

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Henrichsmeyer, Wilhelm; Witzke, Heinz Peter

Article — Digitized Version
Perspectives for Future EU Common Agricultural Policy

Vierteljahrshefte zur Wirtschaftsforschung

# **Provided in Cooperation with:**

German Institute for Economic Research (DIW Berlin)

Suggested Citation: Henrichsmeyer, Wilhelm; Witzke, Heinz Peter (1996): Perspectives for Future EU Common Agricultural Policy, Vierteljahrshefte zur Wirtschaftsforschung, ISSN 0340-1707, Duncker & Humblot, Berlin, Vol. 65, Iss. 3, pp. 354-368

This Version is available at: https://hdl.handle.net/10419/141141

# Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# Perspectives for Future EU Common Agricultural Policy

By Wilhelm Henrichsmeyer\* and Heinz Peter Witzke\*

### Summary

The CAP-reform of 1992 can be considered as a starting point for a stepwise reform process. This paper presents, first, a survey of the severe internal and external pressures which finally led to the reform of 1992. It continues with a short description of the major reform decisions, and their evaluation from political as well as economic viewpoints. Then, the driving forces for future steps of CAP-reform are shown: the next WTO-round, the eastward enlargement of the EU, and the long-term prospects on world markets for agricultural commodities. In the centre of the paper is a more detailed analysis and evaluation of reform options in the different policy areas: Integration of EU agriculture into world markets, Direct Payments, Structural Policies, Rural Development Policy, and Environmental Policy.

European Integration alone does not render each policy economically sound. The following survey will first review the severe problems of past Common Agricultural Policy (CAP) which necessitated the major reform of 1992. This is followed by an assessment of this reform from different angles and an investigation of driving forces for future developments in order to prepare an outlook on the most likely next steps in different areas of the ongoing evolution of the CAP. At the same time these future perspectives are evaluated from an economic point of view with conclusions highlighting the main points.

### 1. Historical background

In the founding phase of the European Economic Community, member states agreed upon a fairly high level of protection for agriculture and its isolation from world market fluctuations. Initially, this relied mainly on "variable levies" raising the import prices including levies to some administered "threshold price" level, irrespective of how low world market prices were. High and stabilized prices attracted resources into agriculture and agricultural research, or slowed down their reallocation towards nonagricultural uses. With demand hardly increasing, due to Engel's law and modest population and income growth, it was only a question of time, until a boosting supply closed the import gap in one agricultural market after the other.

Further growth of supply due to autonomous or induced technological progress in agriculture would have driven down prices from the "threshold price" to a level that brought domestic supply in line with domestic demand. To maintain high prices in this situation, a complementary "security net" was installed that relied on two instruments draining the European budget in the years to come:

- (1) Variable "export restitutions" that covered the gap between high and stable internal prices and lower export prices on versatile world markets.
- (2) "Intervention purchase" and storage of excess supply quantities by EC authorities to be dumped on world markets at a fraction of the "intervention price" subsequently, or to be disposed of in other "inferior" outlets at the expense of the "Guidance" section of the "European Agricultural Guarantee and Guidance Fund" (EAGGF).

This sketch¹ depice the situation for cereals, fruits, vegetables, wine, sheep, beef and milk before 1984. For oilseeds, GATT concessions in the Dillon round (1960-61) prevented (high) tariffs to be used for protection and producer subsidies served as a substitute. On the sugar market, a quota system rendered the interventions more or less neutral to the taxpayer (but not to the consumer). The final exception from the above sketch were the pig and poultry sectors, where interventions or export restitutions played a minor or no role at all.

<sup>\*</sup> Institut für Agrarpolitik, Marktforschung und Wirtschaftssoziologie der Universität Bonn.

<sup>&</sup>lt;sup>1</sup> For some details see Tracy (1993); Henrichsmeyer/Witzke (1994); Wöhlken (1991).

At the beginning of the 80s, budgetary problems escalated in the dairy sector and urged policy makers to act. The market oriented remedy of equilibrating price cuts would have entailed further income losses on a large percentage of already low income farms. Under the pressure of interest groups, the Council of Ministers took recourse to the interventionist solution and introduced a quota system for milk. This step limited budgetary expenses for milk products for the moment, but it slowed down structural change in the dairy sector, because the quotas were almost nontradable initially and subsequent modifications allowed regional transfers at most.

On other markets in the 80s, policy makers tried to set administered prices to curtail supply, but without hurting suppliers. Economists were not surprised that budgetary problems culminated again in 1988, this time mainly originating in the cereal and oilseed sectors. "Guidance" expenses accounted for over 80% of the EU budget in the early 70s, but they came down to 61% at the beginning of the eighties, before expenses for milk exploded. By 1988, the percentage again exceeded 67% of the total budget which could only be financed in a series of emergency arrangements. Under this pressure, policy makers agreed upon several selfobligatory rules, designed to enforce nominal price reductions for agricultural products in the following years. The most important of these rules<sup>2</sup> is the "agricultural budget ceiling". This stipulates that yearly increases of "Guidance" expenses must not exceed 74% of the increase in the overall EC budget and will continue to be a healthy constraint for future CAP.

These self-commitments were more or less successful in controlling budgetary problems. However, perspectives for agricultural incomes became so bleak that more fundamental changes of the CAP were put on the agenda.

### 2. The 1992 reform as a turning point of the CAP

### 2.1 Main elements

The fundamental changes achieved in the 1992 CAP reform, named after the Agricultural Commissioner McSharry, were the first steps towards decoupling price and income policy, at least on some markets.

On the cereals market, the main changes were:

- A decrease of the intervention prices by some 30 % over 3 years into vicinity of world market prices.
- Compensatory payments per ha planted with cereals according to the average revenue loss in the region.
- Set-aside obligations for all farmers above some minimum size to be eligible for the compensatory payments.

In essence, the first two changes substituted a subsidy for land use for protection via producer prices. The same applied to *oilseeds and pulses*, where similar land subsidies were substituted for former producer price subsidies. In both sectors, incentives for input use have been reduced, with the exception of land. Therefore, compensatory payments and set-aside obligations have prevented a drop of land rents, in spite of the price cuts.

In the *beef sector*, a decrease of intervention prices by 15 % over 3 years and upper limits on intervention quantities were compensated for by premia per animal. Upper limits for the number of animals per ha and per farm constrained the total amount a farmer could receive. Upper limits were also introduced for the increased premiums granted to sheep holders.

Other, equally distorted markets like sugar, wine, fruit and vegetables, and especially milk were largely left out of the 1992 reform package. However, there was a set of "accompanying measures" promoting

- environmentally friendly agriculture<sup>3</sup>
- early retirement<sup>4</sup> and
- afforestation<sup>5</sup>.

### 2.2 Success from the political point of view

The reform package was designed to curtail excess supplies, excessive public stocks and budgetary expenses while maintaining agricultural incomes. These objectives were more or less achieved<sup>6</sup>:

- (1) Cereal production in EU-12 declined from 180 m t in 1991/92 by more than 15 m t. This was mainly due to land set-aside, to a lesser extent also due to reduced variable input use and weather effects.
- (2) Domestic demand increased by some 4 m t, thus reversing the downward trend of the 80s, because cheaper cereals again replaced substitutes in feed rations.
- (3) Consequently, intervention purchases and cereal stocks declined, the latter from 33 m t in 1992 to some 5 m t in 1996. Similarly, the stock of 1,2 m t of beef in 1992 has disappeared by now (although BSE could replenish it).
- (4) CAP reform payments "cover a large part of production and market risk" providing considerable support for agricultural incomes since 1992. This has been particularly important for less favoured regions where agriculture might have been abandoned otherwise, with consequences for the rural economy and the landscape as well.

<sup>&</sup>lt;sup>2</sup> For the so-called "automatic stabilizers rules" applied to grains and oilseeds see Henrichsmeyer/Witzke (1994), p. 566.

<sup>&</sup>lt;sup>3</sup> EU Directive 2078/92.

<sup>&</sup>lt;sup>4</sup> EU Directive 2079/92.

<sup>&</sup>lt;sup>5</sup> EU Directive 2080/92.

<sup>&</sup>lt;sup>6</sup> See BML 1996a, EU-Kommission (1996a).

<sup>7</sup> BML (1996a), p. 93.

