



## The agricultural environment in the European Community

C. T. de Wit

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The interrelation between agriculture and the environment is treated within the economic framework of the Common Agricultural Policy (CAP) of the European Community. For this purpose, the development of the CAP and some technical and political aspects that should be taken into account in further policy making are discussed and the goals of the CAP reconsidered. It is then analysed to what extent a policy that combines an increased market orientation with an increased solidarity with the agriculturally less endowed regions may form a basis for reconciling agricultural and environmental demands.

*C. T. de Wit, Dept of Theoretical Production Ecology, Wageningen Agricultural University, The Netherlands.*

### Introduction

Past and present changes in farm management and techniques have a major impact on the environment in the European Community, be it only because two-thirds of the land is used for agricultural purposes. According to a summarizing report by Tracy (1985) the main problems under discussion are:

- problems stemming from the use of chemicals in agriculture. These relate particularly to the pollution of the environment in general and the ground and surface waters in particular by minerals, nitrogen and biocides. The result is damage to flora and fauna and to public health;
- problems stemming from intensive life stock farming, such as the conditions in which animals are housed and treated, the stench created in the vicinity and the emission of ammonia into the atmosphere which may contribute significantly to air pollution. A major problem in certain regions also is the over-production of animal wastes and subsequent dumping in too large quantities on too small areas;
- problems arising from large scale farming and structural changes such as drainage, the filling in or realignment of ditches, building and metalling of rural roads, and land improvement. The result is a change in cherished historical landscapes, a loss of diversity and, again, damage to flora and fauna.

The nature of the environmental problems varies from

region to region. However, the problems referred to above and the problems discussed at this symposium are primarily those of the northern EC countries and arise as it were from affluence. In the southern countries of the EC environmental problems are much more a matter of over-exploitation and of physical and chemical erosion, resulting from poverty. This gulf between Northern and Southern countries was revealed at this symposium by the practically total absence of ecologists and agriculturalists from southern EC countries and by the problems that were discussed.

Had the level of price-support been lower than it is under present EC agricultural policy, then the agricultural expansion would have been less pronounced and many of the structural changes with their associated intensification of environmental problems would not have occurred in their present form. The bulk of the changes are, however, irreversible so that a restrictive price policy alone would not alleviate the environmental problems although would reduce the pressure on land improvements. The reverse could even apply in numerous marginal regions in Europe where farming is vital to the integrity of the social structure and for preserving the landscape and the environment. In these areas, price decreases would make it impossible for agriculture to carry out these functions.

Therefore, the interrelation between agriculture and the environment has to be considered within the economic framework of the Common Agricultural Policy (CAP) of the European Community (EC). For this pur-

pose, I treat the development of the CAP and some political and technical aspects that should be taken into account in further policy-making and reconsider the goals of CAP. I then analyse to what extent an increased market orientation with an increased solidarity may form a basis for reconciling agricultural and environmental demands.

This paper does not stand alone but elaborates upon a paper in 'Agricultural Systems' (de Wit et al. 1987); a report of the Netherlands Scientific Council for Government Policy on the unfinished European integration (WRR 1985); on studies on integrated agriculture (van der Weijden 1985); and on the 'Agricultural policy beyond the watershed of self-sufficiency' (Meester and Strijker 1985), papers written in the Dutch context and on behalf of the above-mentioned council.

### **The Common Agricultural Policy**

The CAP of the EC was initiated more than 25 years ago at a time when the import of agricultural products was considerably larger than the export and food security for the still increasing millions of Europeans was not ensured. The purposes of the CAP were to increase self-sufficiency and food security, guarantee a fair income for the farmers, and maintain equilibrium on the markets of agricultural products. The main policy instruments of the EC were, and still are, import levies and price support to some of its own main products such as sugar, milk, wheat, wine, olives and other oil seeds. The existence of mountains and lakes of agricultural products shows that farmers' income and food security have been given priority to market equilibrium. These are certainly worthwhile goals but the ways and means should be found to achieve them without wasting scarce resources on producing a surplus.

