The CAP has five fundamental objectives according to Article 39 of the Treaty of Rome:

- to increase agricultural productivity,
- to ensure a fair standard of living for the agricultural community,
- to stabilize markets,
- to assure the availability of supply,
- to ensure reasonable prices for consumers.

The pursuit of these objectives clearly betokens a productivist and materialist ideology which takes no account of environmental concerns.

There are three main principles underlying the common agricultural policy: market unity, Community preference and financial solidarity. Market unity implies the unhindered circulation of goods between the Member States and therefore infers uniform prices. However, it is immediately obvious that this may conflict with environmental interests, because the natural conditions in agricultural production of Europe vary widely.

Community preference follows fairly logically from the establishment of a single agricultural market. It is nonetheless clear that it may prove expensive in terms of export subsidies and that it does not necessarily contribute to the rational location of different types of production.

The financial solidarity which is an essential element of the common agricultural policy takes the form of the European Agricultural Guidance and Guarantee Fund (EAGGF), the Guidance Section of which (corresponding to structural policy) has hitherto only received 5% of the fund's overall budget. This is an indication of a policy which sacrifices long-term interests to immediate concerns, and one scarcely needs reminding that most environmental issues arise from a concern for the long-term future.

B. The results achieved by the CAP to date leave a lot to be desired

In terms of its own logic, the CAP is a great success: European agricultural productivity has increased by an average of more than 7% over the past 20 years, and Europe has thus achieved relatively secure supplies and prices.

However, the 'miracle of the CAP' has been accompanied by social and environmental costs which are becoming intolerable.

1. In 25 years of the CAP the number of those working in agriculture has declined from 20 million to 8 million: the corollary of the CAP is the loss of one job per minute in the agricultural sector. The current state of agricultural employment is shown in the table below.

Table 4

Percentage of the total working population working in agriculture in 1980	
Belgium	3.0%
Denmark	8.3%
F.R.G.	6.0%
Greece	30.3%
France	8.8%
Ireland	19.2%
Italy	14.2%
Luxembourg	6.6%
Netherlands	4.6%
United Kingdom	2.6%

2. Parallel to this development, the per capita investment has increased five-fold, consumption of intermediate goods now represents nearly 50% of the value of agricultural output, compared with 25% in 1960, and the indebtedness of most farmers has steadily increased.

Table 5

Intermediate consumption (France, FF billion at current values)			
	1970	1975	1981
Animal feed	6.8	14.9	33.0
Fertilizers	4.2	9.0	19.1
Fuel and repairs	3.2	6.8	15.4
Crop protection	1.2	2.9	9.6
Maintenance of buildings	0.8	1.4	3.2
Veterinary costs	0.9	1.9	4.5
Other goods	2.5	4.8	9.5
Other services	1.4	2.4	5.0
Total int. cons.	21.0	44.5	100.2
Int. cons. as % of output	30%	36%	46%

3. The system leads to a waste of economic, natural and human resources by creating very large agricultural surpluses.

As regards this last point, the phenomenon of milk and wine lakes, butter mountains and fruit and vegetable surpluses is relatively well known. It entails expenditure under the EAGGF Guarantee Section which has increased from 3 927 m ECU in 1973 to 15 861 m ECU in 1983 (in the form of export subsidies, storage costs and assistance with the disposal or destruction of products).

It can be seen, in particular, that agricultural surpluses exported to the Third World (as part of structural policy) are likely to have negative effects such as competition with local products, changes in consumption patterns and the inversion of trade flows.

It should also be noted that paradoxically, surplus-producing Europe continues to be the world's main importer of agricultural products. The Community's external trade balance for agri-foodstuffs in 1982 was US\$ 21.6 billion in the red; Europe imports the equivalent of 45 m tonnes of products to feed its poultry, pigs and cattle.

4. Finally, it can no longer be denied that regional disparities, as well as social inequalities, have become worse, and cropping methods and farming practices have generally become intensive, with a whole range of negative effects on the environment (see below).

C. Future prospects look bleak

According to several documents published by the Commission, especially its Green Paper, agricultural policy has to cope with the following two major constraints:

- international pressure exerted by increasing world output (even from some developing countries such as India and China), keener international competition, low world prices and limited purchasing-power-backed demand;
- budgetary pressure, in that Europe's expenditure on price support can no longer continue to increase; new resources will have to be found for the guarantee and guidance policies for Spain and Portugal and for structural policies exemplified by the Integrated Mediterranean Programmes.

Taking these two constraints as the starting-point, the Commission is in effect arguing for a restrictive price policy, balanced by social measures. As a result, the environment is being used as a pretext for a policy of direct income support: the Commission is proposing compensatory payments for farmers who preserve 'ecological corridors'.

This approach to the problems attaching to the relationship between agriculture and the environment is far too limited and the Commission's overall reasoning is too simplistic.

Instead of a policy aimed at conquering international markets, why not seek a policy based on food self-sufficiency in all parts of the world (a policy of 'food disarmament')?

Equally, why not seek to reduce the budget by less ferocious means than an across-the-board cut in prices, such as a system of differential prices, (or possibly differential taxes) linked to the volume produced and/or other criteria such as product quality?

Environmental issues must be treated as a key element bound up with the problems of agricultural surpluses and questions of prices and economic incentives in relation to types of production and production methods.

III. A DIFFERENT POLICY ON FARM PRICES

Let us now consider a few possible reforms in the light of their impact on the environment.

1. Revising prices across the board

A general increase in prices is virtually inconceivable for budgetary reasons. However, it must be recognized that the trend in farm incomes, in real terms, would justify such an increase, as least for some groups of farmers and for some agricultural regions of the Community. Having said that, a general increase in farm prices obviously does not call intensive farming into question and, in fact, is likely to encourage it, in which case its impact on the environment would be negative.

A general reduction in prices is equally indefensible per se, unless balanced by social measures. Its effect is difficult to predict as far as the environment is concerned. It might well be thought that, in the long term, lower prices would lead to reduced agricultural output, or even to some agricultural land being converted into semi-nature reserves. By boosting the process of regional specialization, however, low prices might well foster greater intensification.

A change in the current price 'hierarchy' is justified in any case for a number of reasons, including environmental ones. For example, a (relative) reduction in the price of sugar might lead to a reduction in surplus output of this product, which is a heavy consumer of chemical products. Conversely, prices for new products, or products of which the European Community has a structural deficit, should be set at favourable levels. However, such new products must undergo advance environmental impact assessments and, if necessary, be subject to a range of specific environmental restrictions.

2. Setting quotas

Many experts consider that quotas are essential to deal with the current agricultural surpluses caused by the CAP. From the environmental point of view, however, such a system does not guarantee less intensive farming. The experience of milk quotas in the Community might well lead to the introduction of quotas in the meat sector and also turn out to favour the largest farms.

3. Setting guarantee thresholds

Guarantee thresholds can be operated in various ways according to the products concerned, as indicated below:

- (a) a cut in the increase in the target or intervention price if output exceeds an overall ceiling (solution adopted in 1983-1984 for the cereals sector, colza and rape and sunflowers);
- (b) a reduction in aid granted under the CAP if the volume produced to exceeds the guarantee threshold (solution applied in 1984 to processed tomato products and processed dried grapes);
- (c) a limit on the total amount of aid paid under market rules (current system used for cotton);
- (d) levies on producers as a contribution to the cost of disposing of surplus production (e.g. levy introduced on milk in 1977).

The effects of guarantee thresholds on production levels are still very unclear, and there is even greater uncertainty about their effects on the environment.

It is particularly interesting to analyse the 'co-responsibility levy' introduced for the milk sector (except for mountain areas). Since it has been set very low, however, it has so far acted as a tax on consumption rather than production. For the sake of greater administrative simplicity, it would be preferable for it to operate on a sliding scale with uniform fiscal relief applicable, say, to the first 40 000 litres of annual milk production. There should also be changes in the way in which this levy is redistributed.

Having said this, the general use of differential taxation linked to production volume in all sectors where there is surplus production appears on the face of it to be an attractive option, because it would generate revenue which would be ploughed back into agriculture in the form of direct payments for measures taken to benefit the environment.

4. Setting differential prices

The option of differential prices can operate in many different ways.

Several years ago, and mainly with social concerns in mind, some farmers' associations put forward the idea of differential prices linked to production volume, and also the 'quantum' idea (the quantum being the amount that a farmer can produce over a period of working time comparable to that of other groups in society, and which is bought at a guaranteed price). Such a system could logically be combined with regional criteria: the European Community has a large number of regions in which the 'natural' production conditions differ widely. It is also possible to envisage introducing criteria linked to production methods, so that 'biological' farmers and stock-breeders using 'humane and environmentally acceptable' methods, for example, could receive better prices.

The latter idea comes close (without being identical) to that of differential prices linked to product quality. Logically, the price mechanism ought to encourage better quality among all agricultural products, although this is far from being the case.

5. Establishing direct income subsidies

Various measures, in the form of direct income subsidies, have been suggested as a way of offsetting the social injustice resulting from 'low' farm prices. Such aid, based on purely social criteria, should be temporary and granted on an individual basis. The resulting system would be very complex and would certainly not guarantee a solution to environmental problems.

It is conceivable, however, that income subsidies could be based on environmental criteria. Over and above the idea of assistance to farmers to maintain a traditional activity in areas which are environmentally sensitive (see below: structural policy), a scheme could be developed whereby anyone could qualify for the payments in return for signing an agreement to follow certain agricultural practices beneficial to the environment.

IV. A DIFFERENT POLICY ON AGRICULTURAL STRUCTURES

A. Development

The Community policy on agricultural structures has hitherto been the poor relation within the CAP, in that it has only received about 5% of the EAGGF budget every year. At the same time, this policy has gone through several phases in which the emphasis has varied quite considerably, as indicated below.

- (a) 1964 : adoption of a regulation on the funding of individual schemes for structural improvements;
- (b) 1972 : adoption, following the Mansholt Plan, of three 'socio-structural' directives aimed at improving agricultural structures by the granting of aid for investments to modernize farms, aid for vocational training and encouragement for elderly farmers to leave farming altogether;

- (c) 1975 : adoption of a specific directive on hill farming and farming in certain less-favoured areas;
- (d) 1976 - increased emphasis on a regional approach (specific measures for
1980 : Mediterranean regions and the west of Ireland) and a more organized approach to the development of the processing and marketing of agricultural products (Regulation No. 555/77);
- (e) since introduction of 'integrated' development programmes (i.e.,
1980 : covering both agricultural and non-agricultural activities) and adjustments to the 1972 directives (mainly to ensure easier access for farmers to development aid, to provide more assistance for young farmers to establish themselves and to reward certain activities beneficial to the environment).

If the technical aspects of all the measures funded by the EAGGF Guarantee Section until just before Regulation 797/85 are considered, only two or three measures can be picked out as being directly beneficial to the environment, namely:

- engineering works to combat soil erosion,
- reafforestation of some areas and the improvement of deteriorated forests.