- (5) In spite of a temporary increase, EAGGF-"Guidance" expenses stabilized at some ECU 34.5bn in 1995<sup>8</sup>, about 45% of the overall budget. The EU Commission has stressed that a safety margin to the budget ceiling could be maintained<sup>9</sup> and the German Federal Ministry of Agriculture (BML) hopes for additional savings when the Reform is fully operating<sup>10</sup>.
- (6) The CAP Reform facilitated the conclusion of the Uruguay GATT agreement. In fact, in official publications it is almost acknowledged that successful participation in the GATT negotiations was one of the motives behind the Reform<sup>11</sup> (see also section III.A).
- (7) Finally, decreasing variable input intensity in agricultural production is welcomed for environmental reasons<sup>12</sup>.

# 2.3 Mixed record from the economic point of view

From the economic point of view, the achievements of the 1992 reform have to be assessed in a more differentiated manner.

- (1) Partial decoupling of price and income policy certainly is a first and important step in the right direction of a liberalized CAP. Closing the gap between high EU internal prices and lower world market prices opens additional possibilities for gains from trade that were sacrificed by high protection in the past. In part, price ratios have been brought in line with world market conditions. Consequently, some distortions, like those between cereals and substitutes, have been eliminated.
- (2) However, land or animal premia counteract the effects of the price cuts, restraining resources currently used in agriculture from moving into other sectors where the EU has comparative advantages. Some intrasectoral price distortions have even been aggravated, because not all agricultural products were included in the reform package.
- (3) The details of the reform package are a source of considerable intrasectoral inefficiencies. The introduction of several additional quantity regulations contradicts basic principles of a market economy and the reform's striving for liberalization. An example is the obligation to idle a certain percentage of a farm's land, even when it is highly productive. Other examples are the exemptions for small farms from set-aside obligations and upper herd size limits for animal premia. They operate against large farms, slowing down structural change and the exploitation of scale economies in agriculture. Furthermore, compensation according to average yields discriminates against farmers with above average yields and efficiency. Finally, set-aside obligations, land subsidies, and animal premia all require public administrative resources. At the same time, farmer's entrepreneurial effort is reallocated towards

- directly unproductive activities<sup>13</sup>, e.g. completing forms for subsidies, marking animals, or evading control.
- (4) In spite of some favouring of small farms, a large part of the benefits of agricultural policy still goes to well-off agricultural holdings. This has been the case in the past decades as well, but with transfers directly and visibly financed by the taxpayer, instead of being gently withdrawn from the consumer, the equity issue is less easily ignored. In present times, when every kind of social benefit is scrutinized for its justification, these payments will not be tenable in the long run, especially if not limited to those in need. Nevertheless, for a limited transition period, there is a case for compensatory payments to protect confidence in policy and its predictability (see section IV.B).
- (5) From the ecological perspective, it is to be expected that a reduced variable input intensity will mitigate negative externalities of agriculture on most locations. On the other hand, without compensatory payments, agriculture might completely retreat from marginal locations. This concern was one of the main reasons to compensate the price cuts with land subsidies. However, it cannot be taken for granted that nonagricultural uses or idling of land are environmentally harmful on all locations. Consequently, environmental benefits could be attained at lower cost, if payments were focused on those locations and land uses with high environmental pay off (see section IV.E).

# 3. Driving forces for future CAP reforms

### 3.1 GATT rounds

GATT negotiations have influenced the CAP in the past and will influence the reform process in the future. Already long before the Uruguay round of negotiations came to an end, it influenced the shaping of the CAP reform package, even though this was denied officially. It was very clear from the beginning that an agreement on the reduction of agricultural protection was a necessary precondition for progress in other areas of crucial importance for the EU. Therefore, the EU had to create a flexible negotiating position, and the pending CAP reform was an appropriate opportunity to do this. If the EU wanted to rescue agricultural protection during GATT talks, it could do so only in a partly decoupled form.

<sup>8</sup> Agra-Europe 2/96a.

<sup>&</sup>lt;sup>9</sup> EU-Kommission (1996a), p. 143.

<sup>10</sup> BML (1996a), p. 93.

<sup>&</sup>lt;sup>11</sup> According to EU-Kommission (1995a), p. 7: "Without a successful CAP Reform, our agricultural sector could have hardly coped with the Uruguay GATT round agreement".

<sup>12</sup> BML (1996a), p. 93.

<sup>13</sup> Bhagwati (1980).

Given the 1992 reform, EU negotiators managed to largely avoid *additional* liberalization in the final Uruguay agreement<sup>14</sup>, but they had to accept it as a straight jacket for future CAP development:

- (1) The GATT agreement stipulates that all forms of external protection are to be transformed into fixed tariffs ("tariffication") which have to be reduced on average by 36% from 1995 to 2001. At first sight, this is an impressive liberalization for a sector the high protection of which has been sacrosanct for decades. However, the choice of the reference period and the precise formula resulted in very high initial values, such that even in 2001, EU tariffs will remain high for many products. To counteract this "trick", the US required that the tariff applied must not raise the import price for most cereals by more than 55% above the intervention price. This regulation has the important consequence of actually exempting cereals from tariffication, because it will usually bind the import price to the internal price (as under the old variable levy system) instead of deriving it from the world market price plus some fixed tariff. But also for other products there is a "safeguard clause" in the GATT agreement, allowing countries to raise supplementary tariffs, if border prices fell under some "trigger level". Summing up, we may say that both the "tariffication" finally agreed upon and the reduction of these tariffs are largely ineffective for the EU (for the time being).
- (2) Another group of commitments is likely to prove more relevant: Export subsidies have to be reduced by 36% in value and by 21% in terms of export quantities. In the typical export situation of EU agricultural markets, tariffs alone cannot raise EU internal prices above world market prices. They can only defend protection brought about by export subsidies. GATT commitments regarding tariffs have therefore only limited importance. On the contrary, the recent adoption of export taxes instead of export subsidies for some cereals did have an impact on markets. In the EU, it limited the increase of internal prices, while simultaneously accelerating the rise of world market prices. This peculiar example illustrates another point: Whereas commitments to reduce export subsidies constitute an upper bound to long run EU agricultural protection, they do little to restrain the EU from destabilizing world markets in the short run.
- (3) The obligation to reduce aggregate internal support by 20 % from 1995 to 2001 does not constitute a binding constraint, because the price cut component of the 1992 reform was acknowledged as fulfilling this obligation, whereas compensatory payments were included into the admissible "blue box" category, and thus exempted from all commitments to reduction.
- (4) Other agreements of the Uruguay round better conform to a global managed trade system than to the principles of a multilateral trade liberalization round. One of these theoretically debatable agreements is an obligation to a

minimum market access of 5 % of domestic demand for imports. For some products, such as milk, this will bring additional imports into EU markets, requiring price or quota cuts. Further, under the threat of another GATT panel, the EU also accepted a quantity restriction for its oilseeds area.

Overall, the Uruguay round commitments provide only mild constraints for the present CAP. Nevertheless, they will mark the starting point for the next round of negotiations within the newly established World Trade Organization (WTO) which is envisaged to begin in 1999. Future agreements will require further steps of liberalization. This is anticipated by important players in agricultural trade policy and influences their strategies already now. For example, in March 1996 the US-Congress passed the new "Farm-Bill" which specifies the agricultural policy programs for a seven year period. All types of traditional deficiency payments and other subsidies have been transformed into strictly decoupled direct payments that will be accepted as "green box" measures under WTO rules. On this basis, the US will be in a considerably strengthened position to urge for further liberalization<sup>15</sup>. Having removed their own deficiency payments from the "blue box", the US might press for an elimination of this "intermediate" category in the next WTO negotiations. EU policy makers must have this challenge in mind, when they prepare the next steps of the CAP reform (see section IV.B).

# 3.2 Enlargement towards the Central European Countries

The EU-Commission considers that the 10 Central European Countries (CECs) having negotiated association agreements already (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia) might become members around the year 2000 with an adjustment period of further 5 years<sup>16</sup>.

This is an additional challenge for future CAP reform. Many farmers and agricultural policy makers fear increased competition on agricultural commodity markets and about financial budgets, and would like to postpone the access of these countries to the Single Market and the CAP for as long as possible. This delaying strategy is hardly acceptable for political and for economic reasons. Foreign and security policy considerations with high priority on the political agenda urge for a straightforward integration in the interest of both sides. Economically, the exclusion of a basic sector from the Single Market would lead to a whole series of distortions. In addition, exclusion of agricultural commodities would be hardly acceptable for the CECs, given that just those commodities are the ones for which the CECs envisage comparative advantages. We may take

<sup>&</sup>lt;sup>14</sup> See EU-Kommission (1996b).

<sup>15</sup> Agra-Europe 21/96.

