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USE OF AGRICULTURAL COMMODITIES

IN THE NON - FOOD SECTOR

REPORT FROM THE COMMISSION

TO THE COUNCIL

Proposal for a
COUNCIL REGULATION (EEC)
amending Regulation (EEC) No 797/85
on improving the efficiency of agricultural structures

(presented by the Commission)

Contents

	Page
I. Introduction	1
II. The non-food markets for agricultural commodities	1
III. The current scale of the non-food use market in the Community	3
IV. Current measures applied in the Community affecting the uptake of agricultural commodities for non-food uses	4
a) R & D for non-food development.	4
b) Demonstration projects	4
c) Structural assistance	5
d) Market measures	7
V. Toward a more consistent and efficient policy in the sector	8
a) The framework for Community Initiatives	8
b) The definition of priorities	10
VI. Conclusions	12
VII. Proposals	13
1. Coordination and cooperation	13
2. Demonstration projects	14
3. Participation of farmers	14
Annex I : Pilot projects covered by Regulation 797/85	
Annex II : Sectors of interest confirmed during the Commission's workshops	
Annex III : Proposal for a Council Regulation (EEC) n° .../89 of ... 1989 amending Regulation (EEC) n° 797/85 on improving the efficiency of agricultural structures	

Use of agricultural commodities in the non-food sector

I. Introduction

This report has been prepared in response to the request made by the European Council on 13th February 1988 to the Commission to investigate all possibilities of increasing the utilization of agricultural commodities in the "non-food" sector, to present proposals and to establish priorities in this respect.

The structural imbalance between the supply and demand for agricultural products and the intense competition which this provokes on the Community and world markets, justify an important effort in this area.

This effort must be consistent with the new policy framework for agriculture and with broader Community policy objectives particularly the completion of the single internal market. An efficient allocation of resources is at least as necessary in non-food markets as it is in other agricultural markets.

All the objective studies available agree that the non-food use of agricultural products will grow in importance in the medium and long term. But they also agree that the quantities of agricultural products concerned are relatively limited when compared with the present surpluses, and even more so if they are compared with the surpluses which could arise in the future if agricultural production were to continue its recent trend. It is therefore essential to address this subject with a positive but realistic attitude.

II. The "non-food" markets for agricultural commodities

Due to their chemical and physical properties agricultural commodities are potential sources for the production of a wide range of "non-food" products.

The potential scope for uptake of an agricultural commodity for "non-food" use depends critically upon two factors. One is the technical feasibility of the process, the other the economic and competitive conditions affecting the choice of raw materials used by processors.

Neither the technical nor economic conditions are static. Considerable resources, both private as well as public, are invested in research and development to seek new production possibilities relevant to "non-food" uses of agricultural commodities. Some of this investment results in a widening of the potential market for the "non-food" use of agricultural

commodities, some widens the scope for other commodities to play a more prominent rôle in the "non-food" sector. Research thus tends to widen choices between agricultural and non-agricultural products as raw materials for processors. This development is likely to continue into the distant future.

Change is not limited to the technical possibilities. Economic conditions may also change significantly and rapidly. Commodity prices, and especially the price relationship between certain agricultural and non-agricultural commodities that may be technical substitutes for each other in the "non-food" sector, can fluctuate sharply due to normal market factors. Such price relationships may also be influenced to a potentially significant degree by public policy decisions.

Changing technical and economic conditions can pose risks for the agricultural sector, but also opportunities. The Community's policy, as indicated by the Council, should be to ensure that the agricultural sector will be able to benefit from the opportunities that arise. This implies equivalent access to raw materials for processors throughout the Community, and a strong market orientation on the part of producers so that such access becomes possible as soon as the necessary technical and economic conditions are met.

A changing environment may also mean that farmers can develop entirely new land uses, for example by catering for the increasing demand for leisure activities in a rural setting. These new opportunities will provide valuable new income in some rural areas, and their importance could be large in comparison with what is normally understood by non-food use of land.

As the new GATT round moves towards a fairer trading system for agriculture, it will see an improvement in the worldwide competitive environment particularly by increasing discipline on the use of all subsidies affecting agricultural trade. Success in this area would increase the price level of agricultural commodities in international trade. The trend in prices within Europe, however, is clearly downwards at least in real terms. This will tend to increase the relative competitiveness of local agricultural raw materials for European manufacturers and processors in the non-food as well as the food sectors. In the very long term, the progressive exhaustion of finite fossil resources will also improve the prospects for using renewable raw materials.

III. The current scale of the "non-food" use market in the Community

The current uptake of Community agricultural production for "non-food" uses is small in relation to the total output of Community agriculture. Currently it accounts for about 2 million tonnes of starches, 180 000 tonnes of sugar, 12 million hectolitres of alcohol, 100,000 tonnes of flax fibre, over a million tonnes of cotton, and nearly 400,000 tonnes of tobacco.

This is a low proportion of total Community agricultural production if one compares it to the proportions of non-food agricultural output elsewhere in the world, and especially if one takes into account forest products which are important non-food products of the land. Not counting forests, non-food use employs less than 1 percent of the land area of Europe, and less than a quarter even when forests are included.

The extent of forests which have been displaced in favour of agriculture oriented towards food markets in Europe and elsewhere, is symptomatic of the precedence that agricultural policies have historically given to food production.