The overproduction reflects the fact that the internal EC market for food products to a large extent is saturated. Expansions on some of the markets are likely to be offset by contractions on others, with the exception of more exquisite food products and ornamental products for house, gardens and parks. There is now a considerable export of products for which intervention prices are being maintained, so that at the EC borders the difference between internal and world market prices is no longer collected as a levy, but paid out as an export restitution. The very success of its policy, therefore, has brought the EC in considerable budgetary problems. Moreover, it has confirmed the voting urban consumer that, in his opinion, he is paying too much for his food. There are still large imports of grain substitutes for animal use, of vegetable oils and fats for margarine, and of cellulose products for paper. This would certainly have been otherwise, if there had also been protecting import levies on these commodities at the EC border. In that case intensive live stock farming in The Netherlands would have increased less and the Dutch would have been using their own butter instead of margarine.

From the beginning, the EC was given the responsibility for the price and market policy, whereas the national government remained responsible for the structural policies of farm improvement and reallocation, reclamation and reconstruction of the land. The prices have been maintained on such high levels that, viewed from the national standpoint, these structural improvements paid their way in spite of overproduction. Therefore, this divided responsibility has contributed considerably to the present problems.

### **Policy limits**

Although the CAP has served its original purpose well, the economic and environmental problems are now so profound that the need for a major revision is widely acknowledged. The choices are, however, severely restricted by limits imposed by the economic and political situation, by the nature of the agricultural production process, and the conflicting goals that have to be served. Some of these limits were mentioned already in the previous paragraphs, but these and others require further elaboration.

The agricultural markets in Europe will remain practically saturated. Admittedly, there are still considerable imports of vegetable fats and animal feeds, but the implementation of levies or restrictive import quota for the purpose of increasing the internal supply of these products must be considered impossible because of the political repercussions on the international trade relations. It should be taken into account also that these imports, although large in terms of tonnage, are equivalent to less than five years of production increase in the Community. Hence, only a few years of grace would be bought at the expense of considerable international strain.

Unfortunately, a detailed, comparative analysis of the possibilities for production increase in the various agricultural regions of the European countries is not available. However, an analysis in a more world wide context (Buringh et al. 1975) has shown that in all parts of Europe there is still considerable leeway for further increase in soil productivity and that the knowledge base to achieve this is already available. Hence, market saturation is not coupled with limits to production.

The most straightforward way to adjust production to demand seems to be a downward adjustment of intervention prices. This would encourage the growth of other and new crops at the expense of price supported commodities, make imports of vegetable fats and animal feeds less competitive and, to some extent, stimulate the final demand. Because a large degree of self-sufficiency in agricultural products will remain an important goal of the CAP, the prices have to be maintained at such a level above the erratic prices on the world market that there is an economic base for this production.

However, in any situation where a crop can be econ-

omically grown, the yields per hectare continue to increase at about the same rate, independent of major differences in productivity of labour and soil, production costs and market possibilities. This important conclusion can be drawn from a regional analysis by Meester and Strijker (1985) of the dynamics of the soil productivity since 1950 in nine states of the EC. They found for this period that the percentage increase in production had been higher in the regions with low yields than in those with high yields. However, measured in absolute terms (i.e. kg per ha or cow per year) the production increases were much more similar. Furthermore, in none of the regions the rate of increase appears to level off.

A partial explanation for this remarkable phenomenon is that new techniques to increase yield may often require more of some inputs per unit area but less of most inputs per unit product. Innovations that lead to yield increases are therefore advantageous under practically all economic regimes and price structures. With regard to the environment, the advantages of using smaller inputs per unit product have to be weighed against the disadvantage of using larger inputs per unit area. That less inputs per unit product are needed is obvious for fixed inputs, like the amount of seeds, but the number of fixed inputs increases also with increasing yield at the expense of the variable inputs. For example, to obtain moderate yields, the pH has to be adjusted around five, but to get higher yields no further adjustment is necessary. This holds also for phosphate. The need for weed control may even diminish with increasing yields because of the ecological control exerted by the better-growing crop. Apart from this it should be taken into account that the agricultural production process is least understood and therefore most difficult to manage in low-yielding situations where many and partly unknown limiting processes may exert their adverse influence. This leads to inefficiencies which can be avoided under higher-yielding conditions where growth is more controlled, so that the supply of inputs can be much better adjusted to the demand. An example is the increasing efficiency of nitrogen fertilizer with increasing yields due to, for instance, better control of water or diseases or the use of higher yielding varieties (de Wit 1988).