In general terms, structural 'modernization' measures have resulted in an aggravation of social and regional disparities and in support for the development of industrial livestock farming and other intensive forms of agriculture. Having said this, a growing awareness of environmental problems can nonetheless be recognized, as indicated below.

(a) Recognition of the necessity of agricultural activities for the environment

In 1975, the Council of Ministers of the European Community accepted for the first time the idea that agriculture is sometimes useful, or even indispensable, for the protection of the environment. Directive 75/268 introduced a system of aid for agricultural activities according to the natural handicaps affecting certain areas. It was acknowledged, in particular, that farming is needed in hilly regions to preserve natural areas, mainly for the purpose of preventing erosion. In 1979, certain Mediterranean zones of the Community were deemed to merit specific agricultural measures. Regulation 269/79 provided for forestry measures in these areas, since such activities could contribute to:

- 'the conservation and improvement of the soil, the fauna, the flora and the surface and groundwater balance,
- the productivity of agricultural land by forming windbreaks and shelter belts and by affecting local water and weather conditions'.

(b) Recognition of some negative effects of agriculture on the environment

The possible negative effects on the environment of certain aids for mechanization, the re-parcelling of holdings, drainage operations, etc., were first taken into account in 1980 in a structural regulation. Regulation 1820/80, on structural measures for agriculture in the west of Ireland, stated explicitly that there had to be assurances as to the compatibility of the

measures planned with protection of the environment. This environmental clause has become a standard feature of structural measures for agriculture taken since then.

(c) Recognition that the environment forms the basis and sets the limits of agricultural development

In its recognition of the idea that the resources of the environment form the basis but also set the limits of further economic and social development (an idea which was officially accepted by the Council of Ministers in its 1983 resolution on the third environment action programme), Regulation 797/85 is a landmark. This regulation actually bases structural policy on concern to ensure 'the permanent conservation of the natural resources of agriculture'. It includes various references to the need to protect the environment and specifically authorizes Member States to introduce special aid schemes for 'less intensive' agriculture in environmentally sensitive areas. Obviously, everything depends on the way in which this provision is implemented, but it is nonetheless the first time that the intensive (even productivist) form of modern agriculture has officially been called into question.

B. A new approach

1. Regulation 797/5

As part of the reform of the policy on agricultural structures carried out in 1985, it was decided to increase the appropriations available:

- (a) for the most disadvantaged farmers and the least-favoured regions;
- (b) for improving the quality of products, for diversifying and converting from one product to another and for introducing new production systems;
- (c) for implementing integrated programmes;
- (d) for providing direct aid to farmers who play a major part in preserving certain areas.

With regard to point (d), the new regulation authorizes the Member States to introduce special national schemes in environmentally sensitive areas.

In particular, aid may be granted to farmers who undertake to use farming methods which will preserve and improve the environment. The farmer must at least undertake not to intensify production any further and, in addition, the stock density must be compatible with the specific environmental needs of the area concerned. This aid is subject to the competition rules in Articles 92 to 94 of the Treaty.

2. The Green Paper

The political keynote of the Green Paper, however, is direct income subsidies to compensate for low farm prices, as mentioned above. It also emphasizes the points set out below.

- (a) The development of exports and food aid

Although it acknowledges that exports and food aid certainly cannot provide a solution to structural surplus production, the Commission considers that the Community should be actively involved in world trade in order to meet the growing need for food products. In this context it envisages long-term supply contracts, particularly with developing countries.

In this area, where the repercussions on the environment are by no means negligible (e.g. the conditioning of dietary habits in the importing countries, the encouragement to develop crops unsuited to the natural environment, increased transport movements) the Community's position is regrettable, to say the least.

(b) The development of new crops

What products might replace those which are currently in surplus?

A few minor products (e.g. almonds, sunflower seeds and walnuts) are the first to spring to mind, together with alternative uses for other products (e.g. tobacco), but in the Commission's view this approach offers few possibilities.

Another solution would be to produce high-protein feed for animals. In this sector, the production of peas and broad beans already receives special support. According to the Commission, however, if the aim is to expand production in this sector, protection against cheap imports of animal feed would have to be stepped up (and why not?).

The Commission considers that forestry operations offer good prospects, provided that there is increased reforestation and more rational use of the area available. This option has the obvious advantages of increasing the supply of wood, reducing the balance of payments deficit and preserving the environment (at least in some cases).

Finally, the Commission considers that agriculture is in an excellent position to exploit biomass, either as a raw material for industry or as an energy source. Initially, more use could be made of agricultural and forestry waste to produce energy. Later on, it would be possible to use biomass conversion on a fairly large scale to produce energy (either using common plants such as sugar beet, maize or colza, or using 'new' plant varieties such as the giant reed).

This prompts fears of an increase in the negative effects associated with intensive crop production (see below).

3. Proposals for structural programmes and/or contracts to protect the environment

There is increasing support for the view that in addition to producing food, farmers should also create attractive landscapes, safeguard the various species of flora and fauna, optimize the use of certain types of waste, etc. These auxiliary functions should be paid for in the same way as the production function. In particular, the idea of remuneration based on land (payment per hectare) and possibly linked to certain restrictions on the use of land for agriculture are gaining currency.

The future might therefore see the widespread introduction of agricultural management agreements to protect the environment, which could include undertakings covering the following points:

- mowing of meadows (timing, methods),
- rolling of meadows between 15 March and 15 June (presence of birds' nests),
- use of pesticides,
- use of fertilizers,

- use of manure,
- ploughing of meadows,
- irrigation of meadows,
- number of animals per hectare,
- grazing of particular animal species,
- maintenance of high water levels,
- levelling of land,
- trimming of hedges, bushes bordering fields, pollarded willows, etc.;
- filling of trenches and ditches.

Having said this, it is to be feared that these practices will be limited in scale (to some 10% of agricultural land) and that in overall terms, intensive farming will continue to rule the roost.

National experiments to date with agricultural management agreements (in the Netherlands and the United Kingdom) are not entirely convincing. There is a real risk of 2- or 3-speed agriculture.

The idea of integrated rural development programmes should certainly be encouraged. It cannot be denied that agricultural reality in Northern Europe is not the same as in Southern Europe; the European Community embraces a widely differing range of agricultural regions.

It is also important to take into account how agriculture fits into the rural environment and the regional economy as a whole.

It therefore makes sense to expand regional reconversion, development and planning programmes (with greater participation by the regional authorities concerned), which should be based on agriculture but would also involve the other aspects of rural life.

V. POLICY ON METHODS OF PRODUCTION

A. Various negative effects on the environment

1. Monoculture

Simplified crop systems (monoculture) are a hallmark of intensive farming. They may lead to chemical exhaustion of the soil or changes in its biological or physical properties. They generally involve high-yield varieties and species which are also the most vulnerable. The impoverishment of genetic resources is all the greater because crop standardization goes hand-in-hand with the disappearance of various habitats for wildlife. Finally, crop specialization generates the need for expensive storage and transport facilities and also leads to the disappearance of the mosaic patterns formed by fields and pasture land.

The compartmentalization of arable farming, forestry and livestock farming is prejudicial to the harmonious integration of each of these activities in the rural environment (see below).

2. Mechanization

The mechanization of farm work obviously has an immediate impact on employment and ways of life; it undoubtedly has some positive aspects, but it nonetheless entails problems such as noise pollution and an increased risk of accidents at work.

Agricultural mechanization also has a considerable impact on the natural environment, such as soil compaction and sometimes erosion.

The table below shows how mechanization has developed.

Table 6

Mechanization					
	No. of tractors			No. of milking machines	
	Morbihan region of France	Netherlands	EEC	Morbihan	Netherlands
1950	770	25 000		500	3 800
1980	24 000	190 000	5 500 000	14 000	65 000

3. Reparcelling of holdings, water engineering works, removal of hedges

Reparcelling of holdings is an operation which is rarely beneficial to the environment. It usually entails a serious loss of ecological diversity and disturbs the existing landscape.

Water engineering works, which are often carried out in conjunction with the reparcelling of holdings, may have adverse effects on the environment.

In many cases drainage or irrigation works lead to the destruction of 'registered' wetlands and unwarranted environmental damage; see *Wetland Drainage in Europe*, D. Baldock, IIED, IEEP, 1984.

The removal of hedges often means the loss of a visual amenity and the disappearance of 'biotopes' for birds and shelter for many vertebrates.

It should also be borne in mind that hedges often act as useful windbreaks, are a means of moderating climatic extremes and serve to regulate water and regenerate the soil.

4. Other practices

The excessive application of fertilizers, the heavy use of pesticides and factory livestock farming are three main sources of environmental problems.

Before looking at them in greater detail, it is worth considering the table on the next page, which was published by the OECD in its latest report on the state of the environment.

Table 7. SELECTED ENVIRONMENTAL EFFECTS OF AGRICULTURE

AGRICULTURAL PRACTICES	SOIL	GROUND WATER	SURFACE WATER	FLORA	FAUNA	OTHERS: Air, noise, landscape, agricultural products
Land development: land consolidation programmes	inadequate management leading to soil degradation	Other water management influencing ground water table			Loss of species	Loss of ecosystem, loss of ecological diversity. Land degradation if activity not suited to site
Irrigation, drainage	Excess salts, water logging	Loss of quality (more salts), drinking water supply affected	Soil degradation, siltation, water pollution with soil particles		Drying out of natural elements, affecting river ecosystems	
Tillage	Wind erosion, water erosion					
Mechanisation: large or heavy equipment	Soil compaction, soil erosion					Combustion gases, noise
Fertilizer use						
- Nitrogen		Nitrate leaching affecting water				
- Phosphate	Accumulation of heavy metals (Cd)			Effect on soil microflora		
- Manure, slurry	Excess: accumulation of phosphates, copper (pig slurry)	Nitrate, phosphate (by use of excess slurry)	Run-off, leaching or direct discharge leading to eutrophication	Eutrophication leads: to excess algae and water-plants	to oxygen depletion affecting fish	Stench, ammonia
- Sewage sludge, compost	Accumulation of heavy metals, contaminants					Residues
Applying pesticides	Accumulation of pesticides and degradation products	Leaching of mobile pesticide and degradation products	residues	Affects soil microflora; resistance of some weed	Poisoning resistance	Evaporation; spray drift, residues
Input of feed additives, medicines	Possible effects					Residues
Modern buildings (e.g. silos) and intensive livestock farming	See: slurry	See: slurry	See: slurry			Ammonia, offensive odours, noise, residues Infrastructure: Aesthetic impacts

Source: OECD

B. Intensive use of chemical fertilizers

Table 8

Use of commercial fertilizers in the EEC (Average kg/ha of agricultural land in 1979-80)				
	NITROGEN (N)	PHOSPHATE (P ₂ O ₅)	POTASSIUM (K ₂ O)	TOTAL
Greece	33	20	4	57
Ireland	43	27	33	103
Italy	59	40	22	121
France	70	62	56	188
United Kingdom	71	24	25	120
Luxembourg	108	51	62	221
F.R.G.	121	75	98	294
Belgium	128	70	114	312
Denmark	136	46	59	241
Netherlands	240	41	61	342
Overall average	75	46	44	165

Source: H. Tunney, Dublin seminar, 1984

The excessive use of fertilizers is quite obvious in some places, such as the following:

- in the Netherlands, the amount of nitrogenous fertilizers used on some land is more than 500 kg/ha/year;
- in Normandy, some farmers use the same quantities as in the Netherlands, if not more;
- a report on an arable farm in the Paris basin shows a nitrogen surplus of 240 kg over 7 years, i.e. 34 kg/ha/year (G. Ricou, EEB colloquy, 1984).