<sup>16</sup> EU-Kommission (1995b), p. 11.

it for granted that agriculture cannot be excluded from the enlarged Single Market and the CAP. The EU-Commission<sup>17</sup> and many politicians argue that the CECs had lower agricultural prices than the EU all the time and hence that farmers in these countries do not need any compensation. Given imperfect capital markets, however, even completely decoupled compensation payments would distort fair competition in the Common Market, if this source of finance was granted to Western farmers and denied to those in the CECs.

By the accession of the CECs, the long-term agricultural production *potential* of the EU will increase substantially, as empirical studies indicate<sup>18</sup>. This is in contrast to the CECs' observed performance during the first years of the political and economic transition process, when agricultural output declined in most of these countries by about 30%, and many of them have switched from the traditional export surplus to a net import situation. Even EU-15 now has a sizable export surplus against the CECs.

The main reasons for this drastic decline in of agricultural production were transitional disturbances caused by the abrupt institutional changes and the break down of traditional trade relations in the aftermath of the disintegration of the Soviet Union. Already the last two years showed a recovery of production growth in most countries, especially of plant production. The speed of future production expansion depends on a number of interrelated factors including completion of institutional reforms (privatization, marketing system, credit system), improvement of infrastructure (transportation, communication), availability of (imported) inputs and international credit, development of domestic purchasing power, and access to foreign commodity markets. It is difficult to forecast the progress in these areas and the resulting path of yearly production expansion in quantitative terms, but there can be no doubt that the medium- and especially the long-term production potential is large, and that its exhaustion will bring about a significant export surplus for the CECs, especially in the grain and meat sectors.

Having this background in mind, it is easily recognized that an unmodified transfer of the present CAP to the enlarged EU is unrealistic for various reasons:

(1) As is often the case, budget limitations would be the most compelling driving force for policy adjustments. An additional burden for the EUbudget would mainly result from increasing costs of market intervention when the CECs become sizable net-exporters, and increasing expenditures for direct transfers according to the vast acreage of the CECs. Further, the budgetary cost of financing Regional and Structural Funds would increase significantly because large parts of the CECs meet present criteria for support. Due to their relative low National Product, the CECs would contribute only very little to the EU-budget, on the other side. Consequently large additional budget expenditures would quickly hit the EU budget ceiling for agriculture.

- (2) A second difficulty would be that the unmodified extension of the present CAP to the CECs would violate their GATT-obligations, because these countries have more stringent commitments than the EU<sup>19</sup>. Just as each EU enlargement has entailed US claims for compensation in the past, this issue will be an additional source of difficulties for the EU in the next round of WTO negotiations.
- (3) A more fundamental point is that the magnitude of direct payments for agricultural households would create intolerable discrepancies and tensions when other, equally poor parts of the population are not supported on a comparable scale. Without modifications, CAP payments would disturb rather than help these societies.

For all these reasons, further steps of CAP reform will be necessary. Most of them would be advisable even without the challenge of eastward enlargement. They have been recommended for a long time by many agricultural economists, as a logical continuation of the CAP reform process. But the enlargement of the EU makes these reforms more urgent and, least in the longer term, unavoidable.

# 3.3 Long-term prospects on world markets for agricultural commodities

The outlook for the CAP reform process is strongly influenced by expectations about the long-term development of world market prices. There can be no doubt that more favourable prospects for the agricultural Terms of Trade would support the readiness of agricultural policy makers to make further steps towards trade liberalization.

Nearly unanimously, all relevant studies forecast a rapid increase of *food demand* over the next three decades, because of population growth and changing consumption patterns in connection with rising incomes, especially in the densely populated and rapidly growing economies in South East and East Asia. It is expected that world food demand will double by 2025<sup>20</sup>.

On the *supply side*, diverging views exist among scientists about the potential of world agriculture and agricultural research to meet the challenges of demand expansion. Analyses of past trends lead to the conclusion that supply could easily exceed demand provided long-term growth rates of yields, total agricultural land and irrigated land materialized with similar magnitudes as in the past three decades. But this is questioned by many scientists, because the possibilities of further expansion of agricultural land use and irrigation are limited and environ-

<sup>&</sup>lt;sup>17</sup> EU-Kommission (1995b), p. 19.

<sup>&</sup>lt;sup>18</sup> Compare EU-Kommission (1995b), p. 11.

<sup>19</sup> Tangermann/Josling (1994).

<sup>&</sup>lt;sup>20</sup> See, for example, McCalla (1995).

mentally risky (deforestation, erosion, water scarcity), and because it is by no means certain that agricultural research and world-wide practice are able to double average yields again in the next three decades.

What will be the consequences of these supply bottlenecks for the further process of CAP reform? Because of the underutilized agricultural potential due to quotas and set-aside measures in some of the developed regions of the world (North America, Western Europe), and because of relative low production intensities in regions with depressed commodity prices for agricultural producers (e.g. Oceania, Argentina, CECs), a rather elastic supply response can be expected in the medium-term. But if the expanding demand tends to exceed supply growth after these responses have worked out, the long-run trend of decreasing real prices for agricultural commodities on world markets will be mitigated. Being aware of these developments should facilitate policy adjustments towards deregulation and liberalization.

### 4. Areas for future reform steps

# 4.1 Integration of EU agriculture into world markets

For many decades the CAP has followed an inward-looking policy strategy. The main objectives were the supply of domestic markets and income support for domestic farmers, implemented via a high degree of external protection. Similar strategies were pursued in most other highly developed countries, especially in the other West European countries, in Japan and to some extent in the U.S. This resulted in highly distorted and depressed world market prices, especially under the influence of massive export subsidies<sup>21</sup>.

Against this background, the 1992 CAP reform can be considered an important step towards reducing trade distortions and improving the functioning of world markets, mainly those for grain, grain substitutes and oilseeds, and to some extent also for beef. In terms of reintegrating EU agriculture into world markets, much more can be done, however.

As explained in section III.A, the EU uses the loopholes of the GATT agreement to evade tariffication and to continue traditional stabilization policies, only at present in favour of consumers by introducing export taxes for some cereals. However, by now EU consumers spend less than  $20 \, \%^{22}$  of their budget on food and beverages, of which only about  $30 \, \%^{23}$  are still due to agricultural raw products. Therefore, stabilization of agricultural raw product prices can provide only a negligible benefit to them.

Stabilization policies for EU markets cause destabilization of world markets, especially hurting developing countries. This fact that has also been emphasized by high officials from the US Department of Agriculture<sup>24</sup>.

In the EU, agricultural pressure groups complain about the lost opportunities offered by the present boom on world markets. This situation could be a chance to sell full tariffication of the CAP to farmers, which would have to be maintained in times of falling world market prices as well. With a minimum income already provided by compensation payments, agricultural producers should be able to shoulder some market risk.

Apart from the destabilizing effects of export interventions, basic economic reasoning suggests their complete elimination, particularly of export subsidies<sup>25</sup>. Fortunately, there are not only arguments but at least two constraints also operating against export subsidies. The first stems from the Uruguay round obligations which are likely to be tightened in the next WTO round. The second constraint is the EU budget ceiling for agricultural expenditures, which will not be questioned in the future, and might become even more restrictive after the accession of the CEC.

As mentioned above, there are chances for higher or at least less declining agricultural prices on future world markets, implying chances to export profitably. These chances provide incentives for pressure groups and policy makers to get rid of these two constraints, possible by abolishing export subsidies altogether<sup>26</sup>. This is the typical policy of all major exporters. Apart from the EU, only the US has granted considerable export subsidies on agricultural commodities in the past, but this was largely to counteract EU subsidies.

If the EU does not want to venture this logically consistent step in the near future of the ongoing reform, it should at least be prepared to offer export subsidies in the next WTO talks and to press for liberalizing concessions from others, especially from the US<sup>27</sup>. If other exporters eliminated export subsidies as well, world market prices would rise to some extent. Having something to offer, the EU might also strive for a lift of the Blair-House acreage restriction which at present constrains EU oilseeds production.

### 4.2 Direct payments

As pointed out above, the present system of direct payments has serious shortcomings regarding efficiency. They will cause additional problems in future WTO negotiations and in the EU enlargement as well. Before considering alternative designs of those payments, it is useful to discuss the reasoning for compensation in principle.

<sup>21</sup> Tyers/Anderson (1992).

<sup>&</sup>lt;sup>22</sup> In 1993, see EU-Commission (1996a), p. T195.

<sup>&</sup>lt;sup>23</sup> BML (1996a), background material, p. 136.

<sup>&</sup>lt;sup>24</sup> Agra-Europe 2/96b.

<sup>&</sup>lt;sup>25</sup> See Henrichsmeyer/Witzke (1994), for example.