A similar situation exists for animal production: wherever animal production is economically feasible, the yield per animal also continues to increase because new knowledge is being used. An illustration is the spreading use of natural hormones, which promises yield increases per animal of about 20% with a decrease in total maintenance costs of a similar magnitude.

The consequences for the CAP of continuing yield increases are large, as may be illustrated by a simple calculation. The yields in Europe appear to increase at an average rate of roughly 70 kg grain equivalents ha<sup>-1</sup> yr<sup>-1</sup>. This increase in all regions that remain in production has to be balanced by, in some way or another,

forcing land out of production. If these are soils with the average yield of about 4000 kg grain equivalents per hectare, the increase amounts to 1.75% yr<sup>-1</sup> or 25% before the year 2000. Without taking into account the existing overproduction, this is equivalent to about 20 million hectare in the twelve EC countries of Europe. However, the 30% of the agricultural land situated in the less endowed regions yields only about 10% of the total production and if mainly this is taken out of production the affected area is almost doubled. On the other hand, 10% of the land in well endowed regions contribute 30% of the production and this may be an argument to shift the burden of production control in that direction.

A bird's eye view of Europe reveals that the better and less endowed regions are not only unevenly distributed within countries, but also between the countries of the European Community. Any CAP that seeks to adjust agricultural demand and supply by drastic downward price adaption will therefore get entangled in the political discussion about where and how to take land out of regular production while maintaining sufficient economic equity and environmental integrity.

Another possibility to adjust production to demand would be to use production quota for price-supported commodities. This does not represent a fundamental break with existing policies. Therefore, fundamental conflicts between member states with weak and strong agricultural sectors, respectively, can be avoided. However, the existence of quota would not affect the continuing rise in yield per hectare and a corresponding fall in costs, so the permitted quantities would be cultivated on a decreasing area. The surplus acreage would then become available for the cultivation of crops not subject to quantitative restrictions. Once again, these crops would be grown most economically in the central regions. Unless quota would be imposed also on these crops, their production would cease in marginal areas, taking the protected crops in their train. But even an extension of the quota system to all agricultural products would not prevent the production increase per hectare, so that also in this way the Community would, in due course, become entangled in the political discussion about where and how to take land out of regular production while maintaining sufficient economic equity and environmental integrity.

#### **Towards more market conformity and solidarity**

There are no simple policies to alleviate the agricultural problems, be it only because the policies have to serve several aims to be workable and acceptable for all member states. Apart from original goals of production and income, these are:

- restoration and maintenance on an equilibrium between supply and demand under conditions of rising agricultural productivity and saturation of demand;

- substantial contribution towards a reduction of geographical differences in prosperity and growth prospects;
- maintenance of agriculture in little endowed regions in order to preserve the landscape and to contribute to nature conservation;
- decreasing the pressure on the EC budget and the recognition of the demand for lower prices by the consumer.

If the price instrument is directed towards a better adjustment of supply and demand this drain on the Community budget is blocked and consumer demands are met. However, the price to be paid in the less densely populated and economically backward rural areas of the EC would be too large. There it would be impossible to maintain the level of agricultural activity that is necessary for the continued viability of population centres and for the preservation of the landscape and the natural environment. The abandonment of the policy of income-supporting prices as an instrument to maintain agriculture in little endowed regions has therefore to be compensated for by other measures. These may be much more effective and cheaper than non-discriminating price supports because they permit a greater differentiation in relation to income levels and regional development potential. The present policy of price support works far too much to the advantage of the large farmer with high yields to qualify as an equitable instrument of redistribution of income. An inevitable consequence of a more market oriented agricultural price policy coupled with structural support for marginal agricultural regions is that the burden for the restoration of the CAP will fall mainly on the economically strong regions. This is fair enough, since they are going to profit most directly from the future potential of the common European market.

