



**EU agri-environmental policies
in the context of the WTO**

Part WTO

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1. Preface

Since the end of the 1940s the OECD Member States have experienced an increasing economic liberalisation; both the debate on subsidies and the subsequent redefinition of the governments' role in this process are results of this development. O'BRIEN (1997) compares the globalisation and liberalisation process with the layers of an onion. The outer layer consists of duties on processed goods, while the inner layers stand for subsidies, protection of agriculture, and environmental protection provisions. According to him, the existing controversy regarding subsidies can be regarded as part of a process towards reducing the role of governments as direct managers of the economy. To attack another government's domestic policies would be equal to attacking that country's political autonomy.¹

This might explain the partly difficult negotiations on agriculture during the Uruguay Round. The result has been a World Trade Organization (WTO) with a new Dispute Settlement Mechanism and new regulation sectors like services, intellectual property rights, and agriculture. The Agreement on Agriculture (AoA) regulates not only export subsidies and market access but also internal support or the policy with regard to agricultural subsidies respectively. Only after the McSharry reform of 1992, named after the then Commissioner of Agriculture, the adoption of the Agreement on Agriculture could be achieved; subsequently a shift in direction was initiated. The agri-environmental measures (Regulation 2078/92) were introduced as accompanying measures to the reform.

It is the WTO negotiation round that gets the reform process going again. Provisions are reviewed, revised and consolidated. To "ensure" the maintenance of the EU agri-environmental policy and to avoid trade distortions affecting developing countries the following questions must be answered: Do the EU agri-environmental programmes comply with Green Box provisions on environmental subsidies? When we consider the experiences with such programmes, where could there be potential problems if evidence has to be provided as to their conformity with WTO rules? Is it possible to prevent potential abuse in the form of hidden protection when financing these agri-environmental programmes? Which demands can result from an analysis concerning the Green Box conformity of EU programmes with regard to a regulation of agri-environmental policy in the context of the WTO? This study aims at contributing to a clarification of these questions.

This study was written in late 1999. Given the present discussion in the context of the Doha Round regarding the trade-distorting effects of the Green Box on the one hand and the maintenance of national flexibility to support rural development on the other hand, the results of this study are still relevant. In order to provide a better contribution to the current discussion the text was translated into English. I did not update the figures mentioned in this text as ultimately this would not influence the fundamental results of the study.

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¹ *cf.* O'Brien (1997), p.19.

2. Introduction

In 1992 the agri-environmental measures were introduced for an indefinite period as accompanying measures to the McSharry reform. Although the implementation of Regulation 2078/92 was somewhat cumbersome in the beginning, 158 programmes with 2200 different measures had been implemented in the Member States when the implementation period concluded in 1998. With 19.5% of farmland covered by these measures the 15% coverage target set in the 5th Environmental Action Programme has thus already been exceeded. Implementation varies significantly both within the EU and within Germany. Eighty-five percent of the overall funds available in the Member States (EU 15) have been spent on the extensification of agricultural production, which is the priority target. However, evaluation and monitoring are still insufficient.

The polluter-pays principle, considered as being market-consistent, has not yet been fully implemented in the agricultural sector. But since the end of the 1980s economic instruments have been used in environmental policy. Due to distortions in the market structures “first best” instruments cannot be applied in the agricultural sector. Thus the concept of “efficiency without optimality” applies to agriculture.

The basis for reimbursements for environmental services is that they go beyond the mere compliance with good agricultural practice and ensure a significant reduction in the use of products and methods which increase agricultural production. The “provider-gets principle” is the basic principle of providing environmental services. On the grounds of environmental protection, reimbursements for environmental services should be related to performance as well as being reliable in order to facilitate long-term planning. To achieve this goal a regional definition of good agricultural practice is indispensable. One approach to good agricultural practice could be provided by integrated farming, though too narrow a definition might not be able to do justice to the specific situation of a given location or farm. Additionally, an inclusion of biodiversity objectives is indispensable from an ecological perspective.

A comprehensive evaluation of environmental effects is not available. Compared to regular farming, experts attest positive, though very volatile, environmental effects to all agri-environmental measures. The evaluation of measures demonstrates the priority given to landscape conservation measures. This study critically examines programmes which only include minor environmental obligations and impose only moderate changes on farm management practices. The programmes should partly represent elements of good agricultural practice. With the environmental effects accrued and a joint burden of 4% of the European Agricultural Guidance and Guarantee Fund (EAGGF), the Commission has acknowledged a “very good” cost-benefit ratio of agri-environmental measures. However, especially the ecological evaluations highlight significant deficits because most Member States did not set performance targets which allow for a regular performance evaluation in relation to the achievement or otherwise of defined targets.

Positive income effects can usually be expected, all the more as they are defined as an objective in Regulation 2078/92. If the premium exceeds the compliance costs, unquantifiable profit-taking effects will occur. While premia are indispensable with regard to incentives, programmes with minor environmental requirements and differentiated premia (e.g. calculated by crop yield in relation to location) hold minimising potentials.

Agenda 2000 established support for rural development as a second pillar of the agricultural policy. As Regulation 1257/99 integrates the agri-environmental measures, some deficits of

the old regulation are revised and environmental objectives are given a much stronger emphasis. Moreover, the principle of coherence provides a new quality for the agri-environmental policy of the European Community. The incentive component will only be granted in a “limited” way in the future. Its effects on the design of the payment system in the Member States and on farmer participation can not be predicted.

Agri-environmental programmes are an essential and significant step towards the integration of environmental policy into agricultural policy. However, their general scope continues to be limited.

3. Agriculture and Environment in the WTO

3.1. Environmental Protection in the WTO

With the establishment of the WTO in 1994 the general trade-related framework for subsidies to the agriculture sector has been established. The “Marrakesh Agreement “Establishing the World Trade Organization” (Preamble, Paragraph 1) states that the optimal use of resources in accordance with the objective of sustainable development should be taken into account within trade relations.

Preamble: “Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development.”

As an “overall guideline” this declaration applies to all treaty texts in the WTO.² The Appellate Body confirmed the objective in the “US – Shrimps dispute” by defining the first paragraph of the preamble as relevant for the interpretation of the provisions contained in the various WTO agreements. *“By explicitly recognizing the ‘objective of sustainable development’, the preamble shows that ‘the signatories to the Agreement were, in 1994, fully aware of the importance and legitimacy of environmental protection as a goal of national and international policy.’”*³

SENTI (1999), however, has criticised that the optimal use of natural resources is not an objective equivalent to raising standards of living, securing full employment etc. but that it is subordinated to the expansion of production and trade in the WTO.⁴

The Ministerial Declaration “Trade and Environment” released on April 14, 1994 refers to the Declaration of Rio on Environment and Development as well as to Agenda 21 and their implementation in the GATT. “Full of optimism” it declares that there is no need for a contradiction between maintaining and securing an open, non-discriminating and fair

² cf. Altemöller (1998), p.35.

³ WTO (1999a), p.19.

⁴ cf. Senti (1999), p.98.

multilateral trading system on the one hand and measures designed to protect the environment and to support sustainable development on the other hand, nor was such a contradiction inevitable.

3.2 Environmental Protection in the Agreement on Agriculture

The preamble states that the agreed long-term objective is the establishment of a fair and market-oriented agricultural trading system combined with a significant gradual reduction of subsidies and protective measures in the agricultural sector within an agreed timeframe. Thus, restrictions of and distortions in the world agricultural markets shall be corrected and prevented respectively. The commitments in the context of the reform programme shall be made in an equitable way among all Members having regard to non-trade concerns such as food security and environment protection.

Preamble: Noting that commitments under the reform programme should be made in an equitable way among all Members, having regard to non-trade-concerns, including food security and the need to protect the environment, having regard to the agreement that special and differential treatment for developing countries is an integral element of the negotiations, and taking into account the possible negative effects of the implementation of the reform programme on least-developed and net food importing developing countries; Hereby agree as follows:[...].

The Green Box requires compliance with basic criteria and policy-specific criteria and conditions. The basic criteria are listed in Paragraph 1 of Annex 2. If Green Box measures are at issue, they shall apply as a “*normative and generally applicable benchmark*”⁵ and allow for distinctions to be made with regard to a policy’s status.

Paragraph 1: Domestic support measures for which exemption from the reduction commitments is claimed shall meet the fundamental requirement that they have no, or at most minimal, trade-distorting effects or effects on production. Accordingly, all measures for which exemption is claimed shall conform to the following basic criteria: the support in question shall be provided through a publicly-funded government programme (including government revenue foregone) not involving transfers from consumers; and the support in question shall not have the effect of providing price support to producers; plus policy-specific criteria and conditions as set out below.

Paragraphs 2) to 13) in Annex 2 list possible Green Box measures with their related special criteria.

According to JOSLING, TANGERMANN & WARLEY (1996), the length of this list rather shows rather the wide range of government activities possible than raising concerns regarding trade distortions caused by them. On the contrary, the list of Green Box measures is a step forward because it shows the future direction of agricultural policy, “*in order to achieve domestically what they are supposed to achieve without negative international effects.*”⁶ According to SENTI (1994), the Green Box exemption range is so wide and diverse that each country can support its agricultural sector to the same extent as before, only the system applied will change (through non production-related contributions)⁷. With reference to the fact that this list

⁵ *cf.* Shanahan, WTO Legal Division (1996), p.57.

⁶ Josling, Tangermann & Warley (1996), p.208.

⁷ *cf.* Senti (1994), p.75.

is not exhaustive, the Agreement on Agriculture provides a “carte blanche” in the field of environmental protection.⁸

Overview 1: List of Green Box Measures

Par. 2	General services, for example research, advisory services, inspection services etc.
Par. 3	Public stock-holding for food security purposes
Par. 4	Domestic food aid
Par. 5	Direct payments to producers
Par. 6	De-coupled income support
Par. 7	Government financial participation in income insurance and income safety-net programmes
Par. 8	Payments for relief from natural disasters
Par. 9	Structural adjustment assistance provided through producer retirement programmes
Par. 10	Structural adjustment assistance provided through resource retirement programmes
Par. 11	Structural adjustment assistance provided through investment aids
Par. 12	Payments under environmental programmes
Par. 13	Payments under regional assistance programmes

Source: Compiled by the author

The following specified criteria apply for payments under environmental programmes:

Eligibility for such payments shall be determined as part of a clearly defined government environmental or conservation programme and be dependent on the fulfilment of specific conditions under the government programme, including conditions related to production methods or inputs.

The amount of payment shall be limited to the extra costs or loss of income involved in complying with the government programme.

Payments for research and infrastructure concerning environmental protection programmes are also covered by “General services” (Par. 2).

The Green Box measures must be notified by the Member States every year commencing with the end of the first implementation year. The prompt notification obligation applies to any “new” measure (Art. 18:3). The details of any new or modified measure and its conformity with the agreed criteria as set out in Article 6 or Annex 2 must be described.