<sup>&</sup>lt;sup>26</sup> Or almost, see Wissenschaftlicher Beirat (1996b).

<sup>&</sup>lt;sup>27</sup> Tangermann/Josling (1994).

In a market economy, economic agents are always confronted with uncertainties and have to adjust to unexpected changes of prices. A justification of compensation payments can be based only on the argument that too abrupt changes of *politically* determined prices would undermine trust in economic policy and its predictability. If they cannot be avoided, there is a case for alleviation of temporarily resulting hardships.

The reference point to set the compensation payments was the high price level as determined by pre-reform CAP. However, politically determined prices of a past period cannot represent the reference point for income transfers forever, in spite of many political actors asking for "durability" and "reliability". On the contrary, to the extent that pre-reform investments are written off and agricultural labour had time to move into other jobs or (early) retirement, the compensation argument fades away.

In addition, the fate of direct compensation payments will depend on the future development of world market prices. If world market prices for grain remained high for a longer time, some compensation would already be provided by market developments. In this case, it would be hardly possible to defend them in the political decision making process, especially in a time with considerable pressure to reduce public expenditures.

Regardless of their justification, it is a political fact that compensation payments are used on a large scale, and it can be expected that they will be used for quite a long time. Therefore, it is worthwhile to examine whether there are more efficient designs for them.

The negative allocational impacts are mainly due to the fact that they are linked to and subsidize land use for certain types of crops (grain and oilseeds) and cattle. In comparison to price support, incentives to increase variable input intensity and yields in subsidized activities are reduced. Some distortions remain, however, because farmers will allocate more fixed factor capacities to subsidized activities than they would do without compensatory payments.

The standard economic recipe to eliminate these distortions would be to completely decouple the payments from production. This could be achieved, if they were paid according to ex-post criteria, e.g. the activity levels of different branches of production in the year before the CAP reform. This complete decoupling strategy has practical problems that can be sketched here only briefly<sup>28</sup>. If the conditions for payments (amount, duration) were fixed in advance and if entitlements were even capitalized, policy could not adjust them to changes in the economic environment. Furthermore, the introduction of such a system would immediately lead to abrupt changes in functional income distribution and wealth. Without doubt, this would strongly stimulate adjustments of factor capacities in agriculture but, again, too abrupt changes may be questionable from legal and equity viewpoints.

Most of the distortions of the present system could be eliminated without complete decoupling if subsidies were not linked to specific crops or livestock numbers, but to broader criteria, such as total (present) crop land or even total acreage (including idled land). Starting out from the present system, a first step would be to determine compensation payments according to the total acreage of grain. oilseeds and pulses. This would eliminate the privileged position of oilseeds regarding premia and stimulate substitutions according to comparative advantages away from oilseeds in accordance with GATT obligations (see section III.A). Further steps could proceed to other types of crop and livestock, including those which are currently regulated by quota systems (sugar, milk). Since the abolishment of sugar and milk quotas would have to be accompanied by drastic price cuts, compensation would become unavoidable in those cases as well (see section IV.C).

If the sugar sector is included, then (nearly) the whole arable crop land could be taken as reference base for transfer payments. This would enable flexible substitutions of *crops* at different locations in the EU according to the principle of comparative advantage. If the milk and meat sectors were included as well, then the total agricultural acreage could be taken as reference base for compensation payments, enabling a still broader range of allocational adjustments. At the same time, however, practical difficulties to calculate "adequate" levels of compensation payments for individual farms might increase, if "inequitable" losses for specific groups are to be avoided.

From the viewpoint of optimal allocation it would be advisable to include as many activities as possible into a unified system. The level and duration of compensation payments are to a large extent issues of distribution which have to be decided politically. On this question, economists can only recommend to apply criteria which are similar to those used for other groups in society.

# 4.3 Extension of the reform concept to the remaining markets

Exclusion of sugar, wine, olive oil, fruit and vegetables and especially milk from the 1992 reform increased intrasectoral distortions, because protection of these commodities increased relative to those covered by the reform. Resulting efficiency losses were limited, partly because of quantity restrictions (sugar, milk) and partly by limited technical substitutability (wine, olive oil).

Including sugar in the reform has been proposed as a step that appears both feasible and highly effective in removing distortions in agriculture<sup>29</sup>. It would be feasible financially because the sugar sector is small, but due to an

<sup>&</sup>lt;sup>28</sup> Wissenschaftlicher Beirat (1996b).

<sup>&</sup>lt;sup>29</sup> Wissenschaftlicher Beirat (1994a).

extraordinary strength of the sugar-lobby, it has not proven politically feasible so far<sup>30</sup>. Because the sugar market is operated without draining the "Guarantee" budget, its reform has rather low priority for the EU Commission as well.

For several reasons, the inclusion of the milk sector is the most challenging area for reform:

- With about 15 % of final agricultural output, it is the most important product of EU agriculture.
- The income of farm households in less favoured regions is particularly dependent on milk production. As a consequence, protection has traditionally been higher for milk than for most other commodities.
- Given the high protection rate for milk products and the large weight of the milk sector, a reform according to the grain/oilseeds concept could easily move "Guarantee" expenditures against the agricultural budget ceiling. The latter holds for nearly 10 years now and seems to be "untouchable" for corrections in both directions.

On the other hand a reform of the milk sector appears to be highly rewarding to policy makers as well:

- (1) A tightly regulated milk sector never fitted into an economy that usually relies on market mechanisms. In a reformed CAP and with a general drive for deregulation, it is an obsolete remainder, hampering today's economic policy. Eliminating the milk quota would free substantial administrative capacities engaged in this market. At the same time it would facilitate a unified approach to compensation across the major agricultural commodities and simplify its implementation considerably (see section IV.B)
- (2) The Uruguay round agreements as to market access and export subsidies necessitate a quota reduction of 5 % in any case. The next round is likely to require further reductions in export subsidies, tariffs and internal support, reducing incomes of milk producers even in a quota framework<sup>31</sup>. The value of the quota policy to milk producers is bound to decline therefore, to zero in the long run, when WTO rounds enforce further liberalization.
- (3) The pending accession of the CECs is another reason to include milk into the CAP reform. Otherwise quotas would have to be introduced in the CECs as well, only to be abolished (against compensation) a few years later, when WTO negotiations proceed.

Against this background expectations about further reform steps can be summarized as follows: The EU-Commission is apparently in favour of a stepwise extension of the reform concept<sup>32</sup>. To reach agreement in the Council of Ministers it might be necessary to avoid cuts of the existing compensation payments for grains, oilseeds and beef (in addition to their erosion by inflation), and at the same time to offer comparable compensation payments to milk pro-

ducers. However, it will not be possible to finance the "necessary" compensatory payments for the milk sector if milk prices are brought down close to the world market level, as in the case of grains. An interim step could be to reduce milk prices by an amount sufficient to give up the quota system, and to reduce milk supply to the level of domestic demand. This might be the utmost step to be reached until the end of this decade.

# 4.4 Structural policy promoting competitiveness

EU agriculture is an extremely heterogeneous sector undergoing permanent structural change. The *composition of output* varies considerably within regions and even more between regions, say between Scottish Highlands, relying on sheep, and northern Italy, with its important vegetable production. This dimension of diversity is mainly attributable to natural conditions.

Other factors are responsible for the observed diversity in *farm sizes*. Although average farm size in 1995 is only 22,3 ha in West Germany, 2,3 % of all farms operate more than 100 ha<sup>33</sup>. In 1965, these figures were 9,3 ha and 0,19% respectively, i.e. there has been considerable structural change towards larger farm sizes. In East Germany, partial disolution of cooperatives decreased average farm size to 183 ha in 1995. These differences are still vast, similar to international differences, for example between average sizes in Greece (4,3 ha) and the UK (67 ha).

Closely associated with farm size heterogeneity is *socio-economic heterogeneity*, indicating whether agriculture is a full-time or a part-time activity or whether it is the main or a supplementary source of household income. Socio-economic status distinguishes farm households within a region and it varies on average over regions. Over time, the percentage of "part-time farmers" in West Germany has increased from 33 % of all farms in 1965 to 44 % in 1995 according to official definitions<sup>34</sup>.

Farm sizes and socio-economic conditions within regions are heterogeneous due to historical heritage. However, in a competitive environment we would expect a tendency towards a similar farm size and socio-economic status. According to farm management research, scale economies should favour farm growth up to a (large) "commercial" farm size optimum, where finally transportation and transaction costs restrain further growth. However, several "diversifying" factors counteract these unifying forces:

<sup>30</sup> Agra-Europe 44/95.

