

Environmental standards and their linkage to support instruments of the EU Common Agricultural Policy

Bernhard Osterburg ¹, Heike Nitsch ¹, Lone Kristensen ²

¹ **Institute of Rural Studies, Federal Agricultural Research Centre (FAL),
Bundesallee 50, D-38116 Braunschweig, Germany
Email: bernhard.osterburg@fal.de, heike.nitsch@fal.de**

² **Danish Centre for Forest, Landscape and Planning,
The Royal Veterinary and Agricultural University
23, Rolighedsvej, DK-1958 Frederiksberg C, Denmark
Email: lokr@kvl.dk**



*Paper prepared for presentation at the 99th seminar of the EAAE
(European Association of Agricultural Economists), 'The Future of Rural Europe in the
Global Agri-Food System', Copenhagen, Denmark, August 22-27, 2005
- Poster session II -*

*Copyright 2005 by Osterburg, Nitsch and Kristensen. All rights reserved.
Readers may make verbatim copies of this document for non-commercial
purposes by any means, provided that this copyright notice appears on all
such copies.*

Abstract

Agricultural support payments in the EU are increasingly connected to compliance with environmental standards, through cross-compliance and “Good Farming Practice”-conditions. In this paper, this relatively new approach is analysed regarding targeting, compatibility with legal procedures, and effects on income and production. Compliance with standards is reinforced by more systematic controls and reductions of support payments. As farms are affected by such sanctions to a different extent, risk-analysis for selection of farms to be controlled is a crucial element of implementation. The real environmental impacts have to be considered, especially if indirect control indicators are applied. Furthermore, technical assistance and audits have to be promoted for the implementation of environmental standards.

Keywords: Good Farming Practice, cross-compliance, environmental standards
JEL-classification: K32, Q28

1 Introduction

In the framework of further development of the EU Common Agricultural Policy (CAP), environmental standards for land use and agricultural production are increasingly connected with agricultural support measures. This linkage can be seen as an integration of environmental aspects into the CAP and reflects the multifunctional role of agriculture. Since the policy reform Agenda 2000, both in the market and price policy (1. pillar of the CAP) and in the rural development measures (2. pillar) new linkages between support and standards have been established. In the first pillar, this linkage is defined as “cross-compliance”, while in the 2. pillar requirements are called “minimum standards” or “usual good farming practices” (GFP). With the Luxembourg reform decisions in June 2003, a more harmonised, obligatory approach for the 1. pillar will be introduced, including other objectives apart from environmental standards, e. g. plant and animal health and consumer safety. However, the focus of this paper will be on environmental standards. Its objective is to present and analyse different approaches of linkages between support and standards, based on empirical experience from different EU Member States, and on theoretical considerations. Emphasis is put on the question whether cross-compliance and similar approaches in the 2. pillar are efficient policy tools, which effects can be expected and which crucial factors have to be considered in the implementation process. This paper is based on outcomes of an EU Concerted Action on cross-compliance¹.

In the following, different types of cross-compliance are defined, and the theoretical framework of compliance and control is revised. Thereafter, experiences since the CAP reform Agenda 2000 with the optional cross-compliance approach in different EU Member States are analysed and compared with procedures of GFP definition and control in the 2. pillar. In a second step, the new cross-compliance approach of the 2003 CAP reform is analysed, concluding with an outlook on compliance mechanisms.

¹

For further information, see <http://www.ieep.org.uk/research/Cross%20Compliance/Welcome%20Page.htm>
The project was funded by the Commission of the European Communities RTD programme Quality of Life and Management of Living Resources under project reference QLK5-CT-2002-02640. The content of this paper does not necessarily reflect the views of the Commission and in no way anticipates future Commission policy in this area.

2 Definitions and properties of different approaches of linking support to compliance with standards

Cross-compliance means to make the reception of public support payments contingent upon compliance with environmental and other requirements. This term originates from the agricultural policy of the United States where this approach has been extensively applied since 1986 to enhance soil conservation and the protection of wetlands (Baldock and Mitchell, 1995; Latacz-Lohmann and Buckwell, 1998; Claassen *et al.*, 2004). Precondition for cross-compliance is the individual excludability from public support, which in the EU has been enabled through the conversion of price support into direct transfer payments since 1992. Thus, cross-compliance depends on the existence of direct payments and their allocation to individual farms (Russel and Fraser, 1995; Latacz-Lohmann and Buckwell, 1998; Webster and Williams, 2001). Baldock and Mitchell (1995) distinguish two types of cross-compliance:

- “Red Ticket” or obligatory approach: Eligibility for agricultural support is made contingent upon farmer’s attainment of given conservation standards
- “Orange Ticket”: Eligibility for agricultural support is made contingent upon farmer’s entering an otherwise voluntary incentive scheme with environmental objectives

The „orange ticket“ can be regarded as a sub-category of the “red ticket” approach and is suitable especially when farmers are unequally affected by cross-compliance requirements. Incentive payments can be understood as compensation for additional burden (Christensen and Rygnestad, 2000), thus increasing the acceptance for this cross-compliance approach. However, incentive schemes might lose their voluntary character when this approach is applied. As an example, in the U.S. especially strict cross compliance requirements could be alleviated through additional support from the Agricultural Conservation Program (Latacz-Lohmann and Buckwell, 1998).