Art.18.3.: In addition to the notifications to be submitted under paragraph 2, any new domestic support measure, or modification of an existing measure, for which exemption from reduction is claimed, shall be notified promptly. This notification shall contain details of the new or modified measure and its conformity with the agreed criteria as set out either in Article 6 or in Annex 2.

Article 7 of the AoA contains the obligation to handle Green Box measures in accordance with the agreement. If no “green” evidence of these domestic support measures is provided, they will be subject to the AMS.

Art.7: Each member shall ensure that any domestic support measures in favour of agricultural producers which are not subject to reduction commitments because they qualify under the criteria set out in Annex 2 of this Agreement are maintained in conformity therewith.

⁸ cf. Bernauer & Ruloff (1999), p.100.

(a) Any domestic support measure in favour of agricultural producers, including any modification to such measure, and any measure that is subsequently introduced cannot be shown to satisfy the criteria in Annex 2 to this Agreement or to be exempt from reduction by reason of any other provision of this Agreement shall be included in the Member's calculation of its Current Total AMS.

Finally, a “vital element”⁹ of the AoA shall be highlighted, *i.e.* the continuation of the reform process. The negotiations to be initiated one year before the end of the implementation period, *i.e.* in 1999, shall also take into account non-trade concerns such as environmental protection and food security.

Art.20: Recognizing that the long-term objective of substantial progressive reductions in support and protection resulting in fundamental reform is an ongoing process, Members agree that negotiations for continuing the process will be initiated one year before the end of the implementation period, taking into account:

non-trade-concerns, special and differential treatment to developing country Members, and the objective to establish a fair and market-oriented agricultural trading system, and the other objectives and concerns mentioned in the preamble to this Agreement;

Article 20 is the most important basis for the continuation of the reform process in the context of the negotiations on agriculture. Non-trade related concerns such as environmental protection and food security are sound prerequisites to ensure that the political scope for the granting of subsidies to target sustainable rural development in both North and South can be maintained.

3.3 The Relationship Between the Different Agreements

The relationship between the WTO agreement, the GATT of 1994 and the multilateral trading agreements of the World Trade Organisation on trade in goods, which also includes the AoA, can be described as follows:

- If there is a contradiction between provisions of the GATT of 1994 and provisions of another agreement in Annex 1 of the WTO Agreement the provisions of the other agreements will prevail.¹⁰
- If the standards of a WTO provision and a provision of a multilateral trade agreement collide, the WTO agreement provision will have priority to the extent of the standard collision (WTO Agreement Art. XVI.)
- If there is a conflict between the Agreement on Agriculture and the Agreement on Subsidies or any other multilateral trade agreement, the Agreement on Agriculture will precede.

With regard to the contestable nature of domestic support measures in the agricultural sector the peace clause regulates the special relationship between the Agreement on Agriculture and the Agreement on Subsidies for the duration of the implementation period (nine years in this case) (see chapter 4.2.).

⁹ Josling, Tangermann & Warley (1996), p.177.

¹⁰ *cf.* Benedek (1998), p.57.

3.4. The EU Green Box Measures for Agri-environmental Programmes

As mentioned above the Member States have to notify Green Box measures every year commencing with the end of the first implementation year. To date the EU has notified the implementation years 1995/96 and 1996/97 to the Committee on Agriculture.

The Member States are expected to submit a description of each measure for which exemption from reduction is claimed in relation to the relevant criteria. *“In practice this will involve not only a description of the measure itself but also a description of how the measure squares with the relevant criteria.”*¹¹

Overview 2: EU Notifications under the Green Box

Domestic support: European Communities Period under Review: Commercial Year 1995/96 ¹² Measures Exempted from Reduction Obligations: Green Box			
Type of measure	Name and description of measure with regard to Annex 2 criteria	Value (million ECU)	Comments
(j) Environmental Programmes	Environmental protection and landscape conservation; control of soil erosion and extensive farming; support for sensitive environments; support and protection of organic farming by creating fair competition conditions; support for forestry measures in the agricultural sector; conservation of genetic resources used in agriculture.	2,783.3	Council Regulations: 797/85; 1401/86; 1402/86; 2052/88; 2092/91; 2328/91; 2066/92; 2078/92; 2079/92; 2080/92; 1467/94;
Domestic support: European Communities Period under Review: Commercial Year 1996/97 ¹³ Measures Exempted from Reduction Obligations: Green Box			
Type of measure	Name and description of measure with regard to Annex 2 criteria	Value (million ECU)	Comments
(j) Environmental Programmes	Environmental protection and landscape conservation; control of soil erosion and extensive farming; support for sensitive environments; support and protection of organic farming by creating fair competition conditions; support for forestry measures in the agricultural sector; conservation of genetic resources used in agriculture.	4,223.7	Council Regulations: 797/85; 1401/86; 1402/86; 2052/88; 2066/92; 2078/92; 2079/92; 2080/92; 1467/94; 950/97;

Source: Compiled by the author based on WTO (1998b) and WTO (1999b).

Even though the Green Box measures of the EU can in principle be challenged if the criteria are not met, this has not, as yet, happened despite other WTO Member States having expressed their concern in relation to this matter (see above).¹⁴ In general, it is possible to settle disputes through informal

¹¹ cf. Shanahan, WTO Legal Division (1996), p.58.

¹² cf. WTO (1998b), p.6.

¹³ cf. WTO (1999c), p.5.

¹⁴ Of 73 actions taken at the WTO, seventeen concern the AoA: Seven actions against import access, seven actions against restrictions by public health authorities and three actions against export subsidies. No action concerns domestic support measures. cf. Hudec (1998), p.43.

Table 1: List of EU environmental protection programmes

List of regulations in the context of notified environmental protection programmes		
	Regulation number	Name of Regulation
Regulations relating to environmental protection policy in less-favoured areas	797/85 ¹⁵	Regulation on improving the efficiency of agricultural structures
	1401/86	Regulation introducing a common action for the encouragement of agriculture in certain less-favoured areas of northern Italy
	1402/86	Regulation introducing a common action for the encouragement of agriculture in the Scottish islands off the northern and western coasts with the exception of the Western Isles (Outer Hebrides)
	2052/88 ¹⁶	Regulation on the tasks of the Structural Funds and their effectiveness and on coordination of their activities between themselves and with the operations of the European Investment Bank and the other existing financial instruments
	2328/91 ¹⁷	Regulation on improving the efficiency of agricultural structures
	950/97 ¹⁸	Regulation on improving the efficiency of agricultural structures
Other regulations concerning environmental protection or production extensification	2092/91	Regulation on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs
	2078/92	Regulation on agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of the countryside
	2079/92 ¹⁹	Regulation instituting a Community aid scheme for early retirement from farming
	2080/92 ²⁰	Regulation establishing a common financial assistance regulation on reforestation in the agricultural sector
	2066/92 ²¹	Regulation amending Regulation (EEC) No 805/68 on the common organization of the market in beef and veal and repealing Regulation (EEC) No 468/87 laying down general rules applying to the special premium for beef producers and Regulation (EEC) No 1357/80 introducing a system of premiums for maintaining suckler cows.
	1467/94	Regulation on the conservation, characterization, collection and utilization of genetic resources in agriculture.

Source: Compiled by the author

¹⁵ According to Art. 19 of Regulation 787/85 all those farmers shall be eligible for assistance who commit to using agricultural production methods which are compatible with the requirements of conserving the natural habitat in designated environmentally sensitive areas. *cf.* EU (1985), p.10.

¹⁶ According to Regulation 2052/88 the interventions of the EAGGF Guidance Section in Objective 1 and 5b regions, seek, *inter alia*, to safeguard the environment, to preserve the countryside (*inter alia* by securing the conservation of natural agricultural resources) and to offset the effects of natural handicaps on agriculture. *cf.* EU (1988), p.12.

¹⁷ Regulation (EEC) 2328/91 repealed Regulation (EEC) 797/85, and was itself replaced by Regulation (EEC) 950/97. They are listed here as payments are still being provided under these regulations. Information based on a conversation with Mr Vera, DG6, on Oct. 26, 1999.

¹⁸ Both in Regulation 950/97 and in its predecessor Regulation 2328/91 “*the contribution to conservation of environment and rural areas, including the enduring conservation of the natural basis of agriculture*” has been defined as an objective. The measures under both regulations are financed by EAGGF, Guidance Section. EU (1997c), p.4., and EU (1991b), p.5.

¹⁹ Article 6.4 states that released land transferred to farming transferees must be farmed for not less than five years, in harmony with the requirements of environmental protection. *cf.* EU (1992b), p.94.

²⁰ According to Art. 1, “Purpose of the aid scheme” the regulation shall contribute towards forms of countryside management more compatible with environmental balance, combat the greenhouse effect, and absorb carbon dioxide. *cf.* EU (1992c), p.97.

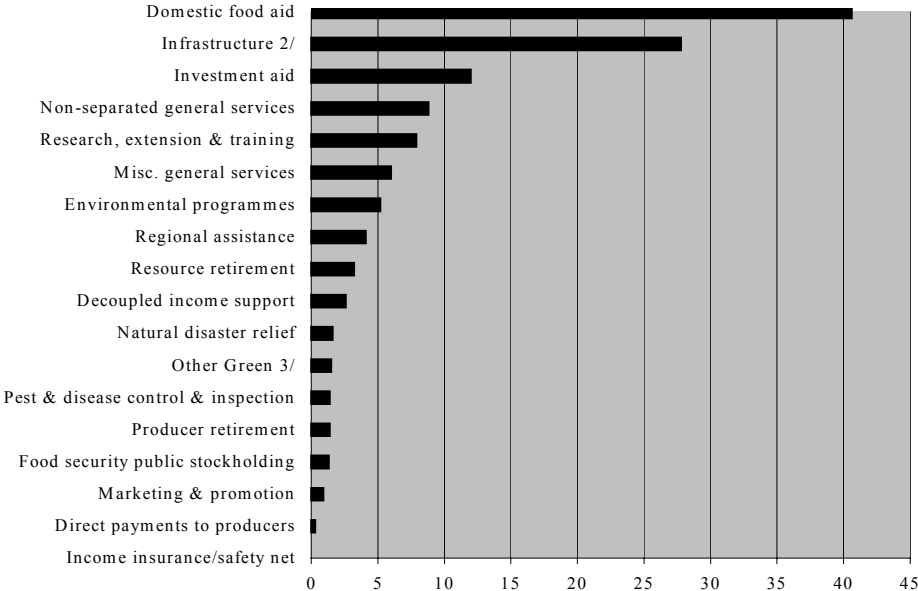
²¹ Some provisions entail an extensification of production. For reasons concerning the coherence of the Community legislation on the common agricultural policy it is necessary to fall back on existing regulations – *inter alia*, to Regulation 2328/91. *cf.* EU (1992d), p.50.

consultations with the Chair of the WTO’s Committee on Agriculture.²² As of now no such consultations relating to EU agri-environmental programmes have taken place.²³

One reason for why no actions have been brought so far can certainly be found in the currently very small funds allocated to environmental protection programmes. In 1996, the Green Box received 24.4% of the overall domestic support within the EU.²⁴ The shares of the EU environmental protection programmes relating to the Green Box and the “Current Total AMS” amount to only 18% and 8%, respectively.²⁵

The expenditure for notified EU environmental protection programmes increased from ECU 2,783.3 million in 1995/96 to ECU 4,223.7 million in 1996/97. As much as 74% of the difference is due to agri-environmental programmes in new Member States such as Austria, Finland and Sweden, which made use of the EU co-financing for the first time in 1996.