Table 9

Pollution directly connected with the production of chemical fertilizers (based on 1982 European production of nitrogenous and phosphated fertilizers)				
	Water	Air	Gypsum	TOTAL
Ammonium nitrates	22 500 t	22 500 t	-	45 000 t/yr
Urea dust	8 000 t	7 000 t	-	15 000 t/yr
CO ₂ -	8 000 t		8 000 t/yr	
Ammoniac	2 000 t	7 000 t	-	9 000 t/yr
Nitric acid	1 000 t	2 000 t	-	3 000 t/yr
P ₂ O ₅	4 000 t	6 000 t	70 000 t	80 000 t/yr
Fluorine	1 000 t	99 000 t	-	100 000 t/yr
Cadmium	-	200 t	70 t	270 t/yr

Source: Commission study

In addition to the above table, it should be noted that the cases of necrosis and death among pine trees in the forest of Roumare (Rouen) have been attributed to fluorine produced by factories manufacturing phosphates.

Irrespective of the pollution related to their production, the excessive use of chemical fertilizers has various negative repercussions (quite apart from the question of the energy balance).

The consequences of the over-use of fertilizers are set out below.

(a) Quality of foodstuffs and fodder produced

- less flavour and reduced keeping quality;
- accumulation of nitrates in leaf vegetables and fodder: dangerous for young children and dyspeptics and also for ruminants.

(b) Soil potential and agro-systems balance

- soil enrichment likely to lead to increased losses through leaching (nitrogen, potassium) or downgrading and fixing in the soil (phosphates);
- impoverishment of humus in the soil with possible effects on soil structure, its resistance to erosion and its suitability for certain crops;

- contamination of soil by metallic oxide impurities in phosphates.

The chemical input into soils of metals and metalloids from non-purified fertilizers is substantial, since their traces accumulate. Some impurities in phosphates are as follows:

- arsenic: 0.2 - 1.2 ppm
- cadmium: 50 - 170 ppm
- chromium: 66 - 243 ppm
- cobalt : 0 - 9 ppm
- copper : 4 - 79 ppm
- lead : 7 - 92 ppm

(c) Water quality

- high nutrient content of seepage and runoff water and water eutrophication, for which there are many causes, among which intensive farming is thought to account for 25% (see Vighi and Chiaudani, Dublin seminar, 1984); this is one of the most serious and widespread forms of water pollution: in Belgium, nearly all non-woodland watercourses are eutrophic (E. Serusiaux, public hearing);
- very high nitrate levels in surface water and groundwater owing to vertical transfer: the maximum permitted level (set by a European directive) of 50 mg of nitrate per litre of drinking water is frequently exceeded (but, it has to be admitted, more because of excessive slurry spreading than chemical fertilizers - see below).

The following points made at the public hearing are worth noting:

- in the Netherlands, the nitrate content of deep-source drinking water is higher than the European standard; fresh water taken from shallow sources by private individuals is no longer usable (J. Swart);
- the average nitrate content of aquifers in the Paris region has effectively doubled, from 20 to 40 mg per litre, over the past 20 years, while in some areas (Beauce and Sologne) the nitrate content of the groundwater is considerably higher than 50 or even 100 mg per litre (P. Ott).

Studies covering more than 6 000 wells in North Rhine-Westphalia have shown that only about a third had a nitrate content of less than 50 mg per litre, which is the maximum level for drinking water permitted by Directive 80/778/EEC of 15 July 1980. One-third of these wells even exceeded the limit of 90 mg per litre hitherto permitted in the Federal Republic of Germany. The highest level found was 280 mg per litre (H. von Mayer).

C. Intensive use of Pesticides

Table 10	
World use of pesticides	
1960s	: 1.500.000 tonnes/yr
1980s	: 2.000.000 tonnes/yr
Medium-term forecast	: 7.000.000 tonnes/yr

Source : Winteringham, Dublin seminar, 1984

Table 11 : Pesticides which are banned or restricted and used in various countries

Products	Aldrin	BHC/Lindane	Chlor-dane	DDT	Dieldrin	Endrin	Hepta-chlor	Kepone	Lepto-phos	Organic mercury compounds	Para-thion	2,4,5-D	TEPP	Strychnine	TDE	Cyfluthrin	Permethrin
Algeria			X		X		X									X	
Argentina			X	X	X	X	X										X
Australia			X	X			X			X				X			
Austria	X		X	X	X	X	X										
Belgium	X		X	X	X	X	X										
Brazil					X				X	Y							
Bulgaria	X	X	X	X	X	X											
Canada	X			X	X		X		X								
Colombia				X				X		X				X			
Costa Rica				X					X	X							
Denmark	X	X	X	X	X	X	Y								X	X	
Finland	X		X	X	X	X	X										X
France	X	X	X	X	X	X	X			X				X		X	
W. Germany	X	X	X	X	X	X	X			X		X					X
Greece	X		X	X	X	X	X										
Guatemala				X	X	X	X		X	X							
Hungary	X	X	X	X	X	X	X								X	X	
India					X	X	X					X					X
Italy	X	X	X	X	X	X	X			X	X	X					X
Japan		X		X	X	X	X			X	X	X	X				
Mexico	X		X	X	X	X	X	X	X	X				X			
Netherlands	X	X	X	X	X	X	X		X	X		X			X		
New Zealand	X			X	X	X	X					X					
Norway	X		X	X	X	X	X										
Poland		X	X	X	X	X	X										
Portugal	X		X	X	X	X	X										
Spain	X	X	X	X	X	X	X			X	X	X					
Sweden					X	X	X						X				
Switzerland	X	X	X	X	X	X	X										
Turkey			X	X	X	X	X										
United Kingdom	X		X	X	X	X	X	X						X	X	X	X
United States	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X
USSR	X	X	X	X	X	X	X										

Source: Sorlini, public hearing

Apart from various positive effects on productivity, many undesirable effects may be noted, including the following:

- epidemics of pests and parasites following the creation of biological imbalances: examples are cotton worms in the United States, the development of mites on vines and the locusts on coffee bushes in Kenya;
- development of resistant strains: 350 species were listed as resistant in 1980, which was more than twice the figure in 1965; these 350 species also constitute nearly 10% of the harmful species which are the specific target of insecticides (Lebrun, Dublin seminar, 1984);
- loss of genetic diversity and destruction of plant and animal species: the entomological fauna associated with cereals in the Paris basin consists of about 800 species or groups of which only 5% are harmful to cereal crops, while the rest are useful auxiliary parasites, predators or scavengers fulfilling a necessary function in recycling organic residues; a combination of treatments with chemical pesticides causes a 60-80% reduction in the overall fauna (Ricou, EEB colloquy, 1984); in southern Belgium, of the 20 bird species referred to in Directive 409/79 as needing protection, 9, i.e. nearly half, are indirectly threatened by pesticides used in agriculture (Lebrun, Dublin seminar, 1984);
- loss of ecological functions: in central Belgium, earthworms have virtually disappeared in various fields where sugar beet has been cultivated intensively for more than 20 years; this 'earthworm genocide' causes disruption of the nitrogen cycle and of the soil's fertility (Lebrun, Dublin seminar, 1984);
- contamination of food chains: while organochlorines are of relatively low toxicity for earthworms, they are dangerous for species which feed on them; half of the world tonnage of DDT is now in the atmosphere, organisms, soil and water; high levels of PCB have recently been found in vertebrate fauna in Wallonia (Libois et al);
- contamination of food: various limits for residues on fruit and vegetables have been set by law, but how useful are they and, above all, to what extent are they complied with (see above)?
- cases of poisoning, sometimes fatal: according to the WHO, there is a case of pesticide poisoning every minute somewhere in the world, and 10 000 deaths every year; equally, little is known about the long-term effects of prolonged exposure to low dosages.

According to recent publications in the United States, there is no information about the possible specific toxic effects on man and the environment of 38% of pesticides currently on the market, and the information available for a further 26% is inadequate for evaluating the possible risks.

D. Factory Farming

The first point to be made is that factory farming is characterized by a loss of genetic diversity and the degeneration of breeds. For example, over the past 20 years we have seen intensive selective breeding of cattle solely for milk or meat production. Breeding factors such as hardiness, natural resistance to disease and the ability to eat rough fodder have been ignored. The consequences have been as follows:

- increased reliance on commercial concentrates and meal, with a concomitant loss of independence;
- a general decline in animal health, leading to considerable expenditure on pharmaceutical and veterinary costs;
- serious problems with the quality of food (e.g. calves full of hormones or antibiotics).

Secondly, it should be pointed out that factory farming almost automatically poses a moral problem with regard to respect for animals.

Factory farming is also synonymous with a degree of concentration of livestock. Factory farms tend to be set up and proliferate in the hinterland of ports (ease of importing animal feed) and in densely populated areas (concentration of consumers and food industries). This leads to considerable concentration of livestock at regional level which may equate to the pollution potential of 1 000 to 3 000 inhabitants per km² of rural land.

A range of individual problems is associated with concentrations of livestock, such as the noise caused by animals and ventilation equipment, the smells associated with slurry, the discharge of pollutants into surface water and the contamination of groundwater caused by unsealed pits and silos of green fodder, or when slurry is transported or spread.

Then there is the problem of bacteriological contamination. Where buildings housing animals are 'over-populated' there is a permanent risk of auto-infection; this situation frequently leads to antibacterial agents being added to foodstuffs, such as copper sulphate in the case of pigs, sulphamides or antibiotics. Such additives are likely to lead to the selective development of resistant strains of pathogens or to interfere with the biological purification of waste. The germ count in buildings used for livestock also poses a threat to the humans working there. One major risk is that of pathogens in animal excrement; if spread on land by muck-spreading operations, these pathogens are particularly dangerous for pasture land. If livestock effluents are inadvertently or deliberately discharged into water, some pathogenic agents are likely to persist and make the water unfit not only for human consumption, but also for bathing and for fish.

Another major problem is the constraints on the agricultural recycling of livestock effluents posed by crop, transport, ecological and health factors. The thoughtless use of slurry may be prejudicial to crops, fodder, meadows and soil in general. The excessive use of slurry has been known to lead to concentrations of up to 10 kg of nitrogen ha.

The rapid mineralization in the soil of the nitrogen from slurry increases the soil's nitrate content and makes large-scale nitrate leaching into surface and groundwater more likely (Noirfalise, 1974).