Estimates of the longer term potential market for uptake of Community produced agricultural commodities for "non-food" use are fraught with difficulty. Much of this difficulty resides in the uncertainty over the economic conditions under which such uptake may occur. Sometimes the incentive to use a given raw material or energy source, for example, may come from a deliberate choice on the part of the public authorities, based on the advantages that this choice holds for society as a whole. Choices of this type can indeed be made, which would favour the use of agricultural raw materials, and in particular for environmental reasons.

Examples of this can already be seen within the Community, such as the specification of non-mineral oils for chainsaws in German state forests, and the discouragement of non-biodegradable plastics in Italy. The Commission's intention to design a Community strategy for energy supply and environmental protection, will help to ensure a better coordination and more coherence in this area. All these initiatives and in particular those which mean a better coordination in the use of economic incentives to encourage certain changes, will also have a direct influence on the non-food use of agricultural raw materials. This is especially so when choosing between the different options for controlling the greenhouse effect and generally in choosing an energy supply strategy which is environmentally sustainable. The Commission will soon be presenting a communication on the subject to the Council.

The matter must nevertheless be kept in perspective : the entire disposable plastics market of the whole Community only amounts to some 10 million tonnes a year. Even optimistically assuming that biodegradable products could take 10 % of that market, the outlet would still represent only a very small fraction of the Community's annual cereals surplus.

IV. Current measures applied in the Community affecting the uptake of agricultural products for non-food uses

a) R & D for non-food development

The Community's current multiannual framework programme for technological research and development⁽¹⁾, contains appropriations of 165 million ecus for pre-competitive research directly concerning agriculture and its dependent industries from 1987 to 1991. Within this budget, there is no fixed guideline as to what proportion of the funds should be employed on projects concerning the non-food use of agricultural products. The new framework programme proposed by the Commission⁽²⁾, and under discussion at the Council, provides 1 bio ECU for the life sciences and technologies.

In addition to the budgetary allocation specific to Community agricultural products, there are also in the 1987-1989 framework programme budgetary allocations for environment protection research, biotechnology, non-nuclear energies, development support technologies, management of agricultural resources, and wood. Under each of these headings projects which partly concern the non-food use of agricultural raw materials would be admissible. This is particularly so in the ECLAIR project, which specifically addresses the links between agriculture and industrial processors of farm products, and which aims to develop systems which improve collaboration between the sectors, in the interests of both. Fundamental research may also be carried out that will enable such uses to become technically feasible at some time in the future.

b) Demonstration Projects

The research of the type financed so far in the framework programme is not necessarily sufficient to ensure that new techniques will be tested on a wide enough scale to prove their feasibility and their interest for a significant number of farmers or of processors.

(1) O.J. L302, 24th October 1987, P.1

(2) COM(89) 397 fin. 28th August 1989

This shortcoming usually arises because collaboration between the interested parties is insufficiently developed and not stimulated at the European level.

Demonstration projects are a basic step in the setting up of a common policy for non-food uses of agricultural products which should be both rational and effective in the long term.

In fact, these projects guarantee the necessary link between research and possible measures for encouraging non-food channels at a commercial level. Community agriculture must be capable of providing these products at a level of performance which guarantees supplies to industry and represents an interest for the producers concerned.

A number of pilot and demonstration actions have been done in various sectors.

Pilot projects have been financed by the Guidance Section of the European Agricultural Guidance and Guarantee Fund together with the Member States concerned. A list of the non-food projects of this type is given in Annex 1. This type of activity, among others, will be continued according to Art. 8 of Reg. EEC n° 4256/88⁽¹⁾.

As regards energy, demonstration projects have also been funded under the Community's Energy Demonstration Programme, according to Regulation (EEC) N° 3640/85⁽²⁾. A total of 35 projects were co-financed by the Community in the period running up to and including 1988, for which the Community contribution amounted to 16 mio ecu. A follow-up programme (THERMIE), to start in 1990, is presently being examined by the Council.

Another possible source of funding could be available through specific legislation applicable in the cereals sector (Reg. (EEC) n° 1097/88)⁽³⁾.

c) Structural assistance

The Community co-finances investments in the infrastructure and processing capacity of certain industries, which purchase agricultural products. These investment aids have been provided for in the European Agricultural Guarantee and Guidance Fund, Guidance section, and in the Integrated Mediterranean programmes.

(1) O.J. L 374, 31st December 1988, p. 25

(2) O.J. L 350, 27th December 1985, p.29

(3) O.J. L 110, 29th April 1988, p. 7

There is no key for the funding of investments which determines a particular proportion for non-food projects; however, few are excluded from finance under the regulations pertaining to the three relevant objectives of the reformed structural funds.

For the areas of the Community concerned by objective 1 (development of backward regions) and objective 5 b (rural development) of these funds, Member States can present programmes which will attract Community co-finance. These notably may include agricultural reconversion programmes, in accordance with Article 5 of Reg. EEC n° 4253/88⁽¹⁾, and they clearly can involve non-food production.

Diversification to non-food use of agricultural products can contribute to rural development under objectives 1 and 5b by improving the economic viability of farms, creating jobs downstream and encouraging the setting up of SME's making use of local production in new ways.