Overview 3: Green box expenditure, 1995 1/ (in billion US \$)



1/ Total of 36 countries who had notified green expenditures as of May 1998
 2/ One of several expenditure types in the “general services” category.
 3/ Includes all other expenditures notified as green where the type was not specified.

Source: USDA (1998), p.16.

A further 4.5% of the difference can be explained with the general expansion of agri-environmental programmes.

In 1995 measures under Regulation 2078/92 amounted to 21% of the EU agricultural expenditure; in 1996 this amount rose to 60%.²⁶

²² “This process of informal consultations on current implementation issues has helped to resolve or defuse a number of potential disputes or difficulties with regard to implementation”. Londoño (1998), p.8.
²³ Information given during a conversation with Mr Londoño, Chair of the WTO Committee on Agriculture, on Nov. 5, 1999.
²⁴ cf. WTO (1999d), p.7.
²⁵ cf. WTO (1999d), p.156.
²⁶ The calculation was based on the EAGGF expenditure (cf. COM 1998) and an average co-financing quota of 54.8%. cf. Deblitz & Nieberg (1998), p.16.

In 1995 not only the EU but also 13 other countries notified environmental protection programmes to the Committee on Agriculture, in 1996 12 further countries notified programmes.²⁷ The expenditure for all Green Box measures amounted to a total of US\$ 129,440.2 million in 1995 and to US\$ 126,735 million in 1996.²⁸

In 1995, US\$ 5,258.5 million were spent on environmental protection programmes and US\$ 7,487.9 million in 1996. Thus their share of the total Green Box expenditure amounted to 4.1% in 1995 and 5.9% in 1996. With 68.2% in 1995 and 67.7% in 1996, the EU spent the highest amount of the total expenditure of all Member States for environmental protection programmes, followed by Japan, Switzerland-Liechtenstein, and the USA.

A look at WTO Member States implementing environmental protection programmes shows a higher participation and a higher expenditure level in developed countries than in developing countries. According to the FAO this imbalance is an expression of greater financial resources and a potentially higher priority of environmental protection in developed countries. This fact contributes to the concerns of many developing countries that developed countries will benefit the most from environmental protection exemptions.²⁹

Table 2: Expenditure on all environmental protection programmes

Expenditure for notified environmental protection programmes in 1995 and 1996				
	1995		1996	
	Absolute in million US \$	Relative in % of total expenditure on environmental protection programmes	Absolute in million US \$	Relative in % of total expenditure on environmental protection programmes
Argentina	-	-	0.2	0.003
Australia	89.3	1.7	157.5	2.1
EU	3585.0	68.2	5072.9	67.7
India	33.2	0.6	-	-
Japan	858.0	16.3	1225.4	16.4
Canada	12.5	0.2	-	-
Korea	100.0	1.9	108.3	1.4
New Zealand	5.5	0.1	5.4	0.1
Norway	28.5	0.5	25.0	0.3
Switzerland-Liechtenstein	265.3	5.0	533.7	7.1
Slovakia	0.3	0.006	0.7	0.01
Slovenia	0.2	0.004	0.1	0.001
South Africa	2.8	0.05	22.6	0.3
Czech Republic	43.9	0.8	57.1	0.8
USA	234.0	4.4	279.0	3.7
Total	5258.5	100	7487.9	100

Source: Compiled by the author based on WTO (1999d)

3.5 Analysis of the Green Box Conformity of EU Regulation 2078/92

²⁷ cf. WTO (1999d), p.2.

²⁸ cf. WTO (1999d), p.5.

²⁹ cf. FAO (1999a), p.9.

“A treaty interpreter must start with the language of the treaty.”³⁰ This quote goes back to the “Vienna Convention on the Law of Treaties”³¹ which states in Article 31:

General rule of interpretation

1. *A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.*
2. *The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:*
 - a) *any agreement relating to the treaty which was made between all the parties in connexion with the conclusion of the treaty;*
 - b) *any instrument which was made by one or more parties in connexion with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty.*
3. *There shall be taken into account together with the context:*
 - a) *any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions;*
 - b) *any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation;*
 - c) *any relevant rules of international law applicable in the relations between the parties.*
4. *A special meaning shall be given to a term if it is established that the parties so intended.*

Thus, the interpretation of a text must take place in accordance with the genuine meaning of the provisions stated in the treaty text and with regard to the objectives and the intention associated with this meaning. Par. (3c) of Article 31 explicitly allows recourse to international law, *i.e.* to Agenda 21 and the Convention on Biodiversity, in order to interpret treaty texts. Furthermore, Article 32 of the Vienna Convention defines supplementary means of interpretation:

Recourse may be had to supplementary means of interpretation, including the preparatory work of the treaty and the circumstance of its conclusion, in order to confirm the meaning resulting from the application of article 31, or to determine the meaning when the interpretation according to article 31:

- (a) leaves the meaning ambiguous or obscure;*
- (b) or leads to a result which is manifestly absurd or unreasonable.*

If the meaning is left ambiguous or leads to absurd or unreasonable results, then members may fall back on the preparatory work of the treaty and the circumstances of its conclusion. According to the Appellate Body report on the dispute “US Standards for Reformulated and Conventional Gasoline”, the Vienna Convention shall be considered as part of the established rules on the interpretation of international law according to Article 3 of the DSU concerning disputes to clarify provisions of the agreements. Additionally, on the subject of decision-making, panels shall now pay more attention to the original treaty texts than to earlier panel findings.³² In the context of these statements the compliance of Regulation 2078/92 provisions with Agreement of Agriculture provisions will be reviewed.

³⁰ Appellate Body quoted from WTO (1998d), p.222.

³¹ Vienna Convention quoted from Petersmann (1996), p.112.

³² *cf.* Bourke, Griffith & Chance (1996), p.14.

Relevant for the review of Regulation 2078/92 are both the “basic criteria” in Par. 1 of Annex 2 and the “policy-specific criteria and conditions” in Paragraph 12 of Annex 2.

Prior to a detailed analysis of individual provisions, the succession of the Annex 2 criteria to be reviewed must be defined. For this definition, a parallel to GATT Art. XX can be drawn, which also contains a distinction between basic and policy-specific criteria.³³ With regard to the succession of the criteria to be reviewed the Appellate Body falls back on its finding concerning the dispute “United States – Gasoline” in the “US – Shrimps case”. According to the earlier finding of the panel the succession didn’t make a difference, but the Appellate Body corrected that. *“The task of interpreting the chapeau so as to prevent the abuse or misuse of the specific exemptions provided for in Article XX is rendered very difficult, if indeed it remains difficult at all, where the interpreter (like the Panel in this case) has not first identified and examined the specific exception threatened with abuse.”*³⁴

According to the Appellate Body the succession results form the basic structure and rationale of the article. The Green Box encompasses all subsidies for measures which are regarded as “acceptable” because their trade-distorting effects are only minor. They are therefore exempted from reduction obligations. The final long-term objective of the AoA is to correct or to prevent restrictions on and distortions in global agricultural trade. Thus the “basic criteria” should act as a *“normative or generally applicable benchmark”*³⁵ to help prevent their abuse or misuse – a possible misuse could occur because Green Box measures are very attractive – and the undermining of the abovementioned long-term objective. In conclusion the following succession for a review of the criteria arises: (1) “policy-specific criteria and conditions”, (2) “basic criteria”.

3.5.1 Criteria and Prerequisites for Subsidies in the Context of Environmental Protection Programmes

The review includes the following criteria: (1) Determination of the eligibility to receive such payments through an “unambiguously defined public environmental protection or conservation programme”; (2) compliance with “specified conditions including conditions regarding production methods or means of production; (3) “limitation of the payment level” to special expenditure or the income loss resulting from “compliance with the government programme”.

According to the FAO, one potential problem with respect to the exceptions to “environmental” protection programmes in the Green Box can be found in the term “environmental” which is not defined in the AoA and *“thus may lead to confusion as to what are considered valid environmental exceptions to Article 6.”*³⁶ The financial support of set-aside in sensitive areas to prevent soil erosion is considered a valid exception. However, it is not clear whether payments supporting the conservation of such rural agri-environments is also considered a valid environmental exception. *“Whether the environmental exceptions in the Green Box are meant to protect such rural agri-environments or a purely natural environment has not been resolved.”*³⁷

³³ In Art. XX GATT “General Exemptions” the introductory clause demands that the following measures are not applied in a way as to result in arbitrary and unjustified discriminations or concealed restrictions on international trade. Paragraphs a) to j) describe the “particular exceptions” in detail.

³⁴ WTO (1998e), p.44.

³⁵ cf. Shanahan, WTO Legal Division (1996), p.57.

³⁶ FAO (1999), p.9.

³⁷ FAO (1999), p.9-10.

Environmental protection and conservation programme: An environmental protection and conservation programme can be defined as such if it serves to promote environmental protection and conservation of natural resources. With regard to the definition of the term “resources” the Appellate Body fell back on Agenda 21, the Convention of Biodiversity, the United Nations Convention on the Law of the Sea and the preamble of the WTO Agreement to decide the “United States – Shrimps” dispute. In its report it states that with the preamble of the WTO Agreement, which recognises the objective of “sustainable development”, the members had been fully aware of the importance and legitimacy of environmental protection as an objective of national and international policies. The term “resource”, which is “*by definition, evolutionary*”³⁸, includes living as well as non-living resources.³⁹ In the “United States – Gasoline” dispute the panel recognised “clean air” as a natural resource, which can be exhausted.⁴⁰

Environmental protection objectives relating to agriculture and providing the basis for an evaluation of programmes as agri-environmental protection and conservation programmes will be discussed in the following section with reference to Agenda 21.

In Chapter 14 “Promotion of sustainable agriculture and rural development” Agenda 21⁴¹ highlights, *inter alia*, the following programme items:

Chapter 14.4(e) Land conservation and rehabilitation

“Land degradation is the most important environmental problem affecting extensive areas of land in both developed and developing countries.”

Chapter 14.4(g) Conservation and sustainable utilization of plant genetic resources for food and sustainable agriculture.

“Plant genetic resources for agriculture (PGRFA) are an essential resource to meet future needs for food. Threats to the security of these resources are growing [...]”

Chapter 14.4(h) Conservation and sustainable utilization of animal genetic resources for sustainable agriculture.

“Some local animal breeds, in addition to their socio-cultural value, have unique attributes for adaptation, disease resistance and specific uses and should be preserved. These local breeds are threatened by extinction as a result of the introduction of exotic breeds and of changes in livestock production systems.”