In addition, it should also be borne in mind that slurry may contain substantial amounts of trace elements (e.g. copper, zinc or manganese from antibiotics or fungicides added to animal feed).

E. Biological Farming

Irrespective of the question of the quality of foodstuffs produced (see above), biological farming, i.e. farming which basically does not use chemical fertilizers or synthetic organic pesticides, has many advantages. The points set out below were put forward at the public hearing of experts.

1. Energy considerations

As a general rule, biological farming only consumes about half as much energy per hectare as conventional farming; the calculation takes account of the energy used in manufacturing chemical products.

2. Preservation of the natural environment

Biological farming tends to respect the natural processes of ecosystems and to increase the capacity of soils, animals and plants to resist disease and animal pests.

3. Employment

The labour input in agrobiological farming is said to be up to 25% higher, which equates to 2.5 employees compared with 1.5. Bearing in mind higher producer prices (80 - 120%), net income per hectare should be of the same order.

4. Yields

Conventional methods undoubtedly produce a slightly higher yield per hectare, but in view of the current surpluses in Europe this is hardly a point worth worrying about.

Further information is provided in the table on the following page.

Results from conventional and alternative full-time test farms, from German agricultural reports

1983 results

1984 results

Average

Conventional Alternative Conventional Alternative

Farm organization

Usable ag. area	ha/farm	25.91	38.93	25.97	35.46
Proportion of arable land %		62	68	61	60
Comparative value	DM/ha AA	1.394	1.063	1.362	1.132
Jobs	jobs/farm	1.45	2.16	1.49	2.31
	jobs/100 ha AA	5.58	5.55	5.76	6.52
Livestock	AU/100 ha AA	169.2	105.2	166.6	146.1
Dairy cows	AU/100 ha AA	49.7	47.9	51.4	66.8

Yields

Cereals	quintal/ha	45.3	35.8	43.5	33.7
Milk production	kg/cow	4.592	3.485	4.729	3.682
Wheat	DM/quintal	47.94	77.71	49.60	92.37
Milk	DM/100 kg	60.20	59.21	64.11	65.71

Farm results

Earnings	DM/ha	5.879	3.684	6.044	4.357
	%	100	63	100	80
Expenditure	DM/ha	4.270	2.218	4.231	3.072
	%	100	52	100	73
of which:					
- fertilizers	DM/ha	383	48	363	73
- plant protection	DM/ha	100	3	107	4
- animal feed	DM/ha	1.136	344	1.076	629
- variable machine costs	DM/ha	423	482	401	473
- total depreciation	DM/ha	457	426	484	502
Farm income		41.687	57.161	47.071	53.294
	DM/ha	1.609	1.466	1.813	1.785
	DM/job	28.807	26.406	31.495	27.385
Profit	DM/farm	28.587	32.872	33.791	41.905
	DM/ha	1.103	843	1.301	1.182
Income expressed as % of earnings	%	27.4	39.8	30.0	36.7

Source: H. Priebe, public hearing

VI. FORESTRY AND THE ENVIRONMENT

A. General comments

On first reflexion the inclusion of forestry in a report on agriculture and environment initially appears completely logical and rational. However, while forests may constitute a wholly anthropic setting, like that of agriculture (arable and livestock farming), they may also be an 'environment' in the sense of natural environment.

Forests per se (as opposed to stands of trees) form an ecosystem which, in Europe, consists of three main layers - the tree, brushwood and herbaceous layer - with a specific pattern of flora and fauna which varies according to ecological and geographical conditions; this ecosystem has the remarkable characteristic of maturing over a period of time, thereby developing greater biological richness with increasing age. In this context, there is a specific problem attaching to the preservation of the (natural) forest environment.

By their very nature forests also often fulfil a range of functions which need to be managed as an integrated whole if unfortunate specific conflicts of interest are to be avoided. Apart from their economic role, forests may have aesthetic, leisure or purely ecological functions. It should be recalled that forests help to:

- produce oxygen which is essential for life;
- ensure the preservation and improvement of soils (by combating erosion, desertification, etc.),
- maintain a whole range of plant and animal life,
- stabilize surface and groundwater systems, regulate climate, etc.

B. The many threats to woodlands

(a) Atmospheric pollution

The serious impact of various pollutants on forests and, in particular, the devastation of forests as a result of acid rain, are sufficiently familiar to obviate the need for lengthy discussion here. Power stations, factories, domestic heating and vehicle exhaust gases are some of the many sources of pollution attacking forests which must be brought under control as soon as possible.

(b) Fires

Every year more than 110,000 ha of woodland in the European Community is destroyed by fire and the scale of this phenomenon is steadily increasing, for a variety of reasons in which the human factor also plays a part.

(c) Urban development/road construction

Road construction (motorways) is especially harmful to forests, not only because it removes tree cover but also because of the resultant 'gaps' in forest ecosystems. The uncontrolled development of week-end areas has an equally strong impact on forests and their natural resources (quite apart from the increased fire risk).

(d) Tourism

While forests fulfil a leisure function which should not be ignored, public access to them must clearly be subject to various rules if serious ecological damage is to be avoided. In particular, tourist infrastructures must be subject to ad hoc rules: the creation of ski pistes, for example, must not involve the clearance of whole forests on steep hillsides, where they are most needed to prevent erosion in some areas.

(e) Livestock farming/hunting

Livestock farming sometimes comes into conflict with the interests of forest conservation. In the case of Mediterranean forests, in particular, free grazing seems to be one of the main causes of forest deterioration. The breeding of ungulates such as deer and boar, the favourite game sought by hunters, is also sometimes deliberately encouraged in forests livestock, with a resulting overpopulation which is not without detriment to the forest ecosystem.

(f) 'Natural' hazards: storms and tree diseases

The damage caused by storms poses a serious threat to our forests: a storm in southern Germany in 1982 brought down the equivalent of 17 million m³ wood, while storm-force winds in France in November of the same year brought down 10 million m³ wood.

Tree diseases are a major scourge; over the past few years European elms and planes have been decimated, quite apart from other threatened species.

C. Unsuitable forestry practices

(a) Forest eradication

Forests, especially ancient forests, form virtually irreplaceable biotopes for a vast number of animal and plant species. Unfortunately, they very rarely benefit from specific conservation measures (E. Serusiaux, Quelques réflexions à propos de l'évaluation des écosystèmes forestiers (Some Reflections on the Evaluation of Forest Ecosystems), Natura Mosana, vol. 33 (1980) No. 4).

(b) The shift to conifers

For more than 150 years, modern forestry has concentrated mainly on spruce and pine (and eucalyptus in southern Europe), to the detriment of the broadleaved varieties which otherwise often naturally predominated. This concentration on conifers entails a number of negative effects such as the absence of undergrowth for mammals, a low density of bacterial flora in the soil, with a reduction in its fertilizing property, and the acidification of water courses.

The cultivation of a single species (either coniferous or broad leaved) results in the exclusive utilization of a particular soil layer, or even virtually irreversible surface or sub-surface damage to the soil, and homogeneous plant cover which causes biological impoverishment. In

pathological terms, single-species forestry allows the viruses, bacteria, fungi and bark beetles associated with individual varieties to run riot. (J. Stein, Les aléas de la monoculture en forêt (The Dangers of Forestry Monoculture), Le Genévrier 1/85).

(d) Excessive forestry infrastructures

The construction of forest tracks is sometimes carried out very carelessly without the requisite precautions against land-slips and the marking of the landscape.

In general terms, the dangers of over-mechanization of forestry operations should also be condemned: the use of equipment such as the 'timberjack', for example, is very unsuitable in some areas from the point of view of soil protection.

(e) Miscellaneous practices

Among the harmful practices which sometimes form part of forestry operations, the following should also be noted:

- the clearance of whole areas of woodland,
- the systematic removal of dead trees,
- the use of chemical fertilizers and pesticides.

(f) Deforestation throughout the world

Experts vary in their estimates of the amount of forest being lost or damaged throughout the world, but the general trend is clear. A joint study by the FAO and the UNEP estimates that 14% of tropical forests alone will disappear between now and the year 2000, which is equivalent to 7.6 million ha every year. If other deterioration of tropical forests is also taken into account, the figures increase to 40% and 20 million ha a year.

The result will be destabilization of the climate and the soil, a sizeable loss of genetic resources and problems of survival for the human race. It hardly needs pointing out that Europe shares responsibility for this situation because of its wood imports: wood is the second largest deficit item in Europe's trade balance.

D. European Forestry Policy

Forestry may be regarded as an integral part of the common agricultural policy, but wood, its main product, is not included among the agricultural products listed in Annex II of the Treaty of Rome.

Funding for forestry projects from the EAGGF began in 1964. A fairly important common measure for forestry was introduced by Regulation 269/79 for certain (dry) Mediterranean zones. This measure was essentially concerned with improving soil and water conservation¹. The financial aid is intended to encourage the following activities:

¹Various ecological concerns are nonetheless missing, at least in explicit terms; for example, no guarantees are given as regards the prevention of soil acidification (caused by too many conifers) or pollution caused by fertilizers.

- initial afforestation or tree planting (especially to shelter crops or livestock herds or to provide protection against erosion and desertification);
- improvement of existing thinly-wooded and/or neglected forests (mainly with the aim of increasing their productive capacity);
- controlling fast-flowing streams by the construction of weirs, the deepening of stream beds or tree planting;
- road building (to create opportunities for forest use);
- provision of fire breaks or other infrastructures for combating fires.

Regulation 1975/82, as supplemented by Regulation 619/84, introduced similar measures for areas in Greece.

Several measures include important provisions with regard to forestry in the more northerly Member States, such as the following:

- Regulation 1939/80 applicable to the Western Isles of Scotland includes clauses on forestry;
- Regulation 1940/81 applicable to the French Department of Lozère includes similar provisions;
- Regulation 1820/80 provides for assistance to forestry in the West of Ireland over a 10-year period.

The latter case poses serious problems as regards protection of the flora and fauna of wetlands and, more generally, the conservation of the ecosystem and landscape. An environmental clause was included in the regulation, but did not provide a solution to all the problems (see in particular P. Kelly, Environmental Review in Agricultural Development Projects, European Environmental Bureau, April 1982).

The new Regulation 797/85 on improving the efficiency of agricultural structures provides for aid for the afforestation of agricultural land and for investments in woodland improvements such as the provision of wind breaks, fire breaks, water points and forest roads. However, unlike the Commission's initial proposal, aid for the improvement of deteriorated woodland and for clearing work is excluded. It will also be regretted (a view expressed by the Council for the Protection of Rural England) that no reference is made to aid to the planting and management of indigenous species, the protection of woodland against grazing and the re-establishment of hedgerows. With regard to finance, instead of the 1.16 billion ECU over five years called for by the Commission, the Council has only allocated 150 million ECU to these measures.