<sup>31</sup> Sheehy (1996).

<sup>32</sup> EU-Kommission (1996b).

<sup>33</sup> BML (1996a), background material, p. 14.

<sup>34</sup> BML (1996a), p. 12.

- (1) Labour and capital are quasi-fixed factors, subject to adjustment costs varying from farm to farm. Consequently, initial endowments constrain future adjustment possibilities. A decisive element of these initial conditions is human capital that may change randomly during the family cycle.
- (2) A further consequence of adjustment costs is that expectations matter. In an uncertain environment, where policy rules are changing unpredictably, subjective expectations of future developments will diverge wildly and would lead to different optimal adjustment paths even with homogeneous initial conditions. Other subjective factors increasing diversity are risk aversion or preferences for fringe benefits from agriculture<sup>35</sup>.
- (3) Structural change may be slowed down by narrow, non-competitive local land markets<sup>36</sup>. The growth of a farm requires that there are neighbours willing to rent out their land at affordable prices. Because there are usually only few such neighbours, complicated bargaining games may evolve with unforeseeable results.

For all these reasons, it is just as impossible to predict what the subjective equilibrium of an individual farm household will be in 20 years as it is to foresee what type of farm will tend to dominate. Consequently, a policy trying to selectively promote the "competitive" farms, i.e. those that will survive in the long run, is almost sure to be inefficient and to pick the wrong recipients for support. In a market economy, policy may leave the selection of competitive firms to the market. In general, competitiveness should be self-reliant instead of being at the expence of the taxpayer. Externalities could justify exceptions. However, the popular presumption of negative externalities increasing with farm size is largely unfounded. Instead of being mixed into structural policy, environmental objectives are pursued more efficiently with environmental instruments, see section IV.E.

These principles have been neglected for decades in agricultural policy, but there is hope for corrections.

- (1) Reducing support in the 1992 reform has been a first step to restored competitiveness, mainly in the cereal and in the livestock sector, apart from milk. The latter is likely to be the least competitive industry of EU agriculture under world market conditions, not only because its protection is one of the highest, but also due to the quota further restraining structural change.
- (2) Eliminating self inflicted barriers to structural change is a second contribution of policy to competitiveness. Quantitative restrictions apart from the milk quota which could be lifted or at least could be made tradable, are the sugar quota, set-aside obligations, and upper bounds on voluntary set-aside. Even in the German Ministry of Agriculture, tight bureaucratic regulations are viewed as an impediment to entrepreneurial freedom by now<sup>37</sup>. Other regulations restrain intersectoral reallocation: Revealing reserves when abandoning and selling a farm is subject to taxation with exemptions offering only limited relief<sup>38</sup>. Using agricultural

- buildings for nonagricultural purposes has been in conflict with construction laws that will be reformed soon in Germany<sup>39</sup>. Land use laws<sup>40</sup> discriminate against nonagricultural users.
- (3) Treating all farm types alike without discrimination would necessitate to modify many EU and national regulations. There is a bias against large farms in the milk quota system, in set-aside obligations, in animal premia, in social security regulations, in taxation and on many other fields.
- (4) Actively promoting structural change is recommendable, if benefits exceed the costs. An example is the support for professional qualification (out of regional policy funds, see section IV.D). Another is provided by early retirement schemes which were expanded for agriculture only recently in the 1992 reform, while being cut back in nonagricultural sectors. More fundamental than a reminder of the budgetary expenses is the question whether the additional scale economies in growing farms really compensate for the economic loss from retiring available labour with zero opportunity cost<sup>41</sup>. Land consolidation is an example where costs seem to exceed benefits by far, at least when the benefits are limited to small increases in agricultural productivity, as in traditional programs, where environmental improvements are only occasional ingredients.
- (5) Abolishing capital subsidy programs for allegedly competitive farms would be a radical reversal of central EU structural policy guidelines<sup>42</sup>. Nevertheless, it would be highly rewarding<sup>43</sup>. Since the beginning of the 70s, agricultural policy offered public loans, grants or interest subsidies to selected farms for selected investments. Essentially, subsidies were limited to buildings, but only up to some maximum amount. To curb the resulting supply expansion on livestock markets, output increasing investments have been excluded from subsidization, with the exception of dairy that was under quota control. Farmers were selected according to "farm development plans" showing that the investment was profitable and that some minimum income, deemed appropriate for commercial farms, was attainable with subsidized investment. On the other hand, some "prosperity threshold" excluded subsidies for high income, i.e. "too large", holdings.

<sup>35</sup> Witzke (1993).

<sup>36</sup> Balman (1995).

<sup>37</sup> BML (1996c).

<sup>38</sup> Köhne/Wesche (1995), pp. 50-58.

<sup>39 35</sup> BauGB, see Agra-Europe 23/96.

<sup>&</sup>lt;sup>40</sup> GrStVG, fortunately largely ineffective.

<sup>&</sup>lt;sup>41</sup> Schmitt (1995).

<sup>&</sup>lt;sup>42</sup> EU Directive 159/72.

<sup>&</sup>lt;sup>43</sup> Loy/Koester/Strieve (1996); Wissenschaftlicher Beirat (1994b).

From an efficiency point of view, this policy should be canceled as early as possible, preferably in all EU countries. If it has an effect at all, then to induce investments that would not be profitable or too risky under market conditions. Consequently, recipients would be better off if they received unconditional transfers. At world market prices, profitability would be even lower. Consequently policy should completely refrain from subsidies in agriculture as it would be wise for coal mining, steel production and other highly protected sectors. The investment program distorts the structure of investments in favour of buildings and dairy. It excludes support for large, potentially efficient investments in large farms. Due to more generous subsidies for young farmers, it attracts precisely those persons into farming whose opportunity costs are highest among farm household members. From a distributional perspective, beneficiaries are to a large extent well off households. This is mainly because small farms have little chances to present a promising farm development plan, but also because milk is already highly protected<sup>44</sup>.

All these arguments might have little impact on policy, but at least one force operates in the same direction. This is the budgetary burden, amounting in 1995 (as in the past 20 years) to some DM 430 m only for West German agriculture. Although present expansive tendencies point in the other direction<sup>45</sup>, under tight pressure policy makers might reallocate these funds to other uses, say to compensation payments for milk price reductions or to environmental programs.

We are not optimistic enough to expect a complete removal of distortions in structural policy in favour of a policy promoting a competitive agricultural sector. Some changes might materialize nonetheless, under the same pressure of budgetary problems and general concerns about competitiveness that recently helped to promote other reforms in Germany and other European countries.

# 4.5 Rural development policy

Judging from its share in the German GDP (1 % in 1996), agriculture makes only a negligible contribution to the overall economy. However, this is in contrast to some other European countries, where agriculture has retained a larger weight, most notably in Greece with some 15 % of GDP. In the CECs as well, agriculture will be an important element of the economy for many years to come. Even in Germany, in some rural counties ("Kreise") up to 8 % of value added originate in agriculture. This income is a (small) stimulus to rural non-agriculture, in addition to conventional input-output multiplier effects emanating from agriculture<sup>46</sup>.

In the opposite direction, agriculture is strongly dependent on the rural economy. Most important for agriculture, is an active local labour market. Otherwise, labour outflow from agriculture would coincide with outmigration from rural areas, implying migration costs that have to be born. In

addition, outmigration entails the danger of a vicious circle of depopulation, if infrastructure costs become unbearable for the remaining population. In addition, transportation costs decrease demand from more distant locations and thus render local demand particularly favourable for local agriculture. Additional ties of local agriculture to local demand might stem from preferences for within-region supplies which are expected to gain importance in the future.

In the 80s, the southward enlargements challenged EU "cohesion". This problem was answered with a considerable expansion of budget shares for the "structural funds" was put under a ceiling (see section I). Together with an increase of funding, EU structural funds underwent a major reform in 1988 towards an integrated approach to rural development that reflects the above mentioned interdependencies inside the rural economy. Important characteristics were the following<sup>48</sup>:

- Focus on specific regions (objectives 1, 2 and 5) or on specific labour market problem groups (objectives 3 and 4).
- Coordination of complementary support for nonagricultural (ERDF) and agricultural (EAGGF) enterprises and for human capital formation (ESF) in medium-term programs.
- Participation of regional authorities in design, implementation, control and finance.

The lion's share of the structural funds goes into economically lagging "objective 1" regions, with per capita GDP below 75 % of the EU average, mainly in Greece, Italy, Spain, Portugal and Ireland but also to East Germany. These are clearly those regions in Europe where the necessity of help is most visible.