Chapter 18 “Protection of the quality and supply of freshwater resources” defines the following objectives under programme item (c) “Protection of water resources, water quality and aquatic ecosystems”:

18.39(c) To initiate effective water pollution prevention and control programmes [...].

³⁸ WTO (1998e), p.48.

³⁹ WTO (1998e), p.48-49.

⁴⁰ cf. Bourke, Griffith & Chance (1996), p.73.

⁴¹ BMU (1992a).

18.39(h) To put in place strategies for the environmentally sound management of freshwaters and related coastal ecosystems, including consideration of fisheries, aquaculture, animal grazing, agricultural activities and biodiversity.

“Major problems affecting the water quality of rivers and lakes arise, in variable order of importance according to different situations, from inadequately treated domestic sewage [...] to poor agricultural practices.”

Finally, Chapter 15 “Conservation of biodiversity” defines the objective to develop national strategies for biodiversity conservation and the sustainable use of biological resources.

“The current decline in biodiversity is largely the result of human activity and represents a serious threat to human development.”

In Article 1 the Convention on Biodiversity⁴² also declares the conservation of biodiversity as one of its objectives. In Article 8 “In-situ conservation”⁴³ the parties’ obligations are listed.

Art. 8 Each Contracting Party shall, as far as possible and as appropriate:

(a) Establish a system of protected areas or areas where special measures need to be taken to conserve biological diversity;

[...]

(d) Promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings;

While soil and water are abiotic resources, biodiversity as well as plant and animal genetic resources are biotic resources. The EU measures relating to Regulation 2078/92 can be classified as belonging to these two resource protection objectives (see Annex 7) and therefore contribute to meeting the obligations of the EU in the context of these agreements.⁴⁴

“Unambiguously defined” environmental protection and conservation programme: In the “Korea – Anti-Dumping Duties on Imports of Polyacetal Resins from the United States” dispute⁴⁵ the panel found the decision of the “Korean Trade Commission” inconsistent with Article 8.5 of the Antidumping Code, which requires *“a clear statement of findings and conclusions”*⁴⁶. The inconsistency is explained by the lack of specific findings with regard to the required tests for the existence of serious damage and the missing discussion on the role of “dumped imports” as a reason for imminent damage. Thus the “unambiguous” reference of the findings to the provisions to be reviewed is demanded as a prerequisite for consistency that needs to be proven. Furthermore, a clear relationship between the “specific” findings and an “unambiguous” statement can be identified.

In the case of environmental programmes the eligibility for receiving payments shall be established *“as part of a clearly defined government environmental or conservation programme.”* In this context, the OECD refers to a “clear and unambiguous” definition.⁴⁷ Therefore, a clearly defined environmental programme defines itself by a clearly defined environmental policy target, *i.e.* the environmental policy target should at least be prominent.

⁴² BMU (1992b), p.25 - p.43.

⁴³ In-situ conservation means preservation of ecosystems and natural habitats as well as maintenance and recovery of viable populations of species in their natural environments and – as far as domestic or cultivated species are concerned – in the surroundings where they have developed their distinctive properties..

⁴⁴ see also COM (1997c), p.13.

⁴⁵ The panel report was adopted by the Committee on Anti-Dumping Practices on April 27, 1993.

⁴⁶ Pescatore et al. (1993), p.229.

⁴⁷ cf. OECD (1994), p.29.

In addition, only the fulfilment of special requirements can guarantee that the environmental targets will be achieved. Only the special conditions transform an environmental programme into an “unambiguous” environmental programme.

Regulation 2078/92 pursues not only environmental policy objectives but also the objectives “to accompany the changes to be introduced under the market organization rules” and “to contribute to providing an appropriate income for farmers”. The regulation does not prioritise the particular objectives and hence it does not provide information on the prominent environmental policy target. According to the treaty text, the eligibility for receiving such aid shall be established as part of a clearly defined environmental and conservation programme. The reference to the criterion of clarity in the context of eligibility for receiving such aid allows reference to Article 2 of Regulation 2078/92. It states that aid will be paid only under the condition that it will lead to positive environmental effects. However, the list of “obligations” of the farmers refers both to extensive production methods [Article 2(a) to (c)] and to maintenance of the countryside and the landscape [Article 2(d) to (f)]. However, it must be considered that extensification and environmental improvement are interlinked. The obligations reflect the “special” requirements of the environmental and conservation programme. They will be discussed below.

Moreover, we have to distinguish between a “*de jure*” and a “*de facto*” unambiguous environmental programme. Legally, the clarity of the environmental policy objective may result from the facts discussed above, but is that also true in reality? Are the environmental effects consistent with environmental policy requirements and objectives? Though clearly defined positive environmental effects can be achieved by applying Regulation 2078/92, problems occur with regard to providing evidence for these positive environmental effects, as required. Most Member States do neither have an operational indicator approach nor do they have performance targets allowing them to appropriately assess their performance in relation to the stated objectives (see Chapter 3.4).

The “new” Regulation 1257/99 eliminates some of these imperfections. While this regulation as a whole seeks not only to support sustainable development in rural areas but to make an additional and complementary contribution to achieving the goals defined in Article 33 of the Treaty, Chapter VI “Agri-environment” unambiguously defines the environmental objectives. In the future, the “new” requirement for quantified indicators for evaluations will also allow for an environmental impact assessment, provided the indicators will be implemented.

Special requirements including requirements concerning production methods or inputs: According to the Treaty text, the special requirements shall include requirements concerning production methods or inputs, but are not limited explicitly to these requirements. In this case, “special” can also be read in the sense of characteristic or precise.

According to WILHELM & MARGGRAF cultivation methods are supported in the context of Regulation 2078/92 which can be summarised under the term “flexible extensification”.⁴⁸ The concretisation of this flexible extensification occurs in the Implementation Regulation 746/96: “Pursuant to Regulation (EEC) No 2078/92, the main undertakings to be given by farmers should normally go beyond the mere implementation of good farming practice, in particular by means of a substantial reduction in the use of inputs, [...]” Furthermore, in Art. 2 of Regulation 2078/92 eligibility requirements for payments are listed. The Table below classifies the “special” conditions and requirements as defined for the “domestic” measures corresponding with the guidelines in Article 2.

⁴⁸ See Wilhelm & Marggraf (1998), p.15.

Table 3: Requirements under the EU agri-environmental measures

	Absolute (No. of measures)	Relative (% of all measures)		Absolute (No. of measures)	Relative (% of all measures)
Pesticide safety requirements (PSR)	16	2.1	PSR + FR	8	1.1
Fertiliser requirements (FR)	0	0	PSR + LR	1	0.1
Livestock requirements (LR)	13	1.7	PSR + others	14	1.9
Others (*)	85	11.4	FR + others	29	3.9
All types of requirements	289	38.7	LR + others	26	3.5
All without LR	189	25.3	None (**)	20	2.7
All without PSR	56	7.5	Total	746	100

Source: Compiled by the author based on DEBLITZ & PLANKL (1997).

(*) The row “others” includes for requirements such as: No alteration of landscape elements or of the percentage of grassland, maintenance of extensive agricultural production methods, location of the farm in a designated area etc.

(**) The programmes under “none” include mostly those aiming at relieving the market, as well as information and training measures.

The synopsis summarises 746 measures in 14 Member States. Though not complete – as not all information on all measures had been available when I wrote this study – it provides a good overview of the mandatory requirements. The share of 2.7% of the listed measures with “no” requirements at all is “extremely small”. Eighty-six percent of the measures include requirements in relation to production methods or inputs. To ensure the fulfilment of these special requirements, Art. 19 of Implementation Regulation 746/96 lays down the rules on compliance controls and requires that the local controls shall cover at least 5% of the beneficiaries annually. *“Evaluation can never substitute for control – if a measure cannot be adequately checked, it should not be the subject of public payment”*.⁴⁹

Finally, the following can be concluded: If the argumentation is followed with reference to Article 2 of Regulation 2078/92, then the EU programmes may indeed be environmental and conservation programmes in the sense of the WTO. Difficulties could arise once countries have to provide evidence of the *de facto* environmental effects. If a programme is financed with public funds, this programme will be defined as a governmental programme. Article 8 of Regulation 2078/92 sets the co-financing level of the EU at up to 75% or 50%, respectively; the remainder is financed by the individual EU Member States. On the basis of Regulation 2078/92 the EU agri-environmental programmes can thus be defined as “governmental environmental and conservation programmes.” Regulation 2078/92 contains special conditions including conditions with regard to production methods or inputs which are a prerequisite to eligibility for payments.

Limitations to payment levels: The level of payments is to be limited to the extra costs or the loss of income incurred, *i.e.* the limit set by these criteria must not be exceeded. In the “United States – Customs User Fee” dispute it becomes clear that the wording “shall be limited in amount to the approximate cost of services rendered”⁵⁰ must be interpreted in the

⁴⁹ COM (1998), p.122.

⁵⁰ *cf.* GATT (1994), p.248.

stricter sense. In its report of 1988 the panel supports the position of Canada and the EU, according to which the costs of the actual service, used by importers, shall be the assessment basis. The USA argues that this terminus will also be taken into account, if the total revenues do not exceed the total costs of the governmental activity in question. In the case “EEC – Production Aids Granted on Canned Peaches, Canned Pears, Canned Fruit Cocktail and Dried Grapes” the panel found in its report of 1985 that since its introduction the EU assistance paid to the processing companies “*had always exceeded that amount necessary to compensate for any increased costs [...]*.”⁵¹

In the AoA itself neither the calculation method nor the assessment basis has been defined in any way. The extra costs or the loss of income are created through compliance with the special requirements as part of the government’s environmental and conservation programme. Thus, the “usual” or “prevailing” agricultural activity serves as an assessment basis; it is also used as “base line” for agri-environmental programmes.⁵² By now the normal agricultural practice in Europe, also referred to as regular agriculture or good agricultural practice, refers to the compliance with the legal principles in agriculture.

Overview 5: Loss of income calculation

Loss of income calculation	
	Gross margin ⁵³ of the production abandoned
	Gross margin of the production commenced
+/-	Costs of use of additionally used production factors which have to be procured or have become redundant
+/-	Depreciation of acquisition costs of production factors that have to be procured or value of redundant factors of production, respectively
+/-	Subjectively based additional costs or reductions (risks etc.)
<hr/>	
	Sum of Payment

Source: Osterburg (1999).⁵⁴

Article 5 of Regulation 2078/92 states that it is the Member States’ responsibility to specify the extent of assistance granted according to the beneficiary’s commitment, the loss of income, and the incentive nature of the measure.

The “*costs incurred and income foregone*”⁵⁵ are the assessment basis for the EU’s agri-environmental programmes, less the potential extra income or savings arising as a result of the utilization of a regulation. Average values are used “*in all programmes*” to calculate payments⁵⁶; payment levels are based on averages of yields and forward estimates of market prices “*in most programmes*”⁵⁷. If necessary, Member States can introduce an additional incentive element which must be justified on the basis of objective criteria. Most programmes

⁵¹ GATT (1994), p.612.