#### Well endowed regions

The well endowed regions in Europe, both agriculturally and otherwise, are mainly located along the axis London-Milano, in East Anglia, Denmark, The Netherlands, the Paris Basin, the central and north-western regions of the German Federal Republic, and the Po Valley in Italy.

If the production decrease in the less endowed regions is mitigated, it has to take place in these well endowed regions in stead. As has been said, one of the instruments would be a considerable reduction of intervention prices. Since the level of support is at present high enough to keep small farmers in less endowed regions in business, this reduction is in principle justified for farmers in well endowed regions. However, these farmers have based their operations and investments on the present high price levels, so that sudden price decreases would confront them with insurmount-

able problems. A gradual decrease means, however, that the existing quota arrangements such as those for milk and sugar would need to be continued for quite some time. This will impose a major burden on the decision-making capacity of the Community.

For milk, a gradual reduction in the quota together with a lowering of the intervention prices would clear the way for the quota system to be replaced by a temporary system of socially-oriented income support for small farmers. For cereals, the transition to lower prices could perhaps be cushioned by co-responsibility levies. These have the advantage that they keep the transfer of money from the consumer to the agricultural sector intact. In practice these levies might take the form of a regionally differentiated levy per hectare cultivated with cereals. Another option is to confine such a levy to the grain brought on the market to stimulate forms of mixed farming in the cereal-producing areas of the Community. This would then be at the expense of intensive livestock farming on the more marginal sandy areas in The Netherlands, Belgium and parts of the German Federal Republic. Here restraints are anyhow needed because the build-up and dumping of animal wastes have unacceptable environmental consequences.

The proceeds of co-responsibility levies on surplus products should not be used to promote their export at rock bottom prices, but would be better used to prevent their production. With some additional money from other EC sources, these proceeds could be channeled to a diversification fund to promote the growth of crops that do not contribute to overproduction. A main drawback of the present support system is that it discourages the farmer from growing a wider variety of crops and the research establishment from working on the improvement of these crops.

The advantage of using land for other crops is that this may relieve the crop rotation problems present in many regions. These can hardly be underestimated. The present narrow crop rotations invite management practices that damage the soil structure and lead to the build up of pests, diseases and weeds. These are often chemically controlled, which in turn creates serious risk for the environment and for public health. For instance, the control of nematodes in potato requires more than half of all pesticides that are used in The Netherlands and at present the growing problem of rhizomania in sugarbeets can only be evaded by not growing the crop at all on infested soils. Alternative crops might include green manures, fodder crops, fibre and oil crops, beans and peas, vegetable crops, fruits, nuts and industrial and pharmaceutical crops. The cultivation of energy crops on a commercial scale will remain unattractive for a considerable time, but with a view of avoiding the high taxes and excises on energy, farmers could perhaps do more to cover their own energy requirements. It seems unlikely, however, that any of the suggested crops will play such a dominant role that the surplus problem of 20 million hectare by the year 2000 will be resolved. It

therefore remains necessary to find ways also to take land out of permanent production in the well endowed regions. Economic wisdom suggests that lower commodity prices sooner or later would lead to lower soil rents and soil prices. This should be of some help. However, it is difficult to generalize, since in some countries and regions, these lower prices have already been materialized, whereas in other regions the demand for land may remain high for some time to come because production rights are attached to possession of land. Nevertheless, some of the good quality land may become cheap enough to promote commercial forestry. This could be more attractive than the present attempts to afforest poor soils. Moreover, commercial forestry in the central and densely populated areas of the Community could readily be combined with mass-recreational facilities.

The establishment of semi-nature reserves on soils that have been in use for agricultural production or are suitable for that purpose also appears possible. Taking into account the large pressure by various human activities on the natural environment of the central regions, there is a pressing need for ecological refuges and corridors. Finally, if land became cheaper, it would be easier to set aside more of it in order to preserve certain landscape features and to enhance environmental diversity.