Various Community provisions concerning the forestry sector have also been adopted, such as the following:

- the 1966, 1969 and 1975 directives on the marketing of forestry reproductive material¹;
- the Directive of 21 December 1976 on protective measures against the introduction into the Member States of harmful organisms of plants or plant products².

On 6 December 1978, the Commission submitted to the Council a proposal for a resolution concerning the objectives and principles of forestry policy, upon which no action has so far been taken. Apart from the production of wood, this resolution focuses on the need to manage forests with the aim of protecting nature and the human environment, as areas for recreation and leisure and in conjunction with sensible wildlife management.

In June 1983 the European Parliament adopted a report drawn up by the Committee on Agriculture, with opinions by the Committees on Regional Policy and the Environment, which all agreed on the urgent need to define a comprehensive Community policy on forests and woodlands (Doc. 1-388/83).

In 1983 the Commission also resumed the initiative with regard to the wood-processing sector in its 'proposal for a Council resolution concerning objectives and lines of action for Community policy regarding forestry and forest-based industries'. The aim of this proposal is to expand European forestry resources by means of more effective exploitation, better protection of forests and an increase in annual wood-cutting. It also seeks to improve the conversion rate and to increase the use of waste from sawing and the recycling of waste paper. Finally, its aim is to improve the structure of forest-based industries.

The Commission put forward a specific proposal for a regulation on protecting forests against fire and acid rain on 14 June 1983 (OJ No. C 187, 13.7.1983). The section of this proposal concerned with fires includes both preventive and fire-fighting measures. The section on acid rain basically advocates the establishment of the network of posts to monitor forest health and the creation of multi-disciplinary teams of scientists to determine appropriate preventive and curative measures.

With regard to measures to combat deforestation in developing countries, three types of basic projects financed by the Community may be mentioned:

- soil conservation schemes,
- forestry schemes as such,
- integrated agricultural schemes.

However, the European Development Fund's involvement with deforestation problems to date has been limited to the following amounts:

- 3.7 million ECU, or 0.12% of the total 4th EDF,
- 11.4 million ECU, or 0.24% of the total 5th EDF, (MOUELE report, ACP-EEC Consultative Assembly, 20 December 1984).

¹ OJ No. 125, 11.7.1966; OJ No. L 48, 26.2.1969; OJ No. L 196, 26.7.1975

² OJ No. L 26, 31.1.1977

MOTION FOR A RESOLUTION (DOCUMENT 2-455/84)
tabled by Ms QUIN
pursuant to Rule 47 of the Rules of Procedure
on Agriculture and the Environment

The European Parliament,

- A. having regard to the rapid intensification of agriculture and its ever-increasing 'industrialization' which is resulting in dramatic environmental changes,
- B. having regard to the effect of the Common Agricultural Policy whose price structure encourages certain forms of agricultural production with little concern for their environmental implications,
- C. having regard for the widespread public concern about the deterioration of the rural environment,
- D. considering that an agricultural policy must take environmental considerations into account and should acknowledge that farmers, farmworkers, rural and town-dwellers, tourists and consumers all have an interest in what kind of countryside is being created,
- E. Considering that the Commission's proposals on agricultural structures are still too 'production-oriented' and do too little for environmental conservation,
 - 1. Instructs its competent Committees to draw up a comprehensive report on the subject of agriculture and the environment within the EEC,
 - 2. Calls upon the Commission to present new proposals to ensure greater weight for environmental considerations within the Common Agricultural Policy,
 - 3. Calls on the Council to agree on measures to safeguard the environment from over-intensification in agriculture and forestry,
 - 4. Calls on the Council, in its budget deliberations to seek to make more money available within the agricultural budget for measures designed specifically to protect the environment,
 - 5. Instructs its President to forward this resolution to Commission and Council.

MOTION FOR A RESOLUTION (Doc. 2-924/84)

tabled by Mr TOGNOLI

pursuant to Rule 47 of the Rules of Procedure

on the need for correct information on the use of plant protection products

The European Parliament,

- A. having regard to the proposal for two Council directives, submitted by the Commission to the Council on 30 January 1980, on the fixing of maximum levels for pesticide residues in and on cereals intended for human consumption, and in and on foodstuffs of animal origin (OJ No. C 56/14, 6.3.1980), and the opinion of the European Parliament (OJ No. C 28, 9.2.1981),
- B. having regard to the proposal for a Council directive concerning the placing of EEC-accepted plant protection products on the market, submitted by the Commission to the Council on 4 August 1976 (OJ No. C 212/3, 9.9.1976), and the opinion of the European Parliament (OJ No. C 30, 7.2.1977),
- C. having regard to the European Parliament's resolution of 14 October 1983 on the export of various dangerous substances and preparations and the desirability of increasing the protection of workers and consumers in the importing countries and of the European consumer of exotic foodstuffs (OJ No. C 307, 1983),
- D. whereas the checks and standards referred to in these documents are liable to remain largely ineffective and theoretical unless they are accompanied by practical and comprehensive information for, and measures to arouse the awareness of farmers using plant protection products and consumers of agri-foodstuffs,
- E. whereas correct information can be counteracted and made ineffective by the vast amount of commercial publicity, which is also widespread in the plant protection sector, unless such publicity is controlled closely enough to ensure that it is clear, truthful and accurate,
- F. whereas the information measures should be accompanied by the establishment in each Member State of appropriate networks of independent plant protection advisers, capable of providing individual farmers with suitable assistance,

- G. aware that the very serious problems of pollution of the food chain covered by the plant protection regulations also concern consumers in third countries,
1. Calls on the Commission to submit an amended proposal for a directive, taking account of the most recent information available, and to forward it to the Council pursuant to Article 149, second paragraph, of the EEC Treaty; the purpose of the amendments to the proposal should be in particular, to:
 - a. call on the Member States to organize, in conjunction with the Commission and the Scientific Committee on Pesticides, continuous information campaigns for farmers and consumers, on the control and correct use of plant protection products;
 - b. call on the Member States to introduce regulations to ensure that commercial publicity for plant protection products, including the indication of risks, warnings and instructions on times, quantities and conditions of usage, is truthful and comprehensive;
 - c. call on the Member States to establish regional networks of independent plant protection advisers to help farmers to solve problems concerning the correct use of plant protection products according to the different crops, and seasonal, atmospheric, climatic, soil and environmental conditions;
 - d. extend the scope of the directive, thus amended, to cover exports to third countries;
 2. Calls on the Commission, in addition to approving the above-mentioned amended directive, to make use of its ordinary powers to launch as a matter of urgency an information programme as referred to in paragraph 1b, planning and implementing it in cooperation with the European Environmental Bureau (EEB) and the European Bureau of Consumers' Unions (BEUC);
 3. Invites the Commission, therefore, to submit a draft programme to the European Parliament before 31 July 1985;
 4. Calls on the Council to deal with this amended proposal for a directive as a matter of urgency;
 5. Instructs its President to forward this resolution to the Council and Commission.

MOTION FOR A RESOLUTION (DOCUMENT 2-1033/84)
tabled by Mrs LEHIDEUX, Mr ROMUALDI and Mr ANTONY
pursuant to Rule 47 of the Rules of Procedure
on the threat to oak forests in Europe

The European Parliament,

- A. having learned that a disease caused by a fungus, *ceratocystis fagacaerum*, is rife in North America,
 - B. alarmed at the fact that since March 1984, the port of Marseilles has been open by special dispensation to imports of oak from the United States,
 - C. noting that the disease could attack Europe, since this imported timber is a carrier of the fungus,
 - D. judging health standards for plants entering the EEC to be inadequate,
 - E. noting that almost all the elms in the French forests and countryside have been wiped out by a disease caused by a fungus : *ceratocystis ulmi*,
 - F. considering that the invasion of Europe by this disease would be a disaster at least on a par with acid rain or fires, since oak trees constitute most of France's deciduous forests,
1. Demands the immediate suspension of imports of oak from the United States as long as the contamination persists;
 2. Calls on the Commission to undertake detailed studies of agricultural imports likely to constitute plant health risks for agricultural produce in the Community;
 3. Instructs its President to forward this motion for a resolution to the Commission and the Council of Ministers.

MOTION FOR A RESOLUTION (DOCUMENT 2-1037/84)

tabled by Mr ANTONY, Mr ROMUALDI and Mr STIRBOIS

pursuant to Rule 47 of the Rules of Procedure

on the decisions to be taken on the protection of European woodlands

The European Parliament,

- A. whereas European coniferous woodlands are suffering particularly severe damage from attacks by bark beetles,
- B. concerned at the inadequacy of the measures taken by certain Community countries to remedy this situation, which is highly detrimental to the environment and to a very sensitive area of the economy,
 - 1. Insists that measures be taken at European level to promote action to control these insects;
 - 2. Calls for international coordinating units to be set up to improve the techniques and materials used to control the bark beetle;
 - 3. Instructs its President to forward this resolution to the Council of Ministers and the Commission.

MOTION FOR A RESOLUTION (DOCUMENT 2-1061/84)

tabled by Mr ROELANTS du VIVIER

pursuant to Rule 47 of the Rules of Procedure

on a European soil protection policy and a plan to reduce the use of chemicals in agriculture

The European Parliament,

- A. having regard to the resolution on a soil protection policy in the European Community, adopted by the European Environmental Bureau on 14 November 1984,
- B. whereas the deterioration of the soil is a major problem in environmental policy,
- C. concerned in particular at the effects of the misuse of plant health products in agriculture,
 1. Calls on the Commission to make proposals for a specific action programme for soil protection in the European Community, directly based on the guidelines suggested by the European Environmental Bureau in its resolution of 14 November 1984;
 2. Requests in particular that a plan be drawn up comprising concrete measures for reducing the use of plant health products in European agriculture;
 3. Instructs its President to forward this resolution to all the authorities concerned.