⁵² cf. COM (1998), p.115.

⁵³ Gross margin = market profit minus assignable variable costs.

⁵⁴ Information given during a conversation with Mr Osterburg, FAL Braunschweig-Völkenrode, on Oct. 28, 1999.

⁵⁵ COM (1997c), p.5.

⁵⁶ COM (1998), p.115.

⁵⁷ COM (1998), p.117

base payment levels on loss of income calculations. “*The objectives, instruments, activities and undertakings of these regulations state that the Commission will only pay when [...] the payment is as high as the income foregone.*”⁵⁸ By basing the calculation of payment levels on the loss of income the Commission acts within the legal framework of the Treaty texts.

Table 4: Premia for organic farming in German regional states (DM per hectare)

State	Cropland		Grassland		Permanent Cropping	
	Continuation	Establishment	Continuation	Establishment	Continuation	Establishment
SH	-	250	-	250	-	-
NI	240	300	240	300	1200	1400
NW	200	300	200	300	960	1440
HE ¹	450 ²	450 ²	450	450	1440	1440
RP ³	450	450 (550)	450	450 (550)	1100	1300
BW ⁴⁵	260	260	260	260	1200	1200
BY ⁶	300-400 ⁷	300-400 ⁷	200-300 ⁷	200-300 ⁷	1000	1000
SL ³	250 ⁸	250 (300) ⁹	250	250 (300)	800	800 (1400)
BB	255	300	255	300	1020	1200
MV	-	300	-	300	-	1200
SN ⁵	450 ¹⁰	450 (550) ¹¹	260	260	1300	1300 (1500)
ST	300	300	300	300	1400	1400
TH ⁵	300	300	350	350	1200	1400
HH ¹²	250	300 (600)	250	300 (600)	1190	1400 (2800)
HB	250	250	250	250	-	-
BE	255	300	255	300	1020	1200

Values in brackets: Payments during the first 2-3 years after establishment – ¹Plus DM 200 per ha basic payment for the first 10 ha for AGÖL (Association of Organic Farming Organizations in Germany) members – ²For crops eligible for price compensation payments DM 350 per ha – ³Maximum assistance DM 35000 per holding – ⁴For the first 10 ha: plus DM 40 per ha – ⁵KULAP (Cultural Landscape Programme) (Saxony) / MEKA (Scheme for the re-alignment of production with the market capacity and for the protection of the cultural landscape) (Baden-Württemberg): in part additional support possible for cultivation of legumes – ⁶for the first 10 ha plus DM 80 per ha; Maximum assistance DM 24000 per farm – ⁷Depending on livestock density – ⁸For vegetables DM 350 per ha – ⁹For vegetables DM 400 per ha – ¹⁰For vegetables DM 700 per ha – ¹¹For vegetables DM 800 per ha – ¹²Maximum assistance DM 30000 per holding. Data: September 1996.

Source: PLANKL (1997), p.157.

According to the provisions only the loss of income involved in complying with the environmental programme is refundable. In cases where agri-environmental measures are in line with existing farm management or where agri-environmental measures were carried out prior to participation in the programme, compensation payments go clearly beyond that. Profit-taking effects occur where only minor or no adjustments in farm management are necessary. According to OSTERBURG (1999), the support for the continuation of desired farming practices would only then be justified, if an anticipated intensification of land use or the abandonment of a farm would be in conflict with the environmental objectives. Additionally, it could prevent a tactically motivated temporary intensification followed by financially supported extensification.⁵⁹ KAZENWADEL (1999) argues that participation usually prohibits the rezoning of agricultural areas to other forms of land use, which could imply high opportunity costs.⁶⁰

The continuation of organic farming practices can illustrate this fact. According to the Commission, within the first 2-3 years adjustment costs are taken into account when

⁵⁸ Information given by DG6 of the Commission via email dated June 23, 1999.

⁵⁹ cf. Osterburg (1999), p.8.

⁶⁰ Kazenwadel (1999), p.147.

calculating the loss of income. In later years compensation will only be paid up to the difference between the income generated and the income from conventional farming, which provides the base line, plus a potential incentive.⁶¹ A comparison between assistance payments for the continuation and establishment of organic farming practices respectively in Germany confirms this for the most part. In most regional states of Germany (*Länder*) additional payments for continuation and introduction of organic farming practices vary between DM 45 and DM 480.

In this context, SCHULZE PALS (1994) pointed out that the relative preference given to organic farming will only be kept up by the majority of farmers in the future, if the government continues to provide assistance. Therefore, compensation payments for the continuation of organic farming practices should be paid as long as the generated positive effects on the environment are not a “joint product free of charge” resulting from commercially viable production.

Furthermore, due to the design of assistance in form of standardised additional payments a high relative preference is given especially in areas with marginal soils.⁶² This takes us back to the point on excessive compensation for agri-environmental measures which fit well into existing farm management practices.

Table 5: Forms of premia differentiation

	G0	G1	G2	G3	G4	G5	G0+G1	G0+G3	G0+G5	G0+G3+G5	G1+G5	Rest	TOTAL
Absolute (No. of measures)	369	48	12	7	1	170	7	4	80	3	2	43	746
Relative (% of measures)	49.5	6.4	1.6	0.9	0.1	22.8	0.9	0.5	10.7	0.4	0.3	5.8	100

G0 = no premia differentiation

G1 = premia differentiated by crop yield category

G2 = premia differentiated by animal/cattle stocking rate

G3 = premia differentiated by duration of participation in the programme

G4 = premia differentiated by farm size

G5 = premia differentiated by other criteria

Rest = no details available, other combinations and addition or subtraction of premia

Source: Compiled by the author based on DEBLITZ & PLANKL (1997).

The cause for this excessive compensation cannot be found in the maximum payment levels as defined by the Commission in the relevant provisions, but in the Member States' preference for standardised payment rates.⁶³ After all, their percentages amount from 49.5% to 62%, as shown in Table 5.

⁶¹ Pers. comm.. (by phone) Mr Vera, DG6, on Oct. 26, 1999.

⁶² cf. Schulze Pals (1994), p. 299-300.

⁶³ I would like to point out at this point that standardised premia do not only result in an over-compensation for farms in regions with low-intensity farming but also in an under-compensation and, related to that, a non-participation of farms in areas with high-intensity farming.

From the wording of the provision in Annex 2, Paragraph 12(b) as discussed above it can be concluded that the additional payments must be designed to compensate only for the loss of income.

Due to the fact that the implementation focuses on less-favoured areas where the costs involved in complying with requirements are relatively low the potential level of excessive compensation may be considerable. In the literature dealing with this issue, the regionalisation of compensation payments is therefore favoured. However, it should be considered that this could lead to an intensification of the process of structural change, to the abandonment of marginal agricultural areas and subsequently perhaps to severe changes in farming. In this case, a combination with an additional compensation payment that takes the special situation of farms in less-favoured areas into account is necessary and should receive particular attention.

Finally, it should be clarified how the incentive component can be classified. It is still being granted under Regulation 1257/99. The payment level is calculated by taking into account the “need to provide an incentive.” TWESTEN assumes that this new regulation is still not in compliance with the guidelines of the AoA. “*Though it had been avoided to give details on the exact share of the incentive element, the explicit mentioning of the incentive system violates the provisions for its classification under the AoA.*”⁶⁴ According to FRIEDHEIM, the evaluation of the incentive system’s consistency with the WTO is a question of “degrees”.⁶⁵ This will be discussed once more in chapter 4.4.2.

*“The Commission has always argued that the incentive component of payments, provided it is limited to ‘transaction cost’, forms part of the costs.”*⁶⁶ According to BROMLEY, there is no world without transaction cost. “*The world without transactions costs is one without externalities.*”⁶⁷ He classifies three categories of transaction costs: “*Information, contracting and policing*”. The costs related to contracting include the valuation of the areas in question, advisory services, and the costs of negotiating and specifying the contract. “*These are typically only reported for public agencies – more properly they should include the costs to farmers themselves [...]*.”⁶⁸ In that sense, the transaction costs are part of the additional costs connected with compliance with the programme and as such are compliant with provisions of the Treaty text. In how far the panels will acknowledge them is unclear.

GATT Article VI “Anti-Dumping and Countervailing Duties” is based on the definition of a “normal value”. It can be possible to fall below this value, if the price of a product exported from one country to another is lower than the production costs in the country of origin plus an appropriate margin for selling costs and profit. Conversely, a kind of minimum price results from that. The second report of an expert group on “Anti-Dumping and Countervailing Duties” states that production costs include all direct or indirect costs. According to the expert group, this wording usually covers “*such items as, for example, the cost of materials and components, and labour, general over-heads, depreciation on plant and machinery and interest on capital investment.*”⁶⁹ Even if this reference seems quite far fetched, it might provide an indicator to prove that transaction costs are indirect costs or general overheads.

⁶⁴ Information via email by Mr Twesten, Agronomist at the Universität of Göttingen, on June 30, 1999.

⁶⁵ Information given during a conversation with Mr Friedheim at the WTO Department of Agriculture, in Geneva on June 21, 1999.

⁶⁶ Information via email by Petra Boonman, DG6, on June 14, 1999.

⁶⁷ Bromley quoted from ECOTEC (1998), p.141.

⁶⁸ ECOTEC (1998), p.141.

⁶⁹ GATT (1994), p.208.

The Commission grants an incentive to encourage farmers to participate in a programme, seeking to increase the voluntary participation rate as much as possible. The necessity of an incentive is also highlighted in the relevant literature.⁷⁰ The environmental objectives can only be achieved if the farmers participate voluntarily. The OECD recommends voluntary participation in schemes involving direct income payments. If farmers are obliged to participate in schemes that are not in their own economic interest, the probability of economic distortions will increase proportionally to the level of orientation towards the market.⁷¹ The principle of voluntary participation goes hand in hand with the need for an incentive element in the environmental programme in order to achieve the set environmental objectives.

Irrespective of the aforementioned possible argumentation to justify incentives, evidence to justify them can as well be found in international treaties adopted by WTO panel decisions. Chapter 14 of Agenda 21 states in Paragraph 14.2: Major adjustments are needed in agricultural, environmental and macroeconomic policy, at both national and international levels, in developed as well as developing countries, to create the conditions for sustainable agriculture and rural development (SARD). The major objective of SARD is to increase food production in a sustainable way and enhance food security. This will involve education initiatives, [and the] utilization of economic incentives [...]⁷².