None of the changes in land use will come cheap, but on the other hand there are no reasons why all of the burden should be placed on the agricultural sector, that will already have to adjust to the consequences of lower prices. This adjustment either must lead to larger, more mechanized and automated farms or to family farms with outside sources of income and may work out differently in different countries. It may be that the female member of the household is burdened with much of the tedious work at the farm and around the house. But it may also very well be envisaged that the male member of the two-income farm family works alone on the farm, whereas the female member continues to work in her former professional capacity.

Whatever the outcome, the farmer will remain a busy person, but even then he may contribute to the preservation of the environment by integrating conservation management with farm husbandry, without much extra costs. It is a happy development that at present agriculturists, conservationists and environmentalists all over Europe band together with farmers to develop practical ways and means to bring about this integration. Some of these means are considered in recent publications of the Council for Protection of Rural England, the German Council of Experts on Environmental Problems and The Netherlands Scientific Council for Government Policy, whereas others are worked out by governmental research agencies and by innovative consultant bureaus like the Tutton Consultancy in England, the "Centrum voor Landbouw en Milieu" in Utrecht in The Netherlands and the "Association Aménagement Envi-

ronnement" in Lille in France. Therefore, it suffices here to present some examples.

There appears to be no extra costs or extra time involved in maintaining the farmyard and its buildings as a valuable conservation area for lichens, mosses, bees, swallows and so on, whereas the natural value of tracks, lanes and ditches can be enhanced by changes in management that are directed towards reducing the use of chemicals and towards less frequent mowing. A well propagated program for inventive management of the many litigate elements in the landscape has contributed considerably to species diversity in The Netherlands. Many arable fields and leys have margins which, if kept free from fertilizers and biocides, could contribute to the survival of now rare weeds and wild flowers. This may require some extra work, but the costs may be recouped by savings on fertilizer and biocides. Many farms also contain small and seemingly unimportant habitats that may be of considerable conservation value. Only slight changes in agricultural practices may be needed to maintain them, at no extra costs in money or labour. This holds, e.g., for the maintenance of hedgerows, although it should be recognized that hedgerows may hamper mechanized operations. However, the opinions regarding possible beneficial and harmful effects of hedgerows on agriculture differ so much that the hedgerow discussion will be with us for at least another generation.

Nitrogen fertilizers are a serious environmental hazard. Their use in rotational grazing systems in The Netherlands has gradually increased towards 500 kg N ha<sup>-1</sup> yr<sup>-1</sup>, much of it being lost in the process. Nitrogen in these amounts is not so much needed to maintain optimal growth of closed grass swards, but to enable a rapid recovery of the sward after intense grazing. Both in England and The Netherlands there is a renewed interest in systems of permanent grazing (Lantinga 1985). In these, the sward is always kept closed which means that considerably less nitrogen is needed to maintain the same animal production throughout the year than with rotational grazing. For the same reason, it appears possible to make savings on sprinkler irrigation. Over-fertilization of arable crops contributes considerably to the leaching of nitrogen in late summer and autumn. It has been shown that much of this can be prevented by growing catch crops (Duynisveld, in these proceedings). Another possibility is to precisely adjust the nitrogen fertilization to the needs of the crop, but this requires costly nitrogen analyses of the soil and crop.

Nitrogen fertilizers should be much more expensive than presently in order to reduce their use so much that yields become seriously affected. Hence, there is scope for an environmental tax on their use, which on the one hand could be high enough to considerably reduce or prevent wastage of N in inorganic or organic form and, at the same time, low enough to avoid inefficient use of fixed inputs due to yield reductions. The proceeds of

such a tax could very well be used for further damage control. Increased prices to control excessive use of nitrogen was proposed in the German Federal Republic by the Environmental Council (Rat Umweltfragen, 1985). However, their suggestion to reimburse the farmers on a per hectare basis for this taxation leads to unnecessary complications, as long as prices in the EC are maintained at such a level that demands on the home market are satisfied.