MOTION FOR A RESOLUTION (DOCUMENT 2-1349/84)

tabled by Mrs SCHLEICHER, Mr BOCKLET, Mr LEMMER, Mr ALBER,
Mrs BOOT, Mrs BRAUN-MOSER, Mr BROK, Mr CHANTERIE, Mr CLINTON,
Mr CORNELISSEN, Mr DALSASS, Mr DEBATISSE, Mrs DE BACKER,
Mr EBEL, Mr James ELLES, Mrs FONTAINE, Mr FRANZ, Mr Ingo FRIEDRICH,
Mr FRÜH, Mr HABSBURG, Mr HAHN, Mr HERMAN, Mr KLEPSCH, Mr LANGES,
Mrs LARIVE, Mrs LENZ, Mrs LENTZ-CORNETTE, Mr LOUWES, Mr MARCK,
Mr McCARTIN, Mrs MAIJ-WEGGEN, Mr MERTENS, Mr MOUCHEL, Mr MÜHLEN,
Mr Brøndlund NIELSEN, Mrs PEUS, Mr PIRKL, Mr POETTERING,
Mrs RABBETHGE, Mr SPAETH, Mr von STAUFFENBERG, Mr STAVROU,
Mr SUTRA DE GERMA, Mr THAREAU, Mr TOLMAN, Mr TURNER, Mr WEDEKIND,
Mr VON WOGAU and Mr ZAHORKA

pursuant to Rule 47 of the Rules of Procedure

on a contribution to environmental protection by promoting the
production and use of bioethanol in motor vehicles

The European Parliament,

- A. having regard to the alarming contribution of motor vehicle exhaust emissions to general pollution and, in particular, to the disastrous consequences of the widespread damage to forests,
- B. whereas the emission of noxious exhaust fumes, particularly carbon monoxide, smog-inducing and carcinogenic hydrocarbons, sulphur dioxide and lead, may be substantially reduced by using admixtures of bioethanol in petrol,
- C. whereas the production of bioethanol from renewable raw materials is less damaging to the environment than the mining and processing of coal, since it does not spoil rural areas or emit pollutants into the atmosphere or biosphere,
- D. whereas it is necessary to save oil in order to conserve available stocks, which are sufficient to cover no more than the next few decades, and to reduce the European industrialized nations' heavy dependence on oil imports, and whereas this calls for the urgent development of a forward-looking policy to promote in particular renewable raw materials as alternative sources of energy to oil and as primary products for the chemical and biotechnology industries,

- E. whereas numerous third countries, notably Brazil and the USA, have already adopted the practice of adding alcohol to petrol with successful results, thereby justifying the initial support from public funds,
- F. whereas the problem of increasing quantities of agricultural surpluses will become even more acute as a result of the inevitable advances in agricultural technology and declining population trends in the Community,
- G. whereas, in particular, the production of renewable raw materials will provide additional sources of employment and income for the population employed in agriculture,
- H. whereas a certain proportion of agricultural land may be used for production of renewable raw materials,

Calls on the Community and its Member States:

1. To acknowledge the need for measures to reduce environmental pollution from motor vehicles by exploiting the oil-saving potential of bioethanol produced from renewable raw materials;
2. To draw up a European bioethanol programme designed to ensure the competitiveness of bioethanol and to promote the following measures as a matter of urgency:
 - creation of a legal basis for the use of bioethanol admixtures in petrol in sufficient quantity. This could be accomplished by amending and adopting the Commission's proposal for a directive on crude oil saving through the use of substitute fuel components in petrol (OJ No. C 229, 2.9.1982, p. 4),
 - tax concessions to promote bioethanol as a fuel until its competitiveness is fully established,
 - all Member States should avoid laying down detailed technical rules which might impede the development of the anti-pollution aspects of engine and motor vehicle technology.

The legislation should confine itself to laying down the limit values for exhaust emissions which are necessary to protect the environment.

- improving the current 'state of the art'

- (a) by intensifying research into the non-pollutant properties of ethanol admixtures in petrol by means of specific studies geared to European engine technology and traffic conditions;
- (b) by coordinating and promoting research designed to eliminate the current shortcomings in Community know-how concerning plants from which bioethanol can be produced, conversion technology and use of by-products;
- (c) by immediately promoting pilot projects and demonstration models for low-cost combined production of bioethanol and biogas in suitable installations in the food industry, in particular in agricultural distilleries, sugar and starch factories;
- (d) by developing models through which supplies of bioethanol may be identified and concentrated as a means of safeguarding production and ensuring orderly marketing;
- (e) instructs its President to forward this resolution to the Commission and Council.

MOTION FOR A RESOLUTION (DOCUMENT 2-1761/84)

tabled by Mr GRAEFE ZU BARINGDORF

pursuant to Rule 47 of the Rules of Procedure

on the implementation by the Commission of the European Communities of a ban on the use of fattening agents - such as natural and artificial hormones, antibiotics and penicillin - to protect consumers and promote systems of animal husbandry appropriate to the particular species in an environmentally acceptable and non-industrial system of agriculture, and the recognition that such a measure is compatible with the EEC Treaty

The European Parliament,

- A - whereas it is unacceptable that, in the use of fattening agents, economic interests should take precedence over the most legitimate interest, namely that meat as a foodstuff should pose no threat to health and/or contain no residues,
- B - whereas it is not possible to calculate the risk to health deriving from the use of these agents, since the limit values cannot be determined for hormone residues, for example, which would rule out all increases in cancerogenic or carcinogenic effects,
- C - whereas fattening agents are commonly used in industrial-scale animal husbandry, i.e. intensive agro-industrial production, and whereas this adversely affects the environment, e.g. through sullage (nitrates in groundwater),
- D - whereas these agents are used to a lesser extent in small and medium-sized farms, so that these produce more wholesome meat at a higher cost,
- E - whereas a graduated system of prices has been introduced which, given the work entailed, acts as a disincentive to animal husbandry based on outdoor farming which is better suited to the animals concerned,
- F - whereas the Community meat market is already saturated, and whereas, accordingly, there seems to be no need to increase yield,
- G - whereas, in addition, the fall in feed requirements caused by the use of these agents is aggravating the problem of surpluses on the Community market in cereals, unlike land-based animal husbandry which, given that a higher proportion of feed is produced on the farms themselves, would reduce the cereal surpluses,
- H - aware that in Belgium, Denmark, France, Italy and the Netherlands, both natural and synthetic hormones are prohibited in animal husbandry,
- I - aware also, however, that in the Federal Republic of Germany, it is only synthetic hormones which are prohibited,
- J - whereas, finally, a ban on the use of fattening agents is compatible with the EEC Treaty and, unlike measures which encourage the concentration of animal husbandry in agro-industrial holdings, accords particularly closely with the agricultural policy objectives laid down in Article 39 of the EEC Treaty,

1. Calls on the Commission to take the necessary measure to prohibit the use of fattening agents, natural and synthetic hormones, antibiotics and penicillin to increase the rate of fattening and sedatives (tranquilizers), and, in addition, to lay down upper limits on the size of herds, so as to open the way for land-based animal husbandry - ecologically more rational and, hence, healthier;
2. Calls on the Council to lay down as a principle for future agricultural policy that a bias - in terms of both aid and political treatment - towards industrial animal husbandry, as opposed to animal husbandry on small and medium-sized farms, contravenes both the principle of equal treatment and the letter and spirit of the EEC Treaties and, in addition, to refrain from endorsing or enacting any agricultural policy measures that would result in further preferential treatment being accorded to industrial scale animal husbandry;
3. Instructs its President to forward this resolution to the Commission, the Council of Ministers and the Government of the Federal Republic of Germany.

MOTION FOR A RESOLUTION (DOCUMENT B 2-15/85)
tabled by Mr FORD, Mr FALCONER and Mr STEWART
pursuant to Rule 47 of the Rules of Procedure
on soil surveys in Europe

The European Parliament,

- A. recognising the wave of public concern about ecological issues throughout Europe,
- B. concerned that some agricultural practices are environmentally damaging,
- C. aware that increasing pollution from acid rain, fertilisers, heavy metals and intensive farming pose severe dangers to soil quality,
- D. believing that sensible decisions on land use can only be made on the basis of good soil maps and continued monitoring of soil quality.

Asks that

- 1. the Commission supports and encourages: the continuation and extension of community programmes in this area; the national programmes undertaken in Member States, the development of new techniques of soil surveying and monitoring;
- 2. the British Government is urged to restore the cuts made in the funds available to the Soil Survey of England and Wales which goes against the need to use and conserve resources in a sensible way;
- 3. this resolution be sent to the Commission, governments of Member States, the UK Ministry of Agriculture and the UK Agriculture and Food Research Council.

MOTION FOR A RESOLUTION (DOCUMENT B 2-374/85)
tabled by Mr KUIJPERS and Mr VANDEMEULEBROUCKE
pursuant to Rule 47 of the Rules of Procedure
on the pollution of the Semois

The European Parliament,

- A. whereas the River Semois crosses national frontiers,
 - B. whereas water pollution is a rapidly increasing problem,
 - C. whereas the Semois is important for tourism and fishing,
 - D. having regard to the water analyses by the French Ministry of Agriculture, which show that the Semois is heavily polluted,
 - E. whereas the pollution is caused by detergents, agricultural fertilizers and industrial waste,
 - F. whereas having regard to the various forms of action taken by the fishing associations,
1. Calls on the Commission of the European Communities to carry out an investigation into the quality of the water in the River Semois;
 2. Calls on the riparian States to draw up a water purification plan for the River Semois at an early date;
 3. Instructs its President to forward this resolution to the Ministers of the Environment of the riparian States and to the Council of Ministers.

O P I N I O N

(Rule 101 of the Rules of Procedure)

of the Committee on Agriculture, Fisheries and Food

Draftswoman: Mrs CRAWLEY

On 23 January 1985, the Committee on Agriculture, Fisheries and Food appointed Mrs CRAWLEY draftswoman of the opinion.

The Committee considered the draft opinion at its meetings of 18 June 1985 and 28 November 1985. It adopted the draft opinion at the last meeting unanimously with one abstention.

The following took part in the vote: Mr Tolman, Chairman; Mrs Crawley, draftswoman; Mr Adamou, Mr Battersby, Miss Brookes (deputizing for Mr Simmonds), Mrs Castle, Mr Clinton, Mr Dalsass, Mr Elles (deputizing for Sir Henry Plumb), Mr Früh, Mr Gatti, Mr Gautier (deputizing for Mr Wettig), Mr Guarraci, Mr Happart, Mrs Jepsen, Mr Ligios (deputizing for Mr Borge), Mr Maher, Mr Marck, Mr Mertens, Mr Morris, Mr Musso, Mr F. Pisoni, Mr N. Pisoni, Mr Provan, Mr Romeos, Mr Roelants du Vivier (deputizing for Mr Graefe zu Baringdorf), Mr Rossi, Mr Späth (deputizing for Mr Bocklet) and Mr Vernimmen.

Introduction

The Committee on the Environment, Public Health and Consumer Protection has held a Hearing on the subject of agriculture and the environment. The evidence of the experts was interesting and valuable, but it is necessary for this evidence to be submitted to interpretation and evaluation in order to make use of these expert views for the formulation of policy. The CAP has a number of different tasks, and any report which seeks to reform or revise it in the light of purely environmental considerations will inevitably fail to take account of these other important objectives. The experts were asked, for example, in a written questionnaire: 'How do you believe the CAP should be reformed and in particular price policy changed so as to ensure proper management of the environment?' (Q.3.5.1) What has to be said here is that we cannot reform the CAP just to take account of the environment, so that the answer to this type of question needs appropriate qualification. These comments are not intended as a criticism of the way the Committee on the Environment, Public Health and Consumer Protection conducted its Hearing. The committee was simply doing the job it set itself. However, it is because the Committee on Agriculture, Fisheries and Food was not party to the organisation of the Hearing, that your draftsman attaches great importance to this opinion, which will enable the Committee on Agriculture, Fisheries and Food to express its view on the question of agriculture and the environment.