Some 10 % of EU structural funds are allocated to support *structural change in agriculture* ("horizontal" objective 5a related to agriculture) and *lagging rural regions* ("regional" objective 5b related to agriculture). Their definition seems to be motivated by desires to give each country (and within Germany each "Land") "its disadvantaged region". Otherwise, it is difficult to understand how the present 5b regions can add up to some 38 % in West Germany<sup>49</sup>.

As mentioned above, EU support is implemented with the help of national authorities, in Germany first of all within the ''Joint Task to Improve Regional Economic Structure' (GRW) and the ''Joint Task to Improve Agricultural Structure and Coastal Protection' (GAK). The latter includes large

<sup>44</sup> Loy/Koester/Strieve (1996), p. 58.

<sup>&</sup>lt;sup>45</sup> BML (1996a), p. 119.

<sup>&</sup>lt;sup>46</sup> Roberts (1995).

<sup>&</sup>lt;sup>47</sup> The guidance section of the EAGGF; the European Regional Development Fund (ERDF) and the European Social Fund (ESF).

<sup>&</sup>lt;sup>48</sup> See Plankl/Schrader (1991).

<sup>&</sup>lt;sup>49</sup> See Schrader (1995).

parts of national "structural policy" for agriculture (see section IV.D), but also different kinds of support for "disadvantaged regions" that cover more than 50 % in West Germany.

Space limitations and our focus on agricultural policy do not allow for a thorough analysis of rural development policy, apart from the following comments:

- (1) Regional economic policy is subject to principal doubts as to whether a correction of regional differences is more efficient than specialization according to comparative advantages. Thinking of rural, scarcely populated regions in East Germany, disposing of environmentally valuable assets, the objective of "equivalent living conditions" appears to be "both economically and ecologically doubtful and unrealistic"<sup>50</sup>. In a European context, however, regional differences are so pronounced that "cohesion" is a strong argument for support.
- (2) In the long run, support for the rural population and economy cannot rely solely or even considerably on agriculture. Observable shifts of support towards nonagricultural activities<sup>51</sup> go into the right direction, therefore, and are to be encouraged.
- (3) Participation of national and regional authorities raises a number of pros and cons to be traded off:
  - Decentralization of decision making and financial responsibility evidently corresponds to principles of subsidiarity and fiscal equivalence. On the other hand, full decentralization is not advisable due to interregional spill-overs.
  - Nonetheless, observable differences in the implementation of 5b support measures by German "Länder" are difficult to rationalize on efficiency grounds<sup>52</sup>. Instead, varying financial strains and political equilibria seem to explain a good part of these differences. To some extent, therefore, they might be considered distortionary to regional competition.
  - A mix of responsibilities as in the interplay of EU structural funds with GRW and GAK complicates decision making and erodes parliamentary control.
- (4) A particularly difficult problem is impact analysis of regional economic policy. Objectives and responsibilities seem to lack the necessary clarification for serious cost-benefit analyses<sup>53</sup>

In spite of these open questions, rural development policy appears to be a more reasonable strategy than conventional agricultural policy. For the CECs, this impression is shared by the EU Commission<sup>54</sup>, but there is no reason why it should be confined to them. The eastward enlargement is likely to increase the relative importance of structural policy, although EU Commissioner Wulf-Mathies hopes to handle additional demand for funding within the present budgetary framework<sup>55</sup>

### 4.6 Environmental policy

Modern agriculture impinges on the environment in numerous ways<sup>56</sup>:

- (1) Soils might be inflicted by mechanical compaction, erosion and accumulation of heavy metals and pesticides.
- (2) Surface waters are in danger of eutrophication because soil particles charged with nutrients run off into streams and rivers. Nitrates from organic and inorganic fertilizers and mobile pesticides may leach into ground waters.
- (3) Gaseous emissions into the atmosphere entail risks for the ozone layer (N<sub>2</sub>O) and the greenhouse effect (CO<sub>2</sub>, methane). On the other hand, agriculture and forestry provide temporary relief to the climate, when CO<sub>2</sub> is fixed in biomass.
- (4) Modern agriculture frequently standardizes the landscape, reducing its attractive diversity. This occurs through soil improvements, consolidation of plots and removal of obstacles to farming (trees, hedges). On the other hand, (extensive) agriculture may be an enrichment in a densely wooded region.
- (5) Biodiversity is impaired as a consequence of landscape and soilconditions being standardized as well as due to pesticide use. On the other hand, traditional extensive farming techniques created habitats for many species that were not indigenous in natural European forests.

To some extent, negative impacts of agriculture on the environment would have occurred also under free market conditions, due to technological progress and wage increases stimulating substitution of capital and variable inputs for labour. However, the CAP greatly exacerbated these impacts. Price support provided incentives for intensive variable input use in crop and animal production. Technological progress was induced to some extent. Selective price support and stabilization of prices favoured specialization. Fuel subsidies<sup>57</sup> and exemptions from the motor vehicle tax facilitated mechanization. Structural policy (see section IV.C) subsidized investments in buildings, increasing livestock density. Land consolidation programs publicly organized the standardization of land-scapes.

On some issues, impacts of agricultural policy are ambiguous, in part because there are contradictory instruments exactly opposing each other. This is true for set-

<sup>&</sup>lt;sup>50</sup> SRU (1996), No. 29.

<sup>&</sup>lt;sup>51</sup> See Schrader (1995), p. 360.

<sup>52</sup> Mehl/Plankl (1995), SRU (1996), No. 80.

<sup>53</sup> Plankl/Schrader (1991); Schrader (1995).

<sup>54</sup> See EU-Kommission (1995b).

<sup>55</sup> Wisdorff (1996).

<sup>&</sup>lt;sup>56</sup> SRU (1985); Wissenschaftlicher Beirat (1992).

<sup>&</sup>lt;sup>57</sup> 1994 still 0,9 bio DM in Germany, see BML (1996a), background material, p. 140.

aside obligations or premia on the one hand and land subsidies on the other. The latter are a traditional element of German support for "disadvantaged regions" called "compensation bonus" (Ausgleichszulage<sup>58</sup>) which is part of "objective 5a" measures on the EU level as well (see section IV.D). Set-aside measures are beneficial to the environment if alternative land uses, i.e. afforestation, fallowing, or crops for industrial processing are less harmful than the type of agriculture they replace, otherwise land subsidies like the "compensation bonus" might be justified. Because this choice depends on local circumstances, all flat-rate set-aside (or subsidy) policies have caused positive effects on some locations and negative effects on others in the past.

Whereas agricultural policy has *indirect* environmental effects, an increasing part of national and EU policy is explicit environmental policy, *directly* geared towards environmental goals. Space limitations preclude an in-depth treatment of these policies<sup>59</sup>, but some problem areas will be selected for review and discussion of future perspectives.

In past policies, there has been a *strong emphasis on mandatory regulations* as opposed to financial incentives<sup>60</sup>. One of the most recent examples is the new German "Fertilizer Regulation"<sup>61</sup> (DVO) containing the following minimum standards for fertilizer use:

- a qualitative definition of "good agricultural practice",
- a maximum amount of 170 kg N/ha from manure and a ban of manure application from November 15 to January 15,
- possibilities for "Länder" authorities to prohibit fertilizer application within a certain distance to surface waters or nature protection zones, and
- an obligation to keep records of fertilizer requirements and applications for the farm as a whole.

These restrictions might be insufficient from an ecological point of view<sup>62</sup>. In any case, the legislatory approach tends to be inefficient:

- (1) Generally applicable standards, as the quantitative and temporal restrictions above, are bound to be too generous under delicate environmental conditions, whereas they are overly restrictive in other situations. This is due to the tremendous variability of ecological conditions. In addition, we have to recognize that political standards are the result of a political bargaining process. Overly restrictive standards would come about, if opportunity costs in agriculture were systematically neglected in this game. But agricultural interest groups are counteracting strongly. It is not to be expected that the political equilibrium of this bargaining process will coincide with the economic optimum.
- (2) Locally specified restrictions might be better suited to local conditions and provide a case for decentralization. However, local authorities, backed up by justice courts,

- might be in a considerably better bargaining position against individual farmers which may lead to excessive restrictions on private property rights<sup>63</sup>.
- (3) In general, regulations do not fundamentally change economic incentives, they try to curb them. Private reactions can be misled under these conditions. The threat of a farm level control of the nutrient balance, for example, will not deter manure to be excessively dumped on fields close to the farm site. Ecologically valuable habitats prone to be included in a protection zone might be destroyed for reasons of "prevention". Not only evasions, but also straightforward violations of restrictions are likely to cause problems and to require costly control.
- (4) Multiple restrictions, each possibly reasonable and far from being excessive, might join into a tight net of restrictions that is weakening property rights and stifling entrepreneurial freedom.