The forestry action programme⁽²⁾ has a role to play in the achievement of all three objectives, particularly the adaptation of structures of production and in rural development. In contrast to agricultural production, it concerns an area where the effective supply of fibre does not match potential demand. Since 1985, the Community has co-financed particular national projects which will increase the supply of wood and fibre from agricultural areas. The Council has also decided⁽³⁾ that in the future, wood industry projects are eligible for assistance, unless they concern a processing stage subsequent to the sawing of the timber. In addition, considering that the expansion of the cork sector and cork-oak growing may help in improving agricultural structures, especially in certain Mediterranean regions of the Community, the Council has adopted a new regulation concerning this sector⁽⁴⁾.

(1) O.J. L 374 31st December 1988, p. 1

(2) Strategy and action of the Community in the forestry sector COM(88)255 final, O.J. C312 7th December 1988 and O.J. L 165 of 15th June 1989

(3) O.J. L 165, 15th June 1989, p. 6

(4) O.J. L 165, 15th June 1989, p. 5

In addition to proposing co-finance for investment projects in rural areas which may or may not concern non-food projects, the Community will co-finance national temporary schemes for the set-aside, which can include afforestation, of arable land (1). In this case, the Community and national assistance is designed to help farmers over the initial period of their adjustment to a new output mix from their farms, more in line with local market requirements. This scheme also, thereby, helps to meet objectives of limiting overproduction.

d) Market measures

In this area the Community has established common market organisations or aid systems for products partially or totally destined for non-food uses. This is the case, in particular, of the CMO for tobacco; the aid regime for cotton; the measures for the use of casein; and the CMO for linen and flax. These regimes aim to safeguard traditional production which has a particular importance for the economy of certain regions of the Community. Bearing in mind this last aspect, the Council has approved the Commission proposal to increase the aid per hectare for fibre flax and hemp while(2), at the same time, maintaining the flat-rate aid per tonne for hemp seed(3). The Community is also now funding market research and promotion with a view to developing the Community and Far Eastern markets for linen(4).

In certain cases, it happens that the prices of raw materials, that could be used equally well either for food or for non-food purposes, were kept higher than world market prices by the guarantee mechanisms of the C.A.P.. Where the internal market for the non-food processed product had little or no protection against foreign competition, this obviously was a disadvantage to the non-food options for using these raw materials inside the Community. It was to resolve this problem that the Community adapted the regulations concerning cereals, potatoes, and sugars. The disadvantage to non-food processors of sugars and starches was removed, by ensuring that processors have access to these raw materials on terms equivalent to those available outside the Community.

Since 1986 the Community has extended this approach whenever it appeared that it was necessary to correct a distortion generated by the guarantee mechanisms of the C.A.P. Annual expenditure incurred under this legislation now amounts to approximately 300 MECU.

(1) O.J. L 121, 11th May 1988, p. 36

(2) O.J. L 129 11th May 1989 p.3

(3) O.J. L 129 11 th May 1989, p. 6

(4) COM (88) 372 30th June 1988, O.J. C3, 5th January 1989, p. 7

In the case of products for which the Community legislation provides for the granting of deficiency payments, industries have access to them at world market prices whether they are for food use or for non-food use. Among the products covered by this arrangement are the oilseeds, protein crops, fibre crops and tobacco. For such crops it is sufficient simply to see that all the varieties of crops which could be used for non-food purposes are included within the scope of the regimes. The Council, at the time of the 1988/89 price decisions, specifically marked its willingness to maintain this for the varieties of rape with a high content of erucic acid, for which there is an industrial demand.

V. Towards a more consistent and efficient policy

It is evident from the foregoing review that the Community's commitment to non-food production from agriculture is already important, and is seen in a wide variety of policies.

It is nevertheless also evident that these policies are somewhat independent of one another. It has now become necessary to reinforce the Community's role and achieve a more effective concentration of efforts.

a) The framework for Community initiatives

To encourage the development of non-food uses of agricultural products one can work at the farm level by supporting traditional or new production which suits these uses. One can also work at the level of processors, with measures which will make it profitable to develop processes which use agricultural raw materials. In both cases, one can also look for changes to detailed administrative arrangements, which would simplify producers' or processors' practical problems. In both cases, there are also three approaches which can be envisaged, with different degrees of public involvement.

In the first approach, one could aim to speed up any technical developments which would make a given agricultural product, or a transformation process for an agricultural product, more competitive. On the farm, such an approach would involve developing the productivity of crops, developing some necessary qualitative characteristic of the crops, or simply developing varieties better adapted to particular regions of the Community. As for the processing industry, such an approach

would involve improving the efficiency of the processes concerned. In this approach, and in either of the above cases, the appropriate policy tools are the support of research projects, of demonstration projects, and of extension and training services.

In the second approach, one would aim to bring forward the commercialisation of a new product or process by using temporary production or transformation subsidies. This would be a way of stimulating the adoption of products or processes which are very close to becoming competitive in their own right and ought indeed to become so within at most 5 years of starting an aid programme for the purpose.

In the third approach, one would subsidise production or transformation processes which, even though well known and well tried, offer no prospect of economic viability in the foreseeable future. In this case, the production or processing aids would be granted on a permanent rather than a temporary basis.

Of the three approaches, the first and second are those which are most cost effective. They are also more consistent with the present regulatory framework, and with the reform of the C.A.P., both as to their conception and as to the availability of the necessary instruments. In fact, these approaches are ones which, by their nature and by their limited duration, do not constitute a fundamental interference in the marketing choices of farmers or of processors. Their nature limits the risks of misallocation of economic resources or of a runaway budget. Finally, if they are backed up by a clear and complete environmental assessment they are the most likely to ensure a rational use of natural resources.