The reform of the CAP is perhaps the most important question facing the European Community at present, since if the question of the excessive costs and continuing surpluses of the CAP is not resolved, the CAP risks disintegration, which would call into question the whole shape and future of the European Community. The subject of reform has been dealt with in the report by Mr TOLMAN¹, on behalf of the Committee on Agriculture, Fisheries and Food, and the present opinion is intended to reflect a more detailed analysis of the effects of agricultural policy on the environment at a time when we have what may be a unique opportunity, in reforming the CAP with the objective of reducing its costs and dealing with the problem of surpluses, to do something which will be of benefit to the environment.

¹ PE 100.044/fin.

Background

1. The scale of the problem

One of the most important factors which seemed (at least to the draftsman) to emerge from the Hearing was that there was no statement of the scale of the problem in quantitative terms. Experts talked of damage to the environment as a result of pollution, but there was no clear statement which quantified how much damage was being done by modern agricultural methods. In more general, public debate, there has also been considerable talk of 'agriculture damaging the environment', but again it is difficult to say to what extent this is happening. The result is a certain amount of scaremongering and exaggeration, and this makes it difficult to discuss this topic coolly and rationally. The OECD countries spend between 3 and 5% of their GDP each year repairing damage caused by pollution. The main causes of pollution are noise, air pollution, industrial and household wastes dumped into rivers and the cost of disposing of solid wastes. Of the total expenditure, one can only guess at the proportion of costs caused by agricultural pollution, and this guess would probably be that it is at most 5% of the total expenditure, although there are social costs in terms of damage to countryside, loss of natural habitats etc., which have not yet been put into figures. Nevertheless, it is important to keep the scale of the problem in perspective.

2. Environmental policy in the Community

A common European environmental policy was established by the European Heads of State and Government at their summit meeting in Paris in October 1972, and was aimed at reconciling economic growth with the increasing need to preserve Europe's environment. The Treaty of Rome spelt out in its Preamble that one of the principal objectives of the EEC must be "the constant improvement of the living and working conditions of their people". The creation of an environmental policy was also intended to preserve free trade between Member States by ensuring that the legislation of Member States should not create distortion in competition or technical barriers to trade in the Community. Further, the Community has played an active role in this respect amongst the 24 nations of the OECD, in order to reduce air pollution and limit the use of hazardous chemicals, with consequent effects on trade.

It is not here the place to summarise the history of the Community's environmental policy, established in 1972 with a call for an action programme for the environment, which was adopted in November 1973² and subsequently extended and supplemented, with the Third Action Programme being adopted on 7 February 1983 for the period 1982-1986³. But it would seem to your draftsman that a study of these measures reveals rather narrow emphasis on the control of pollution, noise or waste, rather than on preventing the causes of environmental damage. In the sectors devoted to the protection and rational management of land⁴ which deals specifically with agriculture, the objectives are limited to reducing undesirable environmental effects of current agricultural policy by the search for solutions to the problems shared by the different Member States⁵ and by such means as distributing and sharing information, while the measures proposed to conserve flora and fauna seem to be similarly rather peripheral: by monitoring the collection of wild life and flora, and monitoring or banning of trade in endangered species. Where the policy in this regard does specify that an objective should be the conservation of habitats, it also recognises that this costs money, which the Community as such does not have, so that it must rely on local, regional and national authorities for decisive action in this field. Environmental considerations have been about the damage limitation of a productivist system rather than the search for mechanisms by which environment and agriculture can be integrated.

Your draftsman does not mean in any way to decry what has been done, or to minimise the importance of the research work undertaken with a view to developing a monitoring system which will provide decision-makers with a picture of the state of the environment. It is merely intended to demonstrate that the Community's environmental policy is inevitably limited and that action to reduce the negative effects of agricultural development is relatively small and piecemeal. It must be pointed out that the Community's Action Programme 1982-86 specified the intention to integrate environmental considerations into other policies, but one has to ask how successful this has

²OJ C 112, 20.12.1973

³OJ C 46, 17.2.1983, p.12

⁴OJ C 46, 17.2.1983, p.12, para 26

⁵OJ C 46, 17.2.1983, p.12

been. It is this feature which has given rise to the Motion for a Resolution which forms the basis of this opinion⁶, as well as the other Motions for Resolutions which have been taken into account in drawing up this Opinion⁷.

3. Specific measures in the CAP relating to the environment

While there is a whole series of Community legislation covering environmental protection, the number of measures to this end within the CAP is limited. These measures include Reg. 2195/81⁸ on a special programme concerning drainage operations in the less-favoured area of the West of Ireland, Reg. 1820/80⁹ for the stimulation of agricultural development in the less-favoured area of the West of Ireland, and Reg. 269/79¹⁰ on establishing a common measure for forestry in certain Mediterranean zones of the Community. Particularly important, too, is Directive 75/268¹¹ which contains reference to environmental considerations, although in all these regulations, the term 'environment' is not defined. 'Environment' is a term used very loosely, but the best definition is one used by the Commission, and which takes account of people. It is as follows: "the combination of elements whose complex inter-relationships make up the settings, the surroundings and the conditions of life of the individual and of society as they are, or as they are felt". Directive 75/268 specially mentions in the Preamble the need to "ensure the continued conservation of the countryside..... whereas farming performs a

6 Motion for a Resolution on Agriculture and the Environment tabled by Ms Joyce QUIN (Doc. 2-455/84)

7 Motion for a Resolution tabled by Mr DEPRez on the progressive disappearance of forests in the world and the economic and ecological consequences (Doc. B2-660/85)

Motion for a Resolution tabled by Mr TOGNOLI on the necessity to have precise information on the use of pesticides (Doc. 2-924/84)

Motion for a Resolution tabled by Mr ANTONY and others on the decisions to be taken concerning the protection of European forests (Doc. 2-1037/84)

Motion for a Resolution tabled by Mr ROELANTS DU VIVIER concerning a European policy for protection of the earth and a programme for the reduction of the use of chemical products in agriculture (Doc. 2-1061/84)

Motion for a Resolution tabled by Mrs SCHLEICHER and others on the protection of the environment by promoting bio-ethanol and its utilisation as fuel for cars (Doc. 2-1349/84)

8 OJ L214, 1.8.1981, p.5

9 OJ L 180, 14.7.1980, p.1

10 OJ L 38, 14.2.1979, p.1

11 OJ L 128, 19.5.1975, p.1

fundamental function in this report". However, the most important piece of Community legislation in this field is the Regulation on improving the efficiency of agricultural structures¹². The emphasis in this Regulation has been far less than in the past on increasing productivity (and thus production and surpluses) and more on encouraging practices which reduce production costs, save energy, improve living and working conditions and improve the environment, as well as raising the quality and value of products leaving the farm. Article 19, in particular, provides for Member States to introduce special national schemes in environmentally sensitive areas, and the aid may be granted to farmers who undertake to farm environmentally important areas so as to preserve or improve their environment. The farmer's undertaking must stipulate that there will be no further intensification of agricultural production. Since this Regulation was adopted in March 1985, it is too soon to provide details of the success of this provision, which is, anyway, only being applied in one Member State so far. This development is welcome, but everybody knows what a small proportion of the total budget is given to Guidance measures, and thus the main problems are untouched by this measure. It is now time to look at some of these problems.

4. Effects on the environment under the CAP regime

It is difficult, at times, to state whether damage has been caused by advances in technology - independent of the CAP - or by the encouragement offered by the CAP to employ the latest technology to achieve higher yields. Defenders of the CAP tend to argue the first; its critics the latter. The truth is probably that the two factors are inextricably intertwined. If you establish a system which rewards high outputs and high technology, it is really academic whether you blame the system on the instruments of the system. In order to avoid getting into this sterile argument, we should perhaps talk of damage caused 'under the CAP regime'. Thus, using this phraseology, it may be said that there has been a major effect on the environment under the CAP regime. On the one hand it is said to lead to the "prairie-isation" of land, based on monoculture, with the associated removal of hedgerows, destruction of woodland, draining of marches, as well as (what is surely equally important but often overlooked by lobbies and pressure groups) negative effects on rural bus services and rail links, village post offices and schools. The

¹² OJ L 93, 30.3.1985, p.1

"industrialisation" of farming has effects on rural employment and on village communities as well as on flora and fauna. Another effect is that the pressure to maximise production and concentrate on areas where natural conditions are most favourable has led in some areas of the Community to the abandonment of land, which has been left to revert to an uncultivated state. This, too, has proved disadvantageous from the point of view of countryside management and environmental policy, especially as the effect can sometimes have a major bearing on the tourist industry and other economic and ecological factors. Equally important - some would say more important - has been the "flight to the towns" despite high unemployment in them, and the consequent pressure on social services. In other words, many people have been driven off the land and ended up homeless and unemployed in cities.

It is sometimes argued that land which is not cultivated can be used as "common land" for the pleasure and relaxation of city dwellers and others. This is simply not the case. Abandoned, or "reverted" land, which is a particularly important problem in Germany, France, Italy and Greece, quickly becomes unusable, and in a Community where land is one of the scarcest resources, this process is unacceptable.

To summarise, under the CAP regime, with its emphasis on high production and intensive farming, there has been a whole range of deleterious environmental effects, although, as stated before, it would appear that the precise scale of these problems has not been quantified. Lack of space makes it impossible to do more than cite the headings of these:

(a) In agricultural terms

- 1) overgrazing
- 2) drainage, altering the nature of the countryside and natural plant and animal habitats, with a decline of natural wildlife
- 3) loss of moorland, grassland and forests
- 4) the construction of farm roads which do not take account of environmental considerations
- 5) removal of hedges and stone walls
- 6) damage to woodland and planting of "wrong" woodland
- 7) conflict with nature conservation
- 8) pollution of air, water and land
- 9) problems of sewage control

- 10) negative effects on animal welfare (farm animals)
- 11) intensification in the form of higher yields from land and livestock¹³.

(b) In social terms

- 1) declining rural employment through substitution of capital for labour
- 2) increasing urbanisation and urban unemployment
- 3) destruction of rural communities
- 4) growth of social disparities between "big" and "small" farmers
- 5) decline of social facilities in the countryside (walking, tourism etc.) through decline in footpaths and other amenities for recreational use of land and lack of public funds for upkeep thereof.

It will be noted that the draftswoman is mentioning only environmental effects, not the well-known problems of vastly expensive and wasteful surpluses, which are directly attributable to the CAP itself, and which involve the economic absurdity of spending so much of the Community budget on a small proportion of the population, at a time when there are almost twice as many unemployed as there are farmers.

5. The future

The Commission seems to believe that while there may be some justification in the past for attacking the CAP on the grounds that it has had deleterious effects on the environment because high prices have encouraged production, this is all in a sense 'water under the bridge' if one assumes that 'prudent' or 'restrictive' prices will apply from now on, coupled with income aids.

Your draftswoman does not accept this optimistic and rosy view of the future. It is quite possible that restrictive prices will encourage further intensification of production, and increased environmental damage, as farmers try to compensate for lower real incomes.