The EU has played a mixed role in the observed "bias" towards legislatory actions. On the one hand, EU directives have triggered corresponding legislation in member states. For example, the above mentioned German Fertilizer Regulation had to define "good agricultural practice" in compliance with the so-called EU "Nitrate Directive" 91/676. On the other hand, EU legislation sometimes prevents "regulatory" member states like Germany from even more restrictive national legislation. In the future, it is likely that EU legislation will confine itself to setting objectives and a broad framework in acknowledgment of the subsidiarity principle and resistance against bureaucracy".

In addition, it has to be recognized that the Commission does not oppose alternative approaches to environmental problems. Given that liability laws are largely ineffective in the context of nonpoint problems and that better extension will only help if private and public interests coincide, the main alternative instruments operating through incentives are Pigou taxes or subsidies on activities involving externalities.

In Germany, a tax on nitrogen fertilizer has been proposed, analyzed and discussed for more than a decade now<sup>64</sup> but never had a chance in agricultural policy. This is mainly because it would (evidently!) reduce agriculture's competitiveness against foreign competitors, particularly if implemented in a single EU country. A tax on pesticides is not

<sup>&</sup>lt;sup>58</sup> See Henrichsmeyer/Witzke (1994), pp. 365-67.

<sup>59</sup> See SRU (1996) and Wissenschaftlicher Beirat (1996).

<sup>60</sup> SRU (1996), No. 5.

<sup>61</sup> Overview in Agra-Europe 6/96.

<sup>62</sup> SRU (1996), No. 195.

<sup>63</sup> Wissenschaftlicher Beirat (1996a), section 2.2.

<sup>&</sup>lt;sup>64</sup> SRU (1985), section 5.7.4; Wissenschaftlicher Beirat (1993); SRU (1996), No. 197.

considered in Germany due to the high level required to become effective and due to practical difficulties in defining categories of pesticides according to potential dangers<sup>65</sup>. Nonetheless it has just been introduced in Denmark<sup>66</sup>. At this example it is remarkable that the EU Commission supports this "experiment" with corresponding duties on imported pesticides.

Far greater importance than taxes on environmentally harmful activities accrues to subsidies for activities involving positive externalities or public goods. Even when looking only at Germany, observers will find a confusing multitude of ("Länder" level) programs, frequently varying widely as to the amount of subsidy and the required restrictions<sup>67</sup>. In 1994/95, nearly 30 % of all agricultural land in Germany was already included in some environmental program<sup>68</sup>.

Several of these programs offer a "basic support" against minimal obligations to extensive farming (e.g. the Bavarian "KULAK"-programm). In this case, income support objectives for farmers dominate environmental goals. This might be considered a misuse of scarce (environmental) funds and WTO trading partners have already expressed concern. To take care of these concerns, a clarifying regulation on the implementation of Directive 2078/92 has recently been issued, requiring commitments to extensive farming beyond those in "good agricultural practice"69. Similarly, the German "compensation bonus" has not only been justified by income motives<sup>70</sup> but also with reference to "stabilization of weakly structured regions" and "conservation of a diversified landscape"71. Given a volume of DM 1 bn in each of the last years72 this money could greatly enhance environmental policy options, if subsidies were linked to environmental contributions instead of being broadly distributed<sup>73</sup>.

If payments were limited to desired public goods, environmental programs might evolve into an efficient variety of publicly funded, contract-based nature protection. To this end, the principle of subsidiarity and knowledge of local conditions suggest that local authorities should take a more active role in selecting activities to be promoted, i.e. on the design of programs. In the past, they were mainly responsible for their implementation. If local authorities decide, fiscal equivalence requires them to contribute to funding as well. To give them the means and incentives to do so, modifications of fiscal balancing arrangements between the "Länder" and local authorities have been proposed.

One possibility would be to decide on the "Länder" level on the overall "nature protection budget" and to allocate this budget over local communities using simple keys like the usable area. Local communities would have to spend the grants for environmental purposes, but they would be free to choose those measures with the highest (environmental) pay-off from a given budget<sup>74</sup>.

The local "nature protection budget" would become variable if it were tied not only to area and population, but

also to the size of protection zones or other locally produced public goods<sup>75</sup>. The "prices" of these public goods, i.e. the grants accorded, could be used to manage interregional spill-overs. Nonetheless, for some problems, for example a well *integrated* net of nature protection elements, planning instruments will keep a role in the future.

It is not very likely that higher level authorities will quickly delegate responsibility and funds to the local level. Nevertheless, a certain tendency towards decentralization is discernible, e.g. in the recent EU-Directive 2081/93 on the structural funds. At the EU level, this can be expected to be reinforced with each further enlargement of the Community<sup>76</sup>.

# 5. Concluding remarks

The 1992 McSharry Reform can be considered a turning point of the CAP. The immediate step to replace, for some commodities, protection via price policy with protection via subsidies on land or animals might appear at first sight a negligible accomplishment. Yet this change in policy instruments opened the door towards decoupling price and income policy and further liberalization of *price policy* which was unthinkable hitherto.

Nonetheless, the present system of compensation payments has serious efficiency shortcomings because they are tied to specific branches of agricultural production. A considerable gain of intrasectoral efficiency could be attained already in the short run by linking them to broader criteria such as total land instead. In the long run, these payments are likely to be abolished for equity reasons and more importantly, in line with general trends to reduce government spending.

The stepwise elimination of export subsidies is another economically sound step in the reform process that has chances in political bargaining. This is because WTO trading partners exert pressure in precisely this direction and competitive producers from the European agricultural sector would like to participate in expanding world markets.

In the field of "structural policy" several improvements are conceivable as well, which do not require additional

<sup>65</sup> SRU (1996), No. 205.

<sup>66</sup> Agra-Europe 50/95.

<sup>67</sup> See Mehl/Plankl (1995).

<sup>68</sup> Agra-Europe 27/96.

<sup>69</sup> Agra-Europe 17/96.

<sup>70</sup> BML (1996a), p. 51.

<sup>71</sup> BML (1996b).

<sup>72</sup> BML (1996a), p. 123.

<sup>73</sup> SRU (1996), No. 184.

<sup>&</sup>lt;sup>74</sup> Wissenschaftlicher Beirat (1996a), Section 3.5.

<sup>75</sup> SRU (1996), No. 276.

<sup>76</sup> See EU-Kommission (1995b), p. 9.

public expenses or even save them, most notably the abolishment of capital subsidy programs. Agricultural policy makers, however, still seem to believe that these programs make positive contributions to efficiency and competitiveness. Therefore any progress in this area will have to be enforced by budgetary contraints.

For rural development policy, we note a trend towards more generous budgetary funding at the expense of conventional agricultural policy. This trend may be welcomed from an economic point of view, in spite of some open questions, because rural development policy appears to be a considerably more reasonable than conventional agricultural support.

Coming finally to *environmental policy* for agriculture, we may discern a certain tendency away from the traditional and largely ineffective use of regulations towards subsidies for public goods provided by agriculture. In principle this is again a change that might increase efficiency in agriculture. However, strategies of agricultural interest groups<sup>77</sup> and first examples of environmental programs will be a reminder that actual implementation will not only serve economic efficiency but political goals as well.

This is not meant to be a pessimistic conclusion. Chances have seldom been better than today to reconcile the two on many agricultural policy issues.