Concerning measures, the section “Agricultural policy review, planning and integrated programmes in the light of the multifunctional aspect of agriculture, particularly with regard to food security and sustainable development” states further:

14.9 Governments at the appropriate level, with the support of the relevant international and regional organizations, should:
(e) Formulate, introduce and monitor policies, laws and regulations and incentives leading to sustainable agricultural and rural development [...];

According to Paragraph 14.11, the term “relevant organizations” also covers the GATT and its present successor organization. Their function is laid down in Paragraph 14.11(b) as follows:

(b) Encourage, in the context of achieving sustainable agricultural development and consistent with relevant internationally agreed principles on trade and environment, a more open and non-discriminatory trading system and the avoidance of unjustifiable trade barriers which together with other policies will facilitate the further integration of agricultural and environmental policies so as to make them mutually supportive;

The Convention on Biodiversity also addresses the necessity of incentives.

Art. 11 “Incentive Measures”: Each Contracting Party shall, as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity.

With regard to the emphasis given to the need for sustainable development by the Appellate Body (AB) and its relationship to both Agenda 21 and the CBD in the “United States –

⁷⁰ See Chapter 3.5., first part of study “European Agri-Environmental policy in the context of the WTO.

⁷¹ cf. OECD (1994), p.17.

⁷² All text emphasised by the author.

Shrimps” dispute, the acknowledgement that an incentive is needed seems to be possible. In the final analysis, the decision of the panel or the AB, respectively, with regard to its consistency with WTO Agreement texts will probably depend on the trade distortion caused by it. This trade distortion will be discussed in the next chapter.

At the WTO level, the timeframes for the calculation of premium payments have not yet been clarified. Under the premise that there is no new regulation the timeframe for the contract period is five years in the EU. With falling prices the lost revenues and consequently also the incentive component decrease. To maintain the premium levels a higher incentive component will then be required which could only be implemented if the evidence for higher adjustment costs and/or an actual environmental service rendered can be provided. Again, the latter requires the existence of indicators.⁷³

In conclusion it can be said that in terms of its consistency with the AoA text an evaluation of the calculation of payment levels pursuant to Regulation 2078/92 gives neither a clear “yes” nor a clear “no”. With regard to payment calculations on the basis of income foregone the regulation complies with the provisions. In the case of agri-environmental measures which fit in with the existing farming management practices and those agri-environmental measures already carried out prior to participation in the programme the payment level exceeds the loss of income. The maintenance of environmentally sound farming will, strictly spoken, only be eligible for support, if the abandonment of the farm or intensification are the only alternatives. In how far the panel will recognise the threatening reduction of positive environmental impacts can not be predicted. With regard to the over-compensation as a result of the granting of standardised premia, the wording suggests that the premia should be designed to only compensate for the loss of income. The granting of an incentive component is not explicitly included in the payment level calculation. It can be challenged by other Member States. Classified as transaction cost, it can be justified as an additional cost factor in the context of compliance with the environmental programme. Another line of argumentation stems from the voluntary participation and the resulting need for the granting of an incentive in order to achieve the desired environmental objectives. Another justification for the necessity of an incentive can be found in the principles of Agenda 21 and the CBD. But it is very obvious that a challenge will only be taken if the incentive causes significant trade distortions. This subject will be investigated in the following chapter.

⁷³ cf. Deblitz & Nieberg (1998), p.190.

3.5.2. No, or at most minimal, trade-distorting effects

To be classified as a Green Box measure exempted from the reduction obligation a measure must comply with the basic requirement that the domestic support measures have no, or at most minimal, trade-distorting effects or harmful effects on production. Consequently, all measures exempted from the reduction obligation must meet the following criteria: (1) providing the relevant support in the context of a publicly-funded programme (including a revenue waiver from the public authority) which does not result in a transfer from the consumers; (2) no support which could result in market support/price support for the producers. Furthermore, the measure-related criteria, *i.e.* those stated in Paragraph 12 with regard to environmental programmes must be met. According to FRIEDHEIM the wording makes it distinctly clear that Paragraph 1 precedes all other criteria.⁷⁴

A publicly-funded government programme not resulting in a transfer from the consumers: The agri-environmental programmes under Regulation 2078/92 represent a government programme funded by public authorities. A renunciation of state revenue based on granted tax relief was not laid down as part of the regulation. A renouncement of revenue could also be considered, if farmers are granted refunds as an incentive for making less use of natural resources instead of seeking to achieve a decrease in use based on the polluter-pays principle by imposing taxes. In 1974 the OECD Council explicitly emphasised the polluter-pays principle as a “fundamental principle of charging for prevention and combating environment pollution.”⁷⁵ In 1992 the countries involved in the Declaration of Rio (Principle 16) also affirmed their acknowledgement of the polluter-pays principle.⁷⁶ Therefore, its acknowledgment by the WTO can also be assumed, not least because of its market compliance. According to TOBEY & SMETS, new and additional environmental services exceeding the required level (=GFP) are regarded as compliant with the polluter-pays principle in many developed countries; this can be identified as a “weak version” of the polluter-pays principle.⁷⁷ Again, no renouncement of revenue exists in this case.

A transfer from the consumers would be given, if the costs of financing the programme were funded by higher market prices. However, financing by public authorities means that tax payers bear the costs, not consumers.

No support that results in market support for producers: The total AMS is defined as “*Sum of all domestic support in favour of producers in the agricultural sector*” (Art.1 (h) AoA), which includes, *inter alia*, direct market support. Such domestic support is subject to reduction commitments, because they are classified as trade-distorting and affecting production. The criterion discussed in this text is supposed to ensure that measures which represent an “indirect” market support for the producers will not be exempted from the reduction obligation. According to OSTERBURG, market support effects are only generated in the case of measures which are linked to production in one way or the other and cause positive income effects through participation in a programme resulting in an improved competition position – maintenance or expansion of production – when without participation in a programme reductions or stagnation should have been expected.⁷⁸ To recognise indirect support three problems must be taken into account.

⁷⁴ Information given by Mr Friedheim at the WTO Department for Agriculture during talks in Geneva on June 21, 1999.

⁷⁵ *cf.* OECD (1998), p.28.

⁷⁶ *cf.* BMU (1992b), p.46.

⁷⁷ *cf.* Tobey and Smets (1996), p.81.

⁷⁸ Information given during a conversation with Mr Osterburg at the FAL Braunschweig-Völkenrode on Oct. 28, 1999.

Problem 1: Agricultural products and environmental goods are “linked” products.

The production of an environmental good is very often connected with the production of an agricultural product. They will be questioned in cases where special payments for environmental services have been granted, if a direct subsidy for producing an agricultural product is presumed.⁷⁹

Table 6: Percentage of Member States’ expenditure on different categories of agri-environmental measures (1996 programme)

	B	DK	G	EL	E	F	IR L	I	NL	L	AU S	P	FI N	S	UK	EU- 15
1(a))	20 %	24 %	1%	14 %	4%	3%	2%	23 %	2%	1%	17 %	4%	5%	15 %	2%	8%
1(b))	58 %	46 %	56 %	35 %	35 %	15 %	49 %	43 %	32 %	39 %	18 %	42 %	6%	53 %	41%	
1(c))	5%	16 %	21 %	0%	15 %	79 %	21 %	22 %	0%	56 %	21 %	68 %	42 %	71 %	30 %	14%
2	14 %	14 %	21 %	50 %	42 %	3%	24 %	10 %	66 %	3%	3%	6%	7%	1%	14 %	3%
3	3%	0%	1%	0%	4%	1%	4%	2%	0%	0%	0%	4%	5%	7%	0%	

1(a) Organic farming

1(b) Farming with positive environmental impacts

1(c) Conservation of systems with low-intensity farming

2 Non-productive farming

3 Training and demonstration projects

Source: ECOTEC (1998), p.30.

Under Regulation 2078/92 the scope of the support is partly related to the nature of the product or service. Even if it is not profitable or possible to grow every desired product due to local conditions, an indirect incentive for producing a certain agricultural product cannot be ruled out under this circumstance. With Regulation 1257/99 the categories were reduced from nine to three, and thus this indirect incentive can be regarded as having been eliminated.

However, the impact on overall production arising from the link between production and agri-environmental measures is the question deserving utmost priority. Eighty-four percent of the funds spent on agri-environmental measures in the EU are linked to production. According to OSTERBURG, production can perhaps be maintained with that support but the area-related productivity, and as a result the production quantity, is decreased as a result of the environmental conditions imposed. In the context of these measures, production coupling has both stabilizing and restricting effects; therefore the overall impact is difficult to predict.⁸⁰

⁷⁹ cf. Swinbank (1999), p.51.

⁸⁰ Information given during a conversation with Mr Osterburg at the FAL Braunschweig-Völkenrode on Oct. 28, 1999.

Problem 2: Multiple Objectives

Many measures pursue a variety of objectives with the control of environmental impacts being only one of these objectives. In the US, Canada and the EU set-aside and extensification programmes help to reduce excess production and to achieve environmental improvements. It will be very difficult to detach the environmental element of a subsidy from the production element.⁸¹ Environmental improvement and extensification goals are closely intertwined, not only from a political viewpoint: production extensification usually has less harmful impacts on the environment and is indispensable to achieving environmental improvements. According to RUNGE (1999) it is not clear whether strict trade neutrality in the sense of no impact on prices or production has been equally important to the negotiating parties as the fact that the programmes do not have negative impacts on production and prices. The “Conservation Reserve Programme” in the USA is said to have lowered production (by approx. 35 million acres) and to have indirectly raised prices. But this would be a method of supply reduction and price support rather welcomed by farmers in competing countries. Furthermore, the assumption that neutrality of prices and production are the best indicators to justify the exemption of trade disciplines would be rather questionable.⁸² In relation to the environmental objective wanted to be achieved, the operational performance should rather aim at achieving environmental benefits than at pursuing a restriction of factor input. However, most Member States set no performance targets at all for measures under Regulation 2078/92.

Problem 3: In the long term all costs are variable

According to SENTI (1995), all domestic support measures packed in the Green Box are based on the consideration that these measures “do not distort the market, and do not affect the marginal costs or the supply curve and consequently the market price and the quantity produced and traded, despite the fact that they change the profit (the income) by changing the fixed costs.”⁸³ In the short term these considerations may be justified but in the long term all costs will be variable costs. In the long term, SENTI claims this domestic support will have the same effect as external cost savings, will shift the supply curve to the right, and will increase the supply quantity with preset prices given.

In the relevant literature, many experts hold the view that it is impossible to support agriculture without distorting effects and that any support will influence relative prices, even if the subsidies are not bound to product prices.⁸⁴ Characteristically, deficit financed support expenditure and the resulting increase in public sector deficit influence relative prices by changing the composition of aggregated demand, no matter whether the support is paid in the form of a price-distorting subsidy or in the form of a direct payment. Thus the question is not whether direct payments do cause price distortions but whether the extent of the distortion is substantial.⁸⁵

With the example of transition payments (= decoupled subsidies) under the Federal Agriculture Improvement Act (FAIR) adopted in 1996, RITCHIE & DIGIACOMO have illustrated that the theoretically possible total separation of income support and production decisions cannot be confirmed in practice. On the contrary, direct income transition payments

⁸¹ cf. Tobey and Smets (1996), p.83.