The use of biocides for control of insects, diseases and weeds is another environmental hazard. It has been shown that application schemes in which their use is guided by expected damage leads to a considerably reduced use of biocides. Such schemes have been developed and used for wheat in The Netherlands since the middle of the seventies, and this is an important reason why the average number of sprayings there is only 2.5, compared with 8.5 in England and 7 in north-western FRG (Rabbinge 1987). Taxation schemes to reduce wastage and promote efficient use of biocides are also worth considering.

The environmental and nature conservancy problems may be large, but they would be even larger, or totally unresolvable, if agriculture should be so unproductive that it would need all the available land to meet the demand for food. As it is, agriculture cannot do without agricultural chemicals to meet this demand, but research and development directed towards a responsible and careful use of these potential environmental hazards can do much to reconcile agricultural and environmental needs.

However, as disturbing chemical contamination may be, in the long run the continued existence of agriculture is much more threatened by creeping sheet erosion and wind erosion. In any soil based agricultural system, be it traditional, organic or industrial, together these forms of erosion may be an order of magnitude larger than the single ton per hectare that is added to the soil profile by weathering each year. A systematic survey of soil erosion within the European Community, as recommended by the German Environmental Council, is therefore urgently needed.

### **Little endowed regions**

Little endowed regions, both agriculturally and otherwise, in the old EC countries are located in West and North-West Ireland, throughout Scotland, North Wales, South East German Federal Republic, the Vosges, the Jura, the massif Central, the Pyrenees and the Alps of France and along the axis of the Apennines, and on the islands of Italy. Many regions in the three new EC countries, Greece, Spain and Portugal, also must be classified as agriculturally little endowed.

The central problem in many of these regions is summarized in the fact that, in spite of a weak natural resource base, up to 30% of the population may be engaged in agriculture, whereas this figure is less than

10% in well endowed regions. Any policy that is directed towards maintaining this situation, would be economically futile and socially discouraging. It would also be politically hazardous, because of its dependence on the lasting willingness of the more prosperous regions in the EC to pay the bill. Therefore, it is necessary to place the problem of little endowed regions within a broader context than agriculture alone, by aiming at social and economic structures that compliment and partially replace traditional agricultural structures. Combined community and country programs to improve the infrastructure in order to bring industries and services, to create non-farm jobs in the regions, for education, and to promote mobility, are more likely avenues to alleviate the problems than are continuing agricultural price supports. Experience from south-eastern GFR shows that diffuse development of industrial activities and services create possibilities for agriculture as a complementary source of employment or even a leisure pursuit. In the so-called integrated programs that are being prepared by the Community especially for the Mediterranean regions, the industrial and services sectors will also need considerable attention.

Within such a wider developmental framework, there are good reasons for directing public support to agriculture in such a way that environmental goals are simultaneously served. It is true that damage to the natural environment is intrinsic in productive farming, but this being said, it is generally agreed that continued farming in the traditional areas is a necessary condition to maintain their environmental value. Some conservationists believe that a prosperous rural life even is a sufficient condition, but too many examples show that this is overly optimistic. Hence, there are good reasons for directing public support to little endowed regions in such a way that environmental goals are served as well. This is mostly done by paying the farmer for taking measures that are supposed to maintain the landscape and the refuge functions of the farm. This often pushes the farmer in the direction of traditional farming, because traditional farming is assumed to serve these functions. This may have been the case in the past, but so many irreversible changes have occurred, even in marginal areas, that this is not necessarily so at present. Some regions have been affected by drainage, some by enrichment with minerals and all of them are affected by air pollution. And even if traditional methods are friendly to the environment, they may be hard to the farmer who has to execute the often heavy and tedious work.

Another approach which is much more in line with the ideas of integrating agriculture and its environment is to define and quantify the ultimate aims that are envisaged and to remunerate the farmer according to his success in attaining them in his own ways and by his own means. In this way ecologists are stimulated to think in dynamic rather than in static terms and the farmers and their advisers challenged to develop in-

novative methods to serve lasting values. If hedgerows or hill pasture are precious elements in the landscape and valuable ecological refuges, it is reasonable to pay the farmer in less endowed regions according to the quantity and quality of these elements on his land. If diversity is an ecological goal worth striving for, why should not the farmer be paid for the number of species or habitats he is able to create. The Act on the interrelations between Agriculture and its Environment in The Netherlands and the EC program of compensation payments for hill farming already go in this direction, and the controversial Wildlife and Countryside Act in Great Britain could be made to do so.