The third approach is the one that corresponds to the situation (see point IV d) above) of European industries whose competitiveness is lessened by the C.A.P.. This may be because of the effect of the C.A.P. on the prices that have to be paid by processors, or because of the effect that the C.A.P. has on farmers' inclination to produce alternative crops for non-food use, when they otherwise have the possibility to produce well-supported crops for food use. It is a real problem which could, depending on the case, induce processors to install themselves outside the Community or at least to delay their installation and thus lose competitive edge within Europe. In consequence, one could propose a generalised and permanent scheme, rather than a case-by-case approach as has been done until now.

A generalised and permanent scheme would have to be open to all potential non-food uses of agricultural products. This would, on the one hand, put into question the present regulatory scope and budgetary limits of the CAP. It would also constitute a substantial discrimination between different industries using agricultural products, privileging non-food industries to the detriment, perhaps, of others such as the animal feed industry who also require good access to raw materials in all parts of the Community. This is of particular concern in view of Art. 40 of the Treaty which excludes discrimination between producers or consumers. Permanent aids for processors or producers would therefore be envisaged only in specific and duly justified cases, such as the abovementioned case of sugar and starches, or where a particular strategic or environmental consideration is of overriding importance.

Some requests from farmer's organisations for particular uses of co-responsibility funds also fall into this context. This is the case, for example, with requests for an alternative "set-aside" scheme which would be designed to promote the development of non-food uses of agricultural products. The Commission has studied this possibility. The aim is to find a way to respond positively to those requests which can be properly justified, given the present budgetary and legal constraints on the Common Agricultural Policy, and given the existing measures which could have the same effect.

Clearly, any action taken by the Community must respect its International obligations, particularly those already adopted or those which could result from discussions in the GATT.

b) The definition of priorities

The context of the Council's request to the Commission is to help solve the Community problem of surplus production not only by the introduction of the stabilisers but also by the active participation of the Community in looking for alternative non-food outlets for Community production as well as alternative use of land.

On defining priorities in these fields one should first analyse the efficiency of existing instruments and see whether scope for improvement still exists.

Regarding the alternative use of land, considerable efforts have been made ranging from set-aside to the development of alternative crops by means of research and demonstration. However, these efforts differ from Member State to Member State. Therefore, Community initiatives should bring a benefit which would not have been obtained by conducting the initiatives on a national scale. In practice, Community initiatives should involve those possibilities which are liable to be put to use in several Member States, even though the necessary research, for example, need only be carried out in one or a very few locations.

While deciding on which research and demonstration projects need to be launched or strengthened, one should consider to what extent these projects help the Community to develop or capitalise upon a real comparative advantage in order to ensure the efficient use of budgetary resources in this area. This will ensure not only that the efforts will offer a prospect of long-term returns from the necessary public investment, but also that the Community's position in international trade will not be undermined. These issues must be covered in a proper cost-benefit analysis. An essential part of this analysis is a clear and complete weighing up of all the environmental implications.

However, while respecting the above criteria, one should also take into consideration that the Council made its request to the Commission guided by its preoccupation with the welfare of the agricultural community. This means that priority should be given to initiatives which maintain farmers' individual earnings, particularly where these are most at risk and which help to maintain the activity of enterprises in rural areas.

Regarding the alternative non-food outlets for agricultural crops, one should recognise that at present expansion beyond the existing schemes might be limited. However, prospects might change, in time, given the present improvements on the technical front and price changes.

In order to be able to respond to possible opportunities in this field - which could differ from region to region - one could consider the creation of a flexible infrastructure allowing for initiatives and active participation by the farmer himself in looking for new possibilities.

This would be an important change in policy since, for example, the success of the starch regime at present depends critically upon the initiative of certain industries to make use of the scheme.

The new infrastructure to be created should, however, comply with certain criteria :

- It should not stimulate further production of a surplus crop
- It should make raw materials available to the industry on terms comparable to world market prices.

Therefore, the new scheme should not run counter to present efforts to reduce the surface planted with crops produced in surplus, but rather reinforce these efforts. The addition of any amounts produced to the Maximum Guaranteed Quantity cannot be considered.

A scheme for the cereal sector can be made to fit these criteria. This sector is also represented all over the Community, thus allowing for a maximum number of farmers to consider the scheme.

VI. Conclusions

This report has shown that the Community's efforts for promoting non-food uses of agricultural raw materials are already substantial. The Community's effort is apparent at every stage in the business of developing new opportunities, from basic scientific research, through applied research and demonstration, transitory financial assistance, permanent production aids, and right through to market research and promotion to find and develop new markets.

These Community efforts come in addition to numerous national, regional and even local initiatives with analogous aims. These initiatives, like the Community ones, will doubtless multiply in the years to come, encouraged by better markets and improved agricultural production techniques. It is therefore important to strengthen the Community's role of coordination, so as to ensure the greatest effectiveness and the necessary complementarity of what is done.

It is important, also, to make sure that there is an appropriate balance between the efforts which are made at each stage in the process of developing new non-food uses of products. Looking at the Community effort in this way, it appears that demonstration projects are under-emphasised. A greater effort in this area would seem to be indicated, and would certainly help to make the most of the work already done at the research level.