#### References

- Agra-Europe 44/95 (1995): Zuckermarktordnung hat Bestand, Europa-Nachrichten, pp. 9-10.
- Agra-Europe 50/95 (1995): Kommission genehmigt dänische Pestizidsteuer, Europa-Nachrichten, p. 7.
- Agra-Europe 2/96a (1996): Milliardenüberschuß im Brüsseler Garantiefonds, Europa-Nachrichten, pp. 1-3.
- Agra-Europe 2/96b (1996): Washington kritisiert EU-Exportsteuer auf Weizen, Europa-Nachrichten, p. 5.
- Agra-Europe 6/96 (1996): Düngeverordnung soll für bundeseinheitliche Regelungen sorgen, Markt + Meinung, pp. 1-4.
- Agra-Europe 17/96 (1996): Brüsseler Vorgaben für Agrarumweltprogramme, Europa-Nachrichten, pp. 1-3.
- Agra-Europe 21/96 (1996): Neues Agrargesetz stärkt Position der USA im GATT, Länderberichte, pp. 12-14.
- Agra-Europe 23/96 (1996): Umnutzung landwirtschaftlicher Gebäude soll erleichtert werden, Länderberichte, pp. 1-2.
- Agra-Europe 27/96 (1996): Agrarumweltprogramme auf mehr als einem Viertel der Nutzfläche, Markt + Meinung, p. 1.
- Baimann, A. (1995): Pfadabhängigkeiten in Agrarstrukturentwicklungen, Berlin.
- Bhagwati, J.N. (1980): Lobbying and Welfare, Journal of Public Economics (14), pp. 355-63.
- BML (ed.)(1996a): Bundesministerium für Ernährung, Landwirtschaft und Forsten, Agrar- und ernährungspolitischer Bericht der Bundesregierung (Agrarbericht), mit Materialband (MB), Bonn.
- BML (ed.) (1996b): Förderung landwirtschaftlicher Unternehmen, Neuauflage Jan. 1996, Bonn.
- BML (1996c): Bestandsaufnahme wettbewerbsbeeinflussender rechtlicher Rahmenbedingungen der Landwirtschaft in den EU-Mitgliedstaaten und innerhalb Deutschlands, Agra-Europe (1+2/96), Dokumentation.
- EU-Kommission (1995a): Die Lage der Landwirtschaft in der Europäischen Union 1995, Brüssel.
- EU-Kommission (1995b): Strategiepapier Osteuropa, Agra-Europe (49/95), Dokumentation, pp. 1-28.
- EU-Kommission (1996a): Die Lage der Landwirtschaft in der Europäischen Union 1995, Brüssel.

- EU-Kommission (1996b): Das GATT und die europäische Landwirtschaft, Agra-Europe (18/96), Dokumentation, pp. 1-20.
- Heinze, R.G. (1992): Verbandspolitik zwischen Partikularinteressen und Gemeinwohl Der Deutsche Bauernverband, Gütersloh.
- Henrichsmeyer, W., H.P. Witzke (1994): Agrarpolitik, Band 2, Bewertung und Willensbildung, Stuttgart.
- Josling, T., S. Tangermann (1995): Toward a cap for the next century, European Policy Forum, London.
- Köhne, M., R. Wesche (1990): Landwirtschaftliche Steuerlehre, Stuttgart.
- Loy, J.-P., U. Koester, L. Striewe (1996): Struktur- und Verteilungswirkungen der landwirtschaftlichen Investitionsförderung am Beispiel Schleswig-Holsteins, Schriften der Landwirtschaftlichen Rentenbank (10), Landwirtschaftliche Investitionsförderung: Bisherige Entwicklung, aktueller Stand, Alternativen für die Zukunft, Frankfurt, pp. 13-62.
- McCalla, A.F. (1994): Agriculture and food needs to 2025: Why we should be concerned, Consultive group on international agricultural research, Sir John Crawford lecture, Washington, D.C.
- Mehl, P., R. Plankl (1995): "Doppelte Politikverflechtung" als Bestimmungsfaktor der Agrarstrukturpolitik., Referat zur Sechsunddreißigsten Jahrestagung der Gesellschaft für Wirtschaftsund Sozialwissenschaften des Landbaues, Berlin.
- Plankl, R., H. Schrader (1991): Politik zur Entwicklung ländlicher Gebiete in der Bundesrepublik Deutschland im Rahmen der Reform der EG-Strukturfonds und Grundprobleme der Bewertung, Arbeitsbericht aus dem Institut für Strukturforschung, Bundesforschungsanstalt für Landwirtschaft, Braunschweig-Völkenrode.
- Roberts, D. (1995): UK agriculture in the wider economy: The importance of net SAM linkage effects, European Review of Agricultural Economics (22), pp. 495-511.
- Schmitt, G. (1995): Ist die Förderung einer vorzeitigen Betriebsaufgabe im Rahmen der Agrarsozialpolitik wirtschaftlich zweckmäßig?, Agra-Europe (33/95), Sonderbeilage, pp. 1-10.
- Schrader, H. (1994): Impact assessment of the EU structural funds to support regional economic development in rural areas of germany, Journal of Rural Studies (10), pp. 357-365.

<sup>77</sup> See Heinze (1992).

- Sheehy, S.J. (1996): Options for CAP reform in the next trade round with special reference to milk, Contribution for the International Conference: What Future for the CAP, University of Padua, 31.5.-1.6.1996, Padua.
- SRU (1996): Der Rat von Sachverständigen für Umweltfragen, Sondergutachten: Konzepte einer dauerhaft-umweltgerechten Nutzung ländlicher Räume, Wiesbaden.
- SRU (1985): Der Rat von Sachverständigen für Umweltfragen, Umweltprobleme der Landwirtschaft, Stuttgart-Mainz.
- Tyers, R., K. Anderson (1992): Disarray in World Food Markets: A Quantitative Assessment, Cambridge.
- Tracy, M. (1993): Food and Agriculture in a Market Economy, Tonbridge.
- Wisdorff, E. (1996): Die Kosten für die Osterweiterung der Union sind noch umstritten, Handelsblatt, 27.6.1996.
- Wissenschaftlicher Beirat (1992): Wissenschaftlicher Beirat beim Bundesministerium für Ernährung, Landwirtschaft und Forsten, Strategien für eine umweltverträgliche Landwirtschaft, Landwirtschaft-Angewandte Wissenschaft (414), Münster-Hiltrup.
- Wissenschaftlicher Beirat (1993): Wissenschaftlicher Beirat beim Bundesministerium für Ernährung, Landwirtschaft und Forsten, Reduzierung der Stickstoffemissionen der Landwirtschaft, Landwirtschaft-Angewandte Wissenschaft (423), Münster-Hiltrup.

- Wissenschaftlicher Beirat (1994a): Wissenschaftlicher Beirat beim Bundesministerium für Ernährung, Landwirtschaft und Forsten, Vorschläge für eine grundlegende Reform der EG-Zuckermarktpolitik, Landwirtschaft-Angewandte Wissenschaft (430), Münster-Hiltrup.
- Wissenschaftlicher Beirat (1994b): Wissenschaftlicher Beirat beim Bundesministerium für Ernährung, Landwirtschaft und Forsten, Agrarpolitik und Agrarstruktur, Landwirtschaft-Angewandte Wissenschaft (433), Münster-Hiltrup.
- Wissenschaftlicher Beirat (1996a): Wissenschaftlicher Beirat beim Bundesministerium für Ernährung, Landwirtschaft und Forsten, Zur Neuorientierung der Landnutzung in Deutschland, Landwirtschaft-Angewandte Wissenschaft (453), Bonn.
- Wissenschaftlicher Beirat (1996b): Wissenschaftlicher Beirat beim Bundesministerium für Ernährung, Landwirtschaft und Forsten: Die Weiterentwicklung der EU-Agrarreform, Landwirtschaft-Angewandte Wissenschaft, Bonn (in Vorbereitung).
- Witzke, H.P. (1993): Mikrotheorie in der Agrarsektoranalyse Neoklassischer Standard, Konflikte mit der Realität und Versöhnungsversuche mit Komplikationen, Berlin.
- Wöhlken, E. (1991): Einführung in die landwirtschaftliche Marktlehre, 3. Auflage, Stuttgart.

### Zusammenfassung

# Perspektiven der künftigen EU-Agrarpolitik

Die Reform der EU-Agrarpolitik im Jahre 1992 kann als Einstieg in einen längerfristigen Reformprozeß angesehen werden. In dem Beitrag wird zunächst ein Überblick über die verschiedenen internen und externen Druckfaktoren gegeben, die schließlich zu den Reformbeschlüssen des Jahres 1992 geführt haben. Im Anschluß an eine knappe Darstellung der wichtigsten Reformmaßnahmen werden diese sowohl im Hinblick auf die Erreichung politischer Ziele als auch anhand ökonomischer Kriterien beurteilt. Anschließend werden die wichtigsten Triebkräfte aufgezeigt, die die weiteren Schritte des Reformprozesses wesentlich beeinflussen dürften: die nächste WTO-Runde, die Osterweiterung der EU und die langfristigen Perspektiven der Entwicklung der Weltagrarmärkte. Im Mittelpunkt des Beitrags steht sodann eine detaillierte Analyse und Evaluierung von Reformoptionen in den verschiedenen Politikbereichen: Eine stärkere Integration der europäischen Landwirtschaft in die Weltagrarwirtschaft, effizientere Ausgestaltungsmöglichkeiten von Transferpolitiken, Reform der Agrarstrukturpolitik, Weiterentwicklung integrierter Regionalpolitik für den ländlichen Raum sowie der Agrarumweltpolitik.