It would be to go too far to pay the farmer for not contaminating the aquifer he is living on with nitrate or his surroundings with biocides. But instead of dealing with a difficult enforcement and therefore problematic prohibition of the use of agricultural chemicals, it would be far more challenging to develop technical packages that finely tune their application and to subsidize their use in these little endowed regions. These innovative techniques could then fan out to central agricultural regions, but then without subsidy.

It has been suggested that farmers in the marginal regions might be better off by growing crops that do not contribute to the surplus production. However, soils that are marginal for surplus crops generally are marginal also for other crops, making it impossible for these regions to compete with better endowed regions. For this reason, differential payments from the above-mentioned diversification fund in favour of the less endowed regions may be justified.

There may be a growing market in an affluent, urban Europe for special products which, for all practical purposes, only distinguish themselves from similar products by either their origin or the way they are produced and which are thus shielded from competition with products from well endowed regions. Examples are some kinds of wine and cheese, fish, game and other special meats, natural foods and craft products. A comprehensive system of protected Community marks of origin and trade names would strengthen the market position of such specialities in the interests of both consumer and producer.

Any policy aiming at better adapting supply to demand will be frustrated by further reclamation and land improvement schemes that are prompted by national interests and mainly financed by public funds. As for other sectors of the economy, such distortions of competition should be reported to the EC commission which could then control the plans in accordance with its own policy. For equity reasons, some public-supported improvement schemes may be permitted in Ireland and the new member countries which joined the EC too late to have developed some of their potentials. However, reclamation of new polders in The Netherlands and the further drainage and reclamation of ec-

ologically valuable wetlands in France and several other countries should come to an end.

Especially in outlying regions without much infrastructure any form of intensive agriculture will vanish. The land may then often be made available to semi-public organisations for the creation of ecological refuges, semi-natural reserves, afforestation, leisure parks and extensive grazing by domestic animals or game. These forms of land use may change the landscape beyond recognition. They have in common that very little employment is created. Therefore, social programs are needed that enable the elder part of the population to survive with dignity and the younger part to move along.

Afforestation requires considerable initial investment with a guaranteed low return on marginal and poor soils while game exploitation requires a good market organisation for both the hunting rights and the meat. The profitability of extensive uses may often be overestimated and the costs of reconstruction underestimated, so that much of the marginal land will simply be deserted.

#### **Some aspects of allocation and financing**

Compensatory geographical redistribution in favour of less endowed regions would create substantial allocation problems, because even the most favoured regions have pockets where agriculture is weak. These regions must solve their own problems and should not be allowed to draw resources away from the outlying regions where the quantitative and qualitative problems are the greatest. In this respect, it is disturbing that the GFR claimed that 50% of its agricultural land is marginal to such an extent that it would require EC support and this the more so as this claim was recognized on the EC level.

Another allocation problem concerns the great diversity of regions that would qualify for compensatory support, which makes a single Community policy for all regions impossible. It will therefore be necessary to develop an arsenal of potential intervention instruments at the Community level, from which the EC Commission and agencies of the member states could choose those measures appropriate to each region. Their selective application and the degree of EC financing would constitute a gradual transition from well to less endowed regions. It is, however, most disturbing that there is not much of an ecological lobby in Brussels that has the capacity to strengthen the ecological and environmental components of such packages and support their use.

The main purpose of reducing support prices is to lessen the waste of scarce resources, to mitigate the burden of the CAP on the EC budget and to enable more discriminate economic, social and environmental policies. Since, without further measures, the consumer

is the only direct beneficiary of decreasing prices, there are good arguments to split the windfall between the consumer and the EC. Since agricultural policy objectives are at issue, the EC Treaty would not prevent a levy or a special surcharge on the value-added tax on agricultural products. The proceeds of such a tax could very well approach the present EC expenditures on agricultural policy and come a long way to fund the structural changes as discussed in this paper, without crowding out other activities of the EC.

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