In the same way that the Community should stimulate and guide collaboration between the many efforts being made at the national level, the Community should also stimulate collaboration between the agricultural sector and the non-food industries which depend on it. Until now, much more emphasis has been placed on dealing with the problems of these industries from above, rather than an encouraging the farmers to help find solutions. This has begun to change, particularly at the research level, but there is scope for more effort by further developing the agricultural structures policy in a way that will encourage farmer's participation to be more active and forward looking.

Finally, it is clear that developments in environmental policy can have important direct implications for the marketability of many products in common use. By putting the long term interests of society as a whole above the short-term incentives provided by the free play of market forces, the Community can speed up the development of many new markets for products which are environmentally friendly. This type of initiative is one that requires a collaborative effort not only on the part of the primary producers and processors who may be involved, but also on the part of consumers. It therefore also needs to be accompanied by substantial public information programmes.

VII. Proposals

1. Coordination and cooperation

The variety of initiatives that can help the process of developing non-food markets is very wide. A review of the Community efforts has already shown that the breadth of this variety poses the risk a suboptimal allocation of resources to the different types of action.

This risk is especially great in the absence of a single policy forum where all the possibilities can be assessed together. It therefore seems necessary to repeat the policy review, in close collaboration with the Member States, in a formal cooperation procedure. The Commission will propose the creation of a committee for this purpose whose duties would be, amongst others, to follow all relevant activity in the non food area within the Community and outside, notably regarding environmental effects, and to assist the Commission in developing further new initiatives in this area.

2. Demonstration projects

It results from the review of Community activities that, whereas there are substantial demonstration projects for renewable energy production from plants, and which will continue, there is relatively little activity for demonstrating other applications of, in particular, agricultural crops.

In the Commission's opinion, based on recent data, it should be possible to mount projects covering the agricultural, process engineering and final product questions, with industrial co-finance, in the case of :

- castor
- Rape
- high oleic acid sunflower varieties
- flax and hemp
- kenaf, fibre sorghum, elephant grass (Miscanthus)
- bitter lupin.

Some technical information about these is given in Annex II.

The raw materials expense in demonstration projects can be an important factor in their financial feasibility. It is therefore desirable to open up the possibility of assisting innovative demonstration projects by granting them intervention stocks, where available, at advantageous prices. This new facility may have the effect of encouraging new ideas especially for cereals.

3. Participation of farmers

It results from the review of Community activities that, whereas there are a number of important programmes supporting and inciting the processing industries to develop new non-food uses of agricultural raw materials, there is a lack of instruments which encourage the active participation of farmers. It is however important to develop a direct collaboration between producers and processors in this area, particularly in view of the long-term prospects for industries based on competitive raw material resources produced within Europe.

The set-aside scheme for arable land⁽¹⁾ should therefore be adapted to encourage the development of another new model of land use, to encourage farmers to make cereals available on advantageous terms for non-food processors. This can be done by granting a premium per hectare of land devoted to this purpose.

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The proposal for the modification of the set-aside scheme is attached as annex III to this report.

The Commission will present the other formal proposals in the near future.

The Commission feels that, when these proposals are adopted, the Community will have the complete range of instruments which are needed to encourage development of those non-food uses which are already apparent now. Additional new uses will appear in the future, most probably as a consequence of the Community's research and demonstration programmes. The Commission with the help of the policy coordination committee, will follow developments in this sector and the Commission will look at what other proposals are needed, either to reinforce or widen the scope of existing measures, or to embark upon new ones.

(1) R. EEC N° 797/85 as modified by R. EEC N° 1094/88 O.J. N° L 106, 27th April 1988, p. 28.

Pilot projects covered by Regulation 797/85

- Establishment of a cooperative forestry enterprise in the west of Ireland (decision C(87)1219 of 25.6.87).
Total cost : 584,000 ECUS
Community contribution : 300,000 ECUS
- Establishment of intensive wood cropping (poplar coppice) in Belgian Lorraine (decision C(87) 1220 of 25.6.87)
Total cost : 600,000 ECUS
Community contribution : 300,000 ECUS
- Establishment of energy crop cultivation (Provence reed) in Languedoc-Roussillon (decision C(87)1223 of 25.6.87)
Total cost : 267,000 ECUS
Community contribution : 200,250 ECUS
- Testing and dissemination of self-assembly types of agricultural buildings, made from roundwood, in Alsace (decision C(87)2524 of 22.12.87)
Total cost : 800,000 ECUS
Community contribution 400,000 ECUS
- Establishment of a pilot scheme for intensive wood cropping from fast-growing trees (poplars) on land currently under grass, in the 'Oldenburg' region (FRG) (decision in 1988).
Total cost : 950,000 ECUS
Community contribution : 380,000 ECUS
- Establishment of Jojoba cultivation in Italy (decision C(87)1221 of 25.6.87).
Total cost : 915,000 ECUS
Community contribution : 500,000 ECUS
- Establishment of a demonstration pilot project for Jojoba cultivation in the Alentejo region (Portugal) (decision C(88)1527 of 11.08.88).
Total cost : 715,000 ECUS
Community contribution : 500,500 ECUS
- Establishment of a goat-rearing enterprise for cashmere production in Scotland (Decision C(87)1180 of 26.6.87)
Total cost : 656,000 ECUS
Community contribution : 383,000 ECUS

Sectors of Interest confirmed during the Commission's workshops

Within the context of workshops designed to determine the interest of those involved in demonstration projects (agricultural producers, the transformation industry, researchers), it was possible to define various particularly promising actions. This list of projects is not meant to be exhaustive, but simply illustrates the considerable interest which certain agricultural products might soon hold for a wide range of industrial sectors.