⁸² cf. Runge (1999), p.2.

⁸³ Senti (1995), p.7.

⁸⁴ cf. Sayan & Tin (1998), p.1.

⁸⁵ cf. Sayan & Tin (1998), p.1.

– which farmers consider as an increase in their spending power – can lead to an increased consumption of inputs and to environmental damage in the remaining areas and as a result thwart the environmental protection objectives.⁸⁶

Price supporting effects will also be generated if positive effects on incomes are coupled with participation in the programme. These are also referred to as profit-taking effects. Essentially, profit-taking effects can be distinguished by the incentive element and by the design of the premium system.

Profit-taking effects due to the incentive element: According to OSTERBURG, the income-relevant transfer payments for Germany will amount to approx. DM 145 million in 1997, if the starting point is a 20 per cent incentive element. Related to the EU – all Member States and the EU – the expenditure for 1997 amounted to ECU 2,757 million allocated to agri-environmental measures under Regulation 2078/92.⁸⁷ Thus the total income-related transfer payments, and subsequently the payments exceeding the loss of income, would amount to approx. ECU 551 million, if the incentive component is fully utilized. The fact that the EU share in the total expenditure on notified environmental programmes amounts to 68% might cause offence to other Member States. Hence, the incentive component leads to an indirect price support and does not presently comply with AoA provisions.

The minimisation of the profit taking effects caused by an incentive component can be achieved by a gradation depending on scale of the requirements. The Commission regards an incentive component as not necessary for broad measures demanding only the achievement of low requirements.

Profit-taking effects due to the design of the premium system: Almost half of the measures do not include differentiated premia. To grant standardised premia can mean that too much or too little compensation is paid for compliance with mandatory obligations depending on site quality, farm structure, farming intensity etc. According to a study prepared by OSTERBURG (1999), incomes on farms with extensive starting conditions tended to stabilise or to rise while the incomes of a control group of non-participants developed less positively. Losses occurring on participating farms without consideration of the environmental premium in the context of the EU's agriculture reforms of 1992 had been overcompensated for.⁸⁸

Another problem is the relationship of premia to absolute rather than relative reductions in fertiliser and pesticide use. Additionally, the volume of input use or the actual environmental impact prior to participation is not taken into account in the calculation of the premium level. According to POTTER (1998) this is the case, for example, in Germany and Finland. Similarly, the maintenance of a certain livestock type or production method is being abused by some Member States – even if that seems to be justified from an environmental policy perspective – “to offer blanket subsidies” for processing enterprises independent of the environmental value of their enterprises or the level of production method modifications.⁸⁹ Profit-taking effects and, consequently, price supporting effects take place.

According to OSTERBURG, the exact scope of income effects is difficult to calculate as it cannot be ascertained how the participating farms would have developed without participating

⁸⁶ cf. Ritchie & DiGiacomo (1997), p.16-21.

⁸⁷ The calculation is based on EAGGF expenditure amounting to ECU 1511 million in 1997 (cf. COM 1998) and an average co-financing rate of 54.8%. cf. Deblitz & Nieberg (1998), p.16.

⁸⁸ cf. Osterburg (1999), p.12-13.

⁸⁹ cf. Potter (1998), p.125.

in the programme and because impacts of the 1992 EC agricultural reform, which induced significant changes in income levels, interfere with the modifications, as mentioned above.⁹⁰ As of now no representative gauge of income impacts is available. Relevant efforts to evaluate the agri-environmental programmes are required in this regard. To minimise the profit-taking effects and to measure the level of payments in relation to the costs incurred, a stronger regionalisation is favoured, for instance by premia differentiation on the basis of the regions' level of earning power.

The above-mentioned impacts on prices and production are partly inherent in the Green Box, as has already been shown, and partly due to the design of agri-environmental programmes of the EU. This is the origin of discussions on quota systems, which have also been claimed for environmental programmes at the forefront of the negotiations to come. Non-product specified measures will as yet only be exempted from reduction obligations if they do not exceed the *de minimis* limit of 5%, while until now there has been no maximum limit for Green Box measures at all. The share of the EU's total expenditure for all notified environmental programmes in the total value of agricultural production, notified in 1996/97 as ECU 219.7 billion, amounts to 1.9%. Even if all EU environmental programmes are not exempted from the reduction obligation and added to the non-product specific AMS, the percentage would only come to 2.25% if these expenditures were added to the expenditures notified (subsidies for fertiliser and insurances; concessions on interest). This value is still clearly below the *de minimis* limit of 5% of total agricultural production which is exempted from reduction obligations like the Green Box. As far as the *de minimis* limit can be interpreted as an expression of a tolerable trade distortion on the part of the Member States, it can be assumed that the price supporting effects, amounting to less than the EU's total environmental programme expenditure and deriving from agri-environmental programmes under Regulation 2078/92, will also be tolerated.

According to the panel report in the dispute "EEC- Payments and Subsidies Paid to Processors and Producers of Oilseeds and Related Animal-Feed Proteins (Soya-Panel)" – adopted on January 25, 1990, regardless of an evaluation of the probability of challenges against agri-environmental measures due to their potentially quantitative trade-distorting impacts, it is sufficient that the system *per se* is capable of producing such effects. The panel report states that the subsidies provided to processing enterprises in the context of the related price system exceed the difference between the prices paid to the producers by the entrepreneurs and those they have to pay for the oilseeds, and thus represent a benefit for the enterprises. "*Even if this effect could not be established in each case, it was sufficient to establish that the system was capable of producing such result [...].*"⁹¹ With regard to agri-environmental programmes the following conclusion can be drawn, though it is obvious that the "systems" cannot actually be directly compared: Even if an indirect price support by means of profit-taking effects in combination with premium design cannot as such be quantified, a challenge is plausible on the grounds of the potential capability of the "system to set the premium level" to cause price support.

The findings of this chapter can be summarised as follows: The EU agri-environmental programmes represent publicly-funded government programmes not accompanied by a transfer from the consumers. A renunciation of revenue on the grounds of the non-application of the polluter-pays principle is not given, as the environmental services exceeding the required extent can be regarded as a "weak version" of the polluter-pays principle. The

⁹⁰ Information given during a conversation with Mr Osterburg at the FAL Braunschweig-Völkenrode on Oct. 28, 1999.

⁹¹ Pescatore *et al.* (1998), p.175.

criterion “no support resulting in price support for producers” shall ensure that measures which establish “indirect” price supports for producers are not exempted from reduction obligations. When determining indirect price supports three problems – *i.e.* joint products, multiple objectives, and, in the long-term, variable costs – must be taken into account, although these problems are fundamental and not specific to the EU. The question with regard to direct payments is not whether they cause price distortions, but whether they cause “substantial” price distortions. Profit-taking effects caused by the incentive component and the design of the premium system will be scrutinized as forms of indirect price support. It is a fact that price support effects do occur but at present their quantification is not feasible. Efforts to evaluate agri-environmental programmes are required in this regard. However the fact that premium calculation system could imply potential benefits is according to the Treaty texts reason enough for judging the programmes inconsistent with WTO law.

Until 2003 the special safeguards of the Green Box measures as apart of the peace clause will apply; until then the agri-environmental measures can only be challenged on the basis of reviewed criteria.

4. Political Conclusion

Concerning its compliance with the WTO the analysis highlights some inconsistencies and shortcomings of the agri-environmental programmes under Regulation 2078/92. What political conclusions result with regard to their design? The conclusions resulting directly or indirectly from the analysis are listed below.

I. Establishing operational performance targets

The justification for payments under an environmental programme needs evidence of their *de facto* environmental impacts. Clear performance targets and/or appropriate indicators as well as a defined reference system are necessary to achieve this goal. Where possible, the goal should be to achieve a specified environmental benefit. Otherwise, the desired relative reduction of the factors harmful to the environment has to be identified starting from a baseline level to be set.

II. Premia differentiation

Premia should be adapted to the specific situations of regions and holdings and oriented towards producing environmental benefits. It must be noted that the additional costs incurred as a result of premia differentiation (administration, control) do not exceed the savings generated by a decrease in profit-taking effects.⁹² A gradation depending on the extent of the mandatory environmental requirement should be considered for the incentive component. Additionally, it is necessary to define reassessment periods for premia.

III. Creating transparency

The notifications of the total expenditure for agri-environmental programmes and their description are not sufficient to allow monitoring by other Member States. The single components of the payment as well as the evaluation of the payment levels related to the desired environmental benefits and the specific conditions of location and farm should be made transparent and easily identifiable. In combination with the proven environmental

⁹² *cf.* Deblitz & Nieberg (1998), p.185.

benefits achieved, conclusions can be drawn as to the cost-benefit-ratio or the adequacy of the payment level in relation to the environment performance achieved.

IV. Clearly separating targets

Regulation 2078/92 includes a market objective, an environmental objective and an income objective; the new regulation on support for rural development corrects this basic deficiency. In combination with a re-design of the premium system the existence of farms in marginal areas could be threatened. Subsidies required in this context must clearly be separated from the environmental programme.

V. Improved evaluation

Shortcomings in terms of the evaluation of the EU environmental programmes are evident with regard to both environmental and income effects. Only an evaluation can provide evidence that set objectives have really been achieved and that the level of payment has “only” caused income effects up to the level of the incentive component.

VI. Coherence in agri-environmental policy

Developing countries in particular are sceptical about a possible abuse of Green Box payments provided to support agriculture; they are afraid that domestic support is only cloaked by a very thin green surface. Additional to the demand for more transparency, agriculture itself should be coherent and thus provide reliable evidence that environmental protection is a central concern of the countries in question. In the EU, some regulations as part of the Common Agricultural Policy have as yet prevented the achievement of environmental protection objective.⁹³

5. Conclusions

The main objectives concerning domestic support measures are to discipline and reduce them in order to minimise trade distortions on the one hand, and to allow as much flexibility as possible to design the national agri-environmental policy on the other hand. As the analysis shows it is not possible to resolve the resulting tension. It is thus inevitable that transparency be established in order to maintain the national flexibility to design national agri-environmental policy! Furthermore, in the context of “a package deal” the reconciliation between the disadvantages deriving for some countries and concessions in other categories of domestic support or in the areas of export subsidies and market access will be part of the political negotiations in the WTO.

The old good agricultural professional practice continues to be the “unknown variable”; its definition has always been taken for granted, once statements are made to justify the “subsidy” instrument. In the relevant literature a local or regional approach to defining good agricultural practice is favoured.

In the analysis of the Green Box capacity the importance of an incentive component has been addressed and its trade-distorting effects have been persistently emphasised. According to the Green Box criteria for environmental programmes, no incentive component has been intended, although it is regarded as necessary by everyone. With regard to that fact, the criteria should be revised. However, concentration on the incentive component must not

⁹³ cf. Hanley (1998), p.14.

obscure our view of harmful effects caused by Regulation 2078/92, as in many cases the payment levels are too low and as a result participation by farmers is limited, especially in intensive farming areas but also in programmes in the environmental protection sector. In this regard, it is necessary to increase the funds to cover environmental services exceeding good agricultural practice. Given the fact that government funds have become more and more limited they must be spent efficiently.