¹³ M Tracey 1984 'Responsible use of Resources in Agriculture and on the Land'

However, the new emphasis in the Green Paper on environmental considerations when dealing with agriculture is to be warmly welcomed. The Commission suggests two different approaches to improve the environment: the first which it calls 'passive protection', involves regulation and control of practices harmful to the environment, and suggests a number of measures to control the use of pesticides and fertilisers by definition of product standards with respect to environmental risks, approval of products before use, restriction of product distribution to specially qualified people, and other such measures. Further, it is suggested that action could take the form of issue of permits for the construction of buildings which intensify livestock production, the introduction of appropriate planning procedures for major projects and possibly even limiting or even prohibiting public aids for drainage. Thus, on the one hand, the Commission is proposing to lower prices (in real terms) for agricultural produce and, on the other hand, it is proposing all sorts of bureaucratic limitations making it difficult for farmers to increase production. The effect is likely to be to hurt farmers of all sizes, but whereas large farmers can overcome this problem, this may not be true for smaller farmers. Thus, the incomes of smaller farmers will decrease further, which will mean that the direct income aids which the Commission is proposing will have to be increased, lending credence to the belief that the Commission is trying to take the heat off the CAP by having not surplus products but surplus, and rather poor, farmers, paid to do little in rather pretty countryside. The reverse is true: the best way to protect the environment is to ensure reasonable prosperity for farmers.

The Commission's second approach - the active approach - consists of promotion of practices friendly to the environment, and here your draftsman believes that this approach is likely to be much more fruitful. The first type of action envisaged is a series of measures to introduce or maintain agricultural practices compatible with the need for the protection of nature, such as the suspension of agricultural activity during certain periods of the year, observance of low limits of use of fertilisers and pesticides, acceptance of rules for the use of pasture, abandonment of drainage and irrigation works and change of use to other agricultural production. Many of these ideas are surely on the right track, but one has to ask how the Commission proposes to implement these ideas, and whether they will be

sufficiently effective. They are an exercise in damage limitation, rather than the creation of a new policy encompassed by a single vision - a truly 'active' policy.

On the other hand, the Commission's second proposal - to encourage the buying out or renting out of land by public authorities for environmental purposes - is likely to be extremely expensive, and one wonders whether it is right to attempt to turn 'up to 10%' of Community land into a kind of nature park, paid for by taxpayers: is this the right use of limited resources?

Your draftsman agrees with the Commission's acceptance of the principle that the polluter pays, but the question has to be asked, how should the polluter pay? A number of suggestions have been made by different people::

A tax on fertilisers: The idea of a tax on nitrogen was discussed at the Environment Committee's Hearing. It seems to your draftsman that having heard arguments on both sides, such a tax, although superficially attractive, would not be feasible: it would add to the cost of production, and part of the costs would be passed on to the consumer. If it were a flat rate tax, it would hurt poorer farmers and poorer regions. On the other hand, if it were differentiated in order to allow smaller farmers and poorer regions to pay less, they would continue to use the nitrogen in high quantities which is allegedly poisoning ground water. Further, although it was suggested that the proceeds of such a tax should be paid back to farmers, there would be considerable difficulties in allocating priorities in doing so.

Differentiated prices: Another form of penalty might be to allocate differentiated prices by size of farm, region or method of production, but even if this were administratively possible, it would require an elaborate system of quotas, which most people agree would be undesirable.

Direct controls: The most simple way to apply the 'polluter pays' principle would be to impose direct controls and penalties on farmers who pollute the environment through intensive livestock rearing. The Commission is studying this problem, and we await their proposals. Like any other industrial activity, one needs control.

A number of other approaches should be enumerated:

(a) Alternative farming: This sector would appear to be more than just another fad. Although the number of farms engaged in this activity is less than 1% of Community total, it is growing rapidly and some estimates assume that it will account for 10 to 20% of Community production in the next decade. Alternative farming requires more labour, lower chemical inputs, and has a lower yield. However, the produce commands a premium price, and consumers seem willing to pay this. It is not a sector which appears to require heavy Community financing, but rather one in which Community encouragement is desirable, by for example facilitating exchanges of views and information on methods of production.

(b) Information and training: The Community should encourage a better understanding of environmental matters amongst people in agriculture, agricultural organisations and producers, advisers and inspectors, suppliers of materials and equipment, authorities responsible for planning of land use, and consumers.

(c) Agricultural research: Much greater research needs to be undertaken on the question of the effect of chemicals on soil and plant life and water, as well as on human beings. Other subjects to be looked at include the question of optimal use of fertilisers, integrated pest control, less toxic and more selective pesticides, better application methods, genetic selection of plants for resistance to disease and plants more efficient for fixing nitrogen (thus reducing the need for fertilisers)

(d) Structural measures: The main need shown in the Green Paper is for an overall plan for restructuring agriculture over the next several years. There is quite rightly an unwillingness to face the possibility of increasing unemployment, which has led to the adoption of the idea of direct income aids, but there is no overall plan on how we should use Europe's very scarce land resources in the future. This subject goes far beyond environmental considerations, and cannot be discussed in detail here, but the Commission is quite right to state (para 19 of the Green Paper) that 'there must be some doubt as to whether the financial framework fixed by the Council' for the Guidance Section for the next five years is sufficient. It is not. The

Commission must propose a new, overall Guidance Policy, taking account of the environment, and building on the beginnings of the new policy established on 12 March 1985 with Regulation (EEC) 797/85¹⁴.

CONCLUSIONS

The Committee on Agriculture, Fisheries and Food

1. Welcomes the initiative taken by the Committee on the Environment, Public Health and Consumer Protection in organising a Hearing to discuss the effects of agriculture on the environment, but regrets the fact that the Committee on Agriculture, Fisheries and Food did not share equally in the allocation and conduct of the Hearing as farming and environmental considerations are mutually interdependent and complementary;
2. Stresses, therefore, that the reform of the CAP provides an opportunity to establish a coherent agricultural policy which also seeks to preserve the environment and the way of life in rural areas;
3. Points out, however, that the environment is not protected by the depopulation of the rural areas or by the elimination of agricultural activity, and that ways must be found to meet the economic and social needs of the farming community within environmental considerations; pretty countryside with a lot of unemployed farmers and farm workers in it is not the answer;
4. Stresses that environmental considerations should include not just effects on countryside, wildlife, flora and fauna, but, as has always been meant by the term as defined under the Community's environmental policy established first in 1972, factors affecting individuals and communities in the countryside;
5. Points out, further, that an agricultural policy which provides a decent income for traditional farming is the best basis for the production of healthy food;

¹⁴ OJ L 93, 30.3.1985

6. Believes that more attention must be given to the future of rural communities, rural employment and access to countryside for town-dwellers; and future rural/urban balance;
7. Believes that emphasis should be on positive conservation activities taken up by the farmers rather than on compensating them for not doing things that are anti-conservationist, and that contracts could be made with producers who undertake to preserve or improve their environment;
8. Believes that some of the proposals contained in the Green Paper do constitute a first step towards improving the relationship between agriculture and the environment; calls for the Community to take a number of clear and coordinated measures over the next few years to provide a proper solution for the problems occurring in this area;
9. Considers that the Commission's suggestion that drainage schemes should no longer be eligible for Community support is too generalised, since regional requirements vary considerably, and drainage can be a vital means of improving land use; believes that the right approach in this regard is a case-by-case examination of the merits of each scheme;
10. Strongly supports the Commission's concept of active measures to promote practices friendly to the environment, but believes that some of the Commission's actual proposed measures are inadequate, or financially unrealistic and misconceived; totally agrees, however, that direct controls and penalties on farm enterprises which pollute the environment must be introduced;
11. Approves of the use of income aids for environmental purposes, where these are compatible with other economic and social objectives, and believes that the criteria for establishing these must be much more precisely defined; does not agree with the idea of turning large areas of the Community into a nature park, complete with imitation farmers drawing a Community pension;

12. Rejects the idea of a nitrogen tax; believes that a substantial rise in the cost of this very important agricultural input would hurt farmers, 'upstream' and 'downstream' processors, and consumers. A differentiated tax (based on size of farm, or region, or other such criteria) would be impracticable;
13. Wishes to see the harmonization in the Community of regulations governing the use of pesticides and herbicides, and calls on the Commission to set up detailed plans to implement this aim;
14. Believes that an agricultural policy which does not encourage surplus production but directs production into the deficit sectors and is supported by income subsidies in mountain and less-favoured regions can best serve the interests of farming and conservation of the environment;
15. Believes that while 'alternative' farming deserves to be encouraged in the interests of consumer choice, effects on employment and the land, it should be allowed to establish its own place in the market, which is growing rapidly, despite the premium price its products command;
16. Believes that more emphasis must be given to questions of information and training, as well as agricultural research, in order to improve the relationship between agriculture and the environment;
17. Believes that the right approach is to continue to develop the Community's agricultural structures policy, in order to give more weight to the development of products which the Community needs (e.g. timber), provide employment which is genuinely gainful (e.g. through part-time farming), encourage the establishment of young farmers to replace the demographic decline that will occur, while, at the same time, integrating this approach with other policies in the regional and social and environmental fields, so that other forms of activity (e.g. tourism) can be encouraged, which will together create the factors necessary for a healthy and balanced environment.

COMMITTEE ON TRANSPORT

OPINION OF THE COMMITTEE ON TRANSPORT

Letter from the chairman to Mrs WEBER, chairman of the
Committee on the Environment, Public Health and Consumer Protection

Luxembourg, 4 November 1985

Subject: Motion for a resolution tabled by Mrs SCHLEICHER and others, pursuant to Rule 47 of the Rules of Procedure, on a contribution to environmental protection by promoting the production and use of bioethanol in motor vehicles (Doc. 2-1349/84)

Dear Mrs Weber,

The Committee on Transport considered the above motion for a resolution at its meeting of 30 October 1985.

With regard to the environmentally harmful effects of road vehicle exhaust gases, the committee fully shares the concern of the authors of this document.

It would therefore back all measures likely to reduce this form of pollution, provided, however, that there was no related risk of severe disruption to transport operations.

The suggestions put forward in the motion for a resolution, namely the production of bioethanol from renewable raw materials and, to further that end, the call on the Commission to draw up a programme embracing the priorities listed in paragraph 2 of the motion, pose no special problem from the point of view of transport and the Committee on Transport can therefore only give them its unreserved support.

While on this subject, I would point out that the Committee on Transport has, on a separate occasion, already made recommendations on support for substitute fuels and in particular on research into and the development of methanol- and ethanol-based fuels for road vehicles, namely in the own-initiative report by Mr ALBERS on ways and means of effecting energy savings in the transport sector (Doc. 1-249/81)¹.

Furthermore, these recommendations were subsequently renewed in Mrs SCAMARONI's report, again drawn up on behalf of the committee, on fuel rationing (Doc. 1-1332/83), to which I would also refer you².

Please treat this letter as the opinion of the Committee on Transport.

Yours sincerely,

Georgios ANASTASSOPOULOS

¹See OJ No. C 287, 9.11.1981

²See OJ No. C 77, 19.3.1984

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