1. The chemical industry

The chemical industry is mainly based on the use of petroleum products. Nevertheless it does use agricultural raw materials such as cereals, potatoes, oils and sugar to produce, amongst other things, detergents, cosmetics, plastics, softening agents, colours, lubricants, and pharmaceuticals.

These uses could be extended by introducing new products and processes, or by a more efficient production of certain traditional products, using new crop varieties which turn out "tailor made" substances.

1.1. Castor bean (*Ricinus communis*; family : *euphorbiaceae*).

One particular industrial use for castor oil on a large scale is the manufacture of polyamide 11, which cannot be manufactured from petrochemicals. However, it is possible to envisage new applications such as the production of polyurethane prepolymers used in the manufacture of agglomerated cork. The short-term potential market in view of the E.C. crushing capacity and imports could be satisfied by cultivating 110 000 ha of castor beans.

1.2. High erucic rape (*Brassica napus*; family : *cruciferae*).

The bulk of supplies to industry, which are inconsistent in terms of both quantity and quality, are at present obtained mainly from Eastern Bloc countries. The current market is approximately 35 000 tonnes of oil, corresponding to an area of approximately 30 00 ha, based on average yields. Given a stable supply and guaranteed quality, industry might take as much as twice this. The acid is obtained from varieties with a high erucic acid content.

1.3. High oleic sunflowers (*Helianthus annuus* var. *oleic*; family : *compositae*).

The high oleic sunflower enables the chemical industry to obtain oleic acid by a much simpler process than in the case of traditional sources (tallow, palm). Also, the quality of the product obtained from high oleic sunflowers is superior to that from traditional sources (low solidification point and greater stability).

European industry's short-term oleic acid requirements are estimated at approximately 200 000 tonnes (approximately 300 000 ha).

2. Textile, paper and cellulose industry

The market for technical fibres is at present dominated by the use of wood. This is the case notably for paper pulp or the manufacture of industrial cellulose. In view of the Community's dependence on imported paper pulp, and in view of a growing demand for and diminishing availability of wood, some new and profitable crops have been developed which give very high quality fibres, as have some new processes.

The possibilities for using various parts of fibrous plants are not limited to the textile and paper industries : they can go into the manufacture of fibrocement, other construction materials, filters, and soundproofing products. In addition, the cellulose which can be obtained from these crops can be used as a raw material by the chemical industry. Furthermore, it must be underlined that getting cellulose from annual plants is much less polluting than getting it from wood (black liquor).

In addition, the cellulose which can be obtained from these crops can be used as a raw material for the chemical industry.

2.1. Enzymatic retting and steam defibration for linen (*Linum usitatissimum*; family : *linaceae*) and hemp (*Cannabis sativa*; family : *cannabinaceae*).

Despite some increase in the sales of long linen fibre for textiles, and despite the possibility to use the short fibre in certain insulation boards, market development for linen is hindered by the variable quality of the products of natural retting. To overcome these problems new industrial retting processes have been developed, such as the use of enzymes and/or steam defibration. These techniques can also help for hemp, whose problems of drug content do seem to be manageable.

2.2. New raw materials for fibres, paper pulp, cellulose, etc. :

kenaf (*hibiscus cannabinus*; family : malvaceae).

Kenaf imported from China and Thailand is now being used in European papermills. There are two distinct uses of kenaf : the long fibres are used for high quality paper, in asbestos composites, and for insulation boards in place of glass fibre, etc., and the short fibres are used for ordinary paper and agglomerates.

New processes for making paper pulp have been developed which are simpler and less polluting.

Besides the uses of the fibres, kenaf leaves can be fed to animals. Their nutrient value (32 % protein) is comparable to that of lucerne.

Miscanthus (*miscanthus sinensis 'giganteus'*; family : gramineae).

Miscanthus fibre lengths are between those of soft and hard woods, which makes them good for making fine high quality paper. The industrial process is similar to that used for cereal straw and should soon be optimised.

Fibre sorghum (*sorghum technicum*; family : gramineae).

Sorghum is suited to most soil types, is resistant to heat and remarkably resistant to drought.

The fibre quality is very good for paper pulp intended for writing paper and corrugated paper.

The leaves, peduncles, and wasted stalks not used by a papermill can be fed to animals. The grain can be used as food (mixed with wheat flour) or as feed.

3. Other Industries

Bitter lupin (*Lupinus sp.*; family : papilionaceae).

Discussions on the bitter lupin have revealed that this product might constitute a viable alternative crop for farmers in some disadvantaged regions in the Mediterranean basin. It would, however, in this case be necessary to prove the feasibility of a debittering process which would enable its constituents to be used for industrial purposes (pharmaceuticals and essential proteins).

The potential market for this crop is very large, corresponding to the market in proteins for animal feed. The crop could in the short-term cover 3 million ha of acid soils in the south of the Community.

Proposal for a
COUNCIL REGULATION (EEC)
amending Regulation (EEC) No 797/85
on Improving the efficiency
of agricultural structures

EXPLANATORY MEMORANDUM

The European Council asked for all the possible non-food outlets for agricultural production to be explored. Identifying new non-food markets would offer the agricultural sector new prospects for development.