The model of lasting sustainable development includes concern for the related ecological, economic and social problems. However essential an integrated approach to sustainable agricultural development is, a separate approach is without any doubt equally important for the sake of transparency and efficiency when applying single political measures. With the environmental objective, the market objective and the income objective, the Regulation combines all three components. Ideally measures are established or combined by choosing one efficient tool to achieve every single target.

Last but not least, it must be pointed out that the share of the expenditure under Regulation 2078/92 amounts to less than 4% of the EAGGF Guarantee Section, and that the environmental effects therefore continue to be somehow positive without providing *de facto* evidence by way of indicators or performance targets. As was pointed out in the first part, the usual soapbox oratory ritual echoing the importance of environmental protection in the agricultural sector contradicts the agri-environmental policy within the EU which is still in its infancy. There is still a long way to go towards a comprehensive and coherent agri-environmental policy.

6. Annexes

Annex 1: Agri-environmental policy priorities of EU Member States

Member State	Land use extensification incl. organic farming	Designated conservation areas	Landscape elements	Traditional farming	Rural conservation	Training, demonstration
Belgium		●				●
Denmark	●	●			●	
Germany	●				●	
Finland	●					
France	●		●	●		
Greece	●					
Ireland				●	●	
Italy	●					
Luxembourg						
Netherlands		●			●	●
Austria	●			●		
Portugal			●	●	●	
Sweden	●		●	●	●	
Spain	●			●	●	
United Kingdom		●	●		●	

Source: Deblitz (1998b), p.58.

Annex 2: Percentage of area covered by Regulation 2078/92

Percentage of area covered by Regulation 2078/92					
	Area in ha ('000)	UAA in ha ('000)	% hectares covered		
			All areas	Ha in Objective 1 regions	Ha outside Objective 1 regions
B	22.7	1375	1.7%	1.0%	1.8%
DK	107.3	2722	3.9%	-	3.9%
G	6741.0	17335	38.9%	26.1%	44.6%
El	34.8	5741	0.6%	0.6%	-
E	871.1	29650	2.9%	3.7%	0.1%
F	6901.4	30170	22.9%	4.1%	23.6%
Irl	1089.6	4530	24.1%	24.1%	-
I	2291.3	16792	13.6%	7.7%	19.0%
L	96.6	127	75.9%	-	75.9%
NL	34.5	1848	1.9%	1.4%	1.9
P	664.2	3960	16.8%	16.8%	-
UK	2322.9	15870	14.6%	12.7%	15.0%
EU12	21177.3	130121	16.3%	9.2%	21.5%
Aus	2429.0	3585	67.8%	84.6%	66.7%
Fin	1877.5	2160	86.9%	-	86.9%
S	1642.2	3180	51.6%	-	51.6%
EU 15	27126.0	139046	19.5%	9.5%	27.8%

Source: after COM (1998), p.23.

Annex 3: EAGGF Expenditure under Regulation 2078/92

EAGGF Expenditure under Regulation 2078/92									
	1993	1994	1995	1996	1997	1998 (e)	Total	% 1998	% Total
B	0	0	0	1.2	1.3	12.4	14.9	0.7%	0.3%
DK	0	1.5	3	5.8	5.4	12.5	28.2	0.7%	0.5%
D	36.6	122.6	223.4	231.7	263	285.6	1162.9	16.5%	21.3%
El	0	0	0	1.5	8.5	6.9	16.9	0.4%	0.3%
E	8.3	13.8	15.7	32.8	39.4	76.4	186.4	4.4%	3.4%
F	67.1	73.1	106.2	118.9	147.9	143.1	656.3	8.3%	12.0%
Irl	0	0	19	43.4	97.6	113.7	273.7	6.6%	5.0%
I	0	0	54.4	41.5	368.5	379.4	843.8	22.0%	15.4%
L	0	0	0	0	4.2	5	9.2	0.3%	0.2%
NL	0.8	0.8	4.2	7.6	12.2	14.9	40.5	0.9%	0.7%
P	0	12	38.6	40	49.1	87.3	227	5.1%	4.2%
UK	9.7	7.2	20.1	25.5	37	50.2	149.7	2.9%	2.7%
E-12	123	231	485	550	1034	1187	3610	68.8%	66.0%
Aus	0	0	0	541	259.5	295.5	1096	17.1%	20.0%
Fin	0	0	0	256.6	134.7	140.5	531.8	8.1%	9.7%
S	0	0	0	43.4	82.7	103.6	229.7	6.0%	4.2%
E-15	132	231	485	1391	1511	1727	5467	100%	100%

Source: COM (1998), p.25.

Annex 4: Expenditure for agri-environmental programmes in the German regional states (*Länder*) and shares in agricultural area (AA) 1993-1997

German regional states	Expenditure in million DM	Share of EU funds in million DM	Area ha	Share of AA in %
Schleswig-Holst.	19.82	8.89	13.638	1.3
Hamburg	7.79	3.19	3.601	25.5
Lower Saxony	52.25	26.40	64.970	2.4
Bremen	0.65	0.26	.901	9.6
North Rhine-Westf.	27.64	12.88	41.538	2.7
Hesse	153.69	75.58	122.916	15.9
Rhineland-Palatinate	97.46	51.09	71.129	9.9
Baden-Württemberg	690.98	301.36	819.550	55.5
Bavaria	1077.31	512.56	2934.790	86.9
Saarland	18.25	8.99	29.705	40.6
Berlin	0.05	0.02	.93	4.1
West Germany	2145.89	1001.22	4102.831	34.9
Brandenburg	211.63	158.05	203.227	15.1
Meckl.-West Pomerania	52.70	36.91	53.072	3.9
Saxony	315.64	236.11	580.088	63.9
Saxony -Anhalt	131.06	81.94	126.616	10.8
Thuringia	224.86	168.08	174.367	21.7
East Germany	935.89	681.09	1137.370	20.4
East and West Germany	3081.78	1682.32	5240.201	30.2

Source: BMELF Information No. 51/52, published Dec. 22, 1997. Cit. based on Schöne (1999), p.196.

Annex 5: Codes for a definition of good agricultural practice

Codes:

- Codes of good agricultural practice need to describe not only what is bad but also what is good.
- The definition of good agricultural practice should reflect the need to protect ecosystem functions and to ensure an adequate level of biodiversity in agricultural areas. [...] relevant criteria need to refer to different geographical scales: individual habitats, fields, ecosystems or entire regions.
- The indicators used in the definition of good agricultural practice must serve clearly defined targets.
- The definition of tolerance thresholds needs to be spatially differentiated.
- Any definition of codes of good agricultural practice needs to be continually improved.

Source: Compiled by the author based on Knickel (1999a), p.9.

Annex 6: Selection of potential environmental policy tools

Economic approaches	Institutional and advisory approaches	Regulative approaches
<ul style="list-style-type: none"> - Input charges and duties as part of the PPP - Elimination or restructuring of existing subsidies - Introduction of payments for environment services - Production of non-food products (e.g. renewable resources) - Transferable emission certificates - Auction procedures 	<ul style="list-style-type: none"> - Direct advice to farmers - Education via media for farmers and the public - Reform of sector-related authorities and working methods of experts - Incentives for research in the field of sustainable agriculture - Improved consumption alternatives and improved marketing (e.g. eco-labelling) - Establishment of local groups in order to encourage participation and to strengthen the farmers - Enlargement of private and public partnerships - Support of best policies 	<ul style="list-style-type: none"> - Restrictions of potentially polluting practices - Ban of undesirable practices - Licensing agreements - Standards for the use of pesticides as well as for production and use of fertilisers - Adequate property rights for sustainable use of agricultural areas

Source: ECOTEC (1998), p. 32.

Annex 7: Environmental impacts with regard to (a)biotic resource protection targets

	Measure	A		Measure	B
1	No fertilising and plant protection in environmentally sensitive areas	4,1	1	Extensive orchards	4,3
2	Conversion of arable land to extensive grassland	4,0	2	Individual plots under environmental contracts	4,0
3	Multi-annual strips along banks and shores	3,7	2	Protective planting of trees and hedges	4,0
4	No use of mineral fertilisers and plant protection products	3,6	3	Multi-annual strips along banks and shores	3,8
5	No use of mineral fertilisers and plant protection products on grassland	3,2	3	20-year set aside for habitats	3,8
6	Environmental spread of liquid manure on arable land	3,1	3	No use of mineral fertiliser in arable farming	3,8
6	Organic horticulture, permanent crops	3,1	4	No fertilising and plant protection production in environmentally sensitive areas	3,7
7	Organic arable farming	3,0	5	Conversion of arable land to extensive grassland	3,6
8	Environmentally-friendly spreading of liquid manure on grassland	2,9	6	No use of mineral fertiliser and plant protection products on grassland	3,5
9	Protective planting of trees and hedges	2,7	6	No use of mineral fertiliser in arable farming	3,5
9	No use of mineral fertiliser in arable farming	2,7	7	Extensive use of grassland on individual plots	3,1
10	Livestock density < 1.4 LU/ha forage area	2,6	7	Multi-annual field margins	3,1
11	Individual plots under environmental contracts	2,5	8	Maintenance of abandoned land	2,9
12	Under-sowing	2,4	9	Organic arable farming	2,8
12	Organic arable farming	2,4	10	Late cut on grassland	2,7
12	20-year set aside for habitats	2,4	11	Reduced mineral fertiliser use on grassland	2,6
13	Reduced mineral fertiliser use on grassland	2,3	12	Organic arable farming	2,5
14	Integrated farming in horticulture and permanent cropping	2,2	13	Livestock density < 1.4 LU/ha forage area	2,4
14	Mulch seeding	2,2	14	Organic horticulture, permanent crops	2,2
15	Multi-annual field margins	2,1	15	Reduced mineral fertiliser use in arable farming	2,0
16	Extensive use of grassland on individual plots	1,8	16	Wider distances between rows	1,9
16	Maintenance of abandoned land	1,8	17	Minimum 4 elements to crop rotation	1,6
16	Extensive orchards	1,8	18	Environmentally-friendly spreading of liquid manure on grassland	1,3
16	Minimum 4 elements to crop rotation	1,8	19	Under-sowing	1,0
17	Integrated farming	1,7	20	Mulch seeding	0,9
17	No use of herbicides in arable farming	1,7	20	Integrated farming in horticulture and permanent cropping	0,9
18	No use of growth regulating product in arable farming	1,6	21	No use of growth regulating products in arable farming	0,8
19	Wider distances between rows	0,2	21	Environmentally-friendly spreading of liquid manure	0,8
19	Late cut on grassland	0,2	22	Integrated farming	0,5

A: Impacts on abiotic protection targets (-5/+5) ^B: Impacts on biotic protection targets (-5/+5)

Source: Compiled by the author based on Wilhelm & Markgraf (1998), p.37.

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