The major potential non-food markets for cereals are already quite well known, ranging from automotive fuels to biodegradable plastics. A substantial development of these outlets is not immediately possible under present market conditions, although prospects are expected to improve with time. Consequently, agricultural producers need financial incentives if they are to be encouraged properly to explore their capacity to play this future role, as suppliers of industrial raw materials. The set-aside system offers incentives of this type to farmers who want to explore non-agricultural opportunities for the use of their land or afforestation. But these options go against the grain for many farmers; they do not see in them the prospect of constructive change.

The Commission considers that it is time to introduce an additional alternative. It would encourage wider participation in the set-aside scheme, and provide a stimulus for farmers to make more use of the scheme in shaping the future of the non-food use of arable land.

There are basic principles to be observed:

- The scheme should encourage more farmers to apply for set-aside and would not in any way detract from the existing scheme.
- The real budgetary cost of the scheme should not be more than the cost per hectare to the budget of the set-aside scheme.
- The scheme should be aimed at the farmers who are trying to develop new uses of crops in collaboration with industry, rather than at the processing industry. It should encourage the active involvement of farmers and mutual cooperation between them.
- The scheme should ensure supplies to industry at lower but reasonable prices. These prices should bear some relation to future price expectations on Community and world markets.
- The scheme should not encourage an increase in production.

The measure will give farmers practical help in discovering the style of agriculture in which they will be involved if they are looking to industrial use of their production. This exploratory scheme will provide concrete experience on which to base projections of Europe's cereal farmers' capacity to supply non-food markets. It will also provide concrete experience on which to base a proper environmental assessment of

the implications of a shift towards non-food markets, considering that production of raw materials at extremely low cost, and to industrial rather than food or feed specifications, in all likelihood requires a quite different model of agriculture to that which is being practised now.

It is important to explore the non-food potential of the cereals sector. It is the sector of primordial importance in the crop rotations used throughout the Community. Also, despite a satisfactory competitiveness, this sector is now facing market problems, notably due to the increasing use of cereal substitutes in animal feed. Finally, the cereals sector is one of those where the farmers are being asked to contribute financially, by the payment of a co-responsibility levy, to the improvement of their marketing prospects.

The basic components of the proposal

a) Eligibility

Farmers are to participate in set-aside as at present. They will set aside a certain number of hectares and receive a given premium per hectare.

Farmers participating in the set-aside scheme (but with a minimum proportion of 30% instead of 20% of their arable land) would be allowed to produce cereals for non-food uses on, at most, half as much land as has been set-aside, and receive a certain premium.

The basic condition for receiving this non-food premium would be a contract concluded between any industrial company and individual farmers (or groups of farmers). In this contract the processor would guarantee that the product will not be used for food or feed manufacture.

Contracts will not qualify if the buyer/processor of the crop applies for aid under the existing scheme for granting production refunds for the manufacture of non-food products from starch. This is necessary to avoid a duplication of effort.

b) Premium and financing

Farmers will receive a premium per hectare for the area for which contracts have been concluded. The Member States will fix these premiums, as with set-aside. The limits laid on these premiums by the Community should be the same as those on the set-aside scheme. However, in view of the fact that at least a small cash flow is to be

expected from the sale of cereals under the scheme, it is proposed to grant a premium which is lower than the premium which is granted for withdrawing land from production. It will be reduced by 30%.

Member States' expenditure should be co-financed in the same proportion as set-aside.

It is presumed that the Council will have adopted the Commission's proposal concerning the financing of the set-aside regime, which was presented with the first report on the operation of the regime.

c) Controls and reports

The scheme inevitably poses problems of control, in particular as regards ascertaining that quantities produced on the qualifying areas are not sold at the normal, subsidized prices to other markets. For this and other reasons, the Commission's implementing regulation will have very strict control provisions requiring, inter alia, that farmers produce no other cereals of the same type on their farms at all.

The scheme must not result in a net increase in the production of cereals in the Community. This would be indefensible, given the present situation on the markets. It is accordingly proposed that the scheme should only be applicable to farmers who set aside a number of hectares at least equal to the number they intend making subject to the scheme. For reasons of budgetary control the Commission will also need to set a ceiling on the expenditure which is allowable under the scheme.

The environmental consequences of any necessary changes in agricultural practice must be monitored. This will be an additional requirement in the general reporting provisions laid down for the set-aside scheme.

Proposal for a
COUNCIL REGULATION (EEC)

amending Regulation (EEC) No 797/85
on Improving the efficiency of agricultural structures

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Articles 42 and 43 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas the structures policy must contribute towards helping farmers adapt to the new market reality and towards alleviating the effects which the new market and prices policy may have, in particular, on agricultural income;

Whereas the European Council has requested the Commission to explore all possibilities for stepping up the use of agricultural raw materials for non-food ends;

Whereas possibilities for non-food use are sufficiently advanced, technically and economically, in the case of cereals;

Whereas the realization of such possibilities enables farmers to turn towards new outlets; whereas, in order to encourage them in this direction, cereals must be made available at attractive prices;

Whereas, however, such new uses must not lead to an increase in production of cereals, thereby leading to further surpluses;

Whereas the existing aid scheme to encourage the set-aside of arable land should accordingly be adjusted by providing for specific aid for the use of arable land for non-food ends;

Whereas in order to ensure that the new policy is effectively applied, certain minimum conditions must be laid down for the granting of the aid; whereas provision should be made in particular for producers to present a contract concluded with a processing enterprise guaranteeing the non-food use of the products in question in order to qualify for the aid; whereas,

In addition, in order to avoid overcompensation, products which qualify for a production refund in accordance with Article 11a of Council Regulation (EEC) No 2727/75 of the Council⁽¹⁾, as last amended by Regulation (EEC) No / ⁽²⁾, or the aid provided for in Article 11b thereof should not be eligible for the aid;

Whereas the ceiling on the specific aid must take account of income from the sale of the cereals in question to the processing enterprises; whereas such ceilings must accordingly be less than those effectively laid down for set-aside;

Whereas Council Regulation (EEC) No 797/85⁽³⁾, as last amended by Regulation (EEC) No 3808/89⁽⁴⁾, should be amended accordingly,

HAS ADOPTED THIS REGULATION :

Article 1

Article 1a of Regulation (EEC) No 797/85 is hereby amended as follows:

a) The following paragraph is inserted:

"3a. Member States may provide for a specific aid scheme for the use of arable land for non-food purposes, these being the manufacture of products not destined for human or for animal consumption.

The following shall be eligible under the scheme:

- recipients under the aid scheme provided for in paragraph 1 on condition that the arable land set aside represents at least 30% of the arable land of the holding in question,
- arable land on the holding which is the subject of a set-aside undertaking, extending to at most 50 % of the area set aside and on condition that it is sown to cereals, that the whole cereal production of such areas is intended for non-food purposes and that, where other areas of the holding are sown to cereals, the latter are of a different species from the abovementioned cereals.

To qualify for the specific aid, producers must submit a contract concluded with a processing enterprise guaranteeing the non-food use of the products in question within the Community.

(1) OJ No L 281, 1.11.1975, p. 1.

(2) OJ No L

(3) OJ No L 93, 30.3.1985, p. 1.

(4) OJ No L 371, 20.12.1989, p. 1.

Contracts relating to consignments which qualify for the production refund provided for in Article 11a of Regulation (EEC) No 2727/75 or the aid provided for in Article 11b thereof shall not be eligible for the specific aid.

The specific aid shall be paid for a period of five years from the first supply of products to the processor in accordance with the delivery contract, with a possibility of cancellation after three years."

b) The following subparagraph is added to paragraph 4(a):

"The specific aid provided for in paragraph 3a to be paid per hectare shall be determined in accordance with the criteria laid down in the first subparagraph. The maximum aid shall be fixed at 70% of the aid provided for in the first subparagraph. For the areas in question, the specific aid shall replace aid for set-aside."

c) In paragraph 7:

- the following words are inserted after 30 April 1988 :
"... and, in the case of the specific aid provided for in paragraph 3a, before 1 April 1990,";
- the following indent is added :
"- the special detailed rules on the granting of the specific aid provided for in paragraph 3a, and in particular those on the exclusion of certain uses, the determination of the ceiling and the minimum areas which may qualify for the aid, delivery contracts, controls including, where appropriate, checks on the processing undertaking, and penalties to be laid down where obligations are not complied with."

Article 2

This Regulation shall enter into force on 1990.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 1990

For the Council
The President

FINANCIAL STATEMENT concerning : a proposal for a Regulation amending Regulation (EEC) No 797/85 on improving the efficiency of agricultural structures

1. Budget heading : III B Item : 390 Title : Set-aside of arable land

2. Legal basis : Article 43 of the EEC Treaty

3. Classification : Compulsory expenditure ~~/XXXXXXXXXXXXXXXXXXXXXXX~~

4. Purpose/description of the measure :
To permit farmers to channel part of their cereal production towards new outlets involving non-food utilization.

5. Method of calculation

5.1 Form of expenditure : reimbursement of part of the national expenditure

5.2 Community contribution : 60% or 25% as appropriate

5.3 Calculation : It is anticipated that the EAGGF contribution to the cost will be:

1990: 0,5 million tonnes x ECU 30,2 million (1) = ECU 15,1 million
 1991: 1,0 million tonnes x ECU 30,2 million = ECU 30,2 million
 1992: 1,5 million tonnes x ECU 30,2 million = ECU 45,3 million

6. Financial implications as regards operating appropriations

6.1 Schedule of commitment appropriations and payment appropriations (ECU million):

Year	
1990	15,1
1991	30,2
1992	45,3
1993	45,3
1994	45,3
following years	45,3
Total	<u>226,5</u>

6.2 Financing during current year :

Financing possible on the basis of appropriations entered in Chapter 39 of the 1990 draft budget.

7. Observations :

(1) 1 million tonnes of cereals is produced on approximately 220 000 hectares.

The average aid paid under the set-aside arrangements is ECU 400(B)/ha.

The aid for this measure will therefore be 400 x 70% = ECU 280(B)/ha.

The average rate of reimbursement from the EAGGF will be 49%.

Per million tonnes of cereals, the cost to chapter 39 of the EAGGF will therefore be 220 000 ha x ECU 280(B)/ha x 49% = ECU 30,2 million.

Impact on business - SME

Industrial set-aside option

The proposal is designed to encourage farmers to find new markets for cereals. This is done by paying a premium per hectare to farmers who participate in the scheme; the income will enable them to sell cereals at very advantageous prices to industrial processors. This is expected to accelerate the development of new outlets which are technically feasible, but which are only developing slowly or not at all.

The effect on employment is expected to be positive especially in the long term.

This type of aid scheme poses a particular risk of fraud, so there will be administrative controls on participant farmers. On the other hand, the scheme is a voluntary one and the farmers will be aware of these controls before making a decision on participation.