Environmental incentive schemes („green ticket“) such as voluntary agri-environmental measures are a third option mentioned by Baldock and Mitchell (1995). Support payments are offered for farmers complying with especially targeted standards beyond the general baseline of requirements for all farmers. These payments can not be regarded as general agricultural income support because they compensate for additional cost and income losses due to specific scheme requirements. Such payments can be the starting point for another form of conditionality:

- eligibility for support for voluntary schemes can be made contingent upon farmer’s compliance with basic standards such as codes of „Good Farming Practice“ (GFP)

Compliance with basic standards can be seen as a general eligibility criteria for voluntary measures supporting actions beyond this baseline. Therefore, in the EU the term cross-compliance is used exclusively in connection with income support payments of the 1. pillar of CAP in spite of some similarities to the “Good Farming Practice”-conditionality in the 2. pillar.

Cross-compliance according to the obligatory approach is an instrument to enforce compliance with general environmental standards using the reduction of support payments as an additional sanction. Furthermore, a more systematic administrative control can increase the number of on-the-spot controls and thus the risk of revelation of breaches. Since most of the farms in the EU receive direct payments, cross-compliance is expected to improve enforcement of standards (Dwyer *et al.*, 2000). However, in sectors without direct payments, such as the vegetable, vine and fruit sector, cross-compliance will not become binding.

Therefore, a general question is whether attaching new requirements to existing income support payments is an efficient policy instrument. Since direct payments are allocated according to agricultural policy objectives and not according to environmental goals, the linkage between

both policies results in conflicts and a lack of targeting from the point of view of environmental policies (Webster and Williams, 2001). Farms most depending on direct payments must not coincide with those farms causing mayor environmental damages and which should be the main addressees of environmental regulations (Christensen and Rygnestad, 2000; Dwyer et al., 2000; Webster and Williams, 2001). The cross relations established between different policy sectors through cross-compliance might cause higher administrative cost, and are weakening the clearness of the policy system (Isermeyer, 2002).

Theoretically, the receipt of direct payments is voluntary, so that farms renouncing the receipt could avoid those cross-compliance requirements which go beyond the legal baseline (Russel und Fraser, 1995). In this case, cross-compliance is only effective in farms in which direct payments exceed the cost of complying with additional requirements (Christensen and Rygnestad, 2000; Webster and Williams, 2001). However, because of the high economic dependency of EU agriculture from direct payments, cross-compliance requirements *de-facto* have for most farms similar properties as legal standards (OECD, 2003), and sanctions through reduction of support payments have the same effect like increased administrative fines. Cross-compliance requirements based on legal standards are binding for all farms anyway, independently from the receipt of direct payments, but, in addition to administrative fines, beneficiaries of support payments might lose eligibility.

The introduction of ambitious requirements beyond legal standards can transform income support payments into agri-environmental schemes. Such a transition can be observed in the case of Switzerland, where the agri-environmental scheme “integrated farming” has been converted into the basic cross-compliance requirement for all support payments (Lehmann, 2001). By the same time, a “greening of agricultural policy” can provide new legitimacy to income support regimes, although the more ambitious cross-compliance standards are the lower is the remaining income effect of these payments.

Because the future of direct payments in the EU is insecure in the long run, cross-compliance is frequently seen only as transitional instrument at medium term (Christensen and Rygnestad, 2000; Dwyer et al., 2000). On the other hand, the new legitimacy through cross-compliance might at least in medium term hamper the reallocation of funds in favour of more targeted rural development measures, i.e. the transfer of funds of the 1. into the 2. pillar, the so called modulation.

In contrast to cross-compliance in the 1. pillar of the CAP, the “Good Farming Practice”-approach introduced into the CAP since the year 2000 means an additional conditionality only for beneficiaries of agri-environmental schemes and less favoured area allowances. Thus, less farms are reached, and beneficiaries are predominantly less intensive farms causing on average less environmental problems (Nitsch and Osterburg, 2004). The income effect especially of agri-environmental schemes is limited, so that in the future the risk of sanctions through reduction of payments as well of the 1. pillar can have impacts on the acceptance of these voluntary measures.

3 Theoretical considerations on sanctions

Administrations can apply two different approaches to improve compliance with environmental standards, that is deterrence through control and sanctions, or co-operation. Enforcement of legal standards with cross-compliance is based on command and control approaches. According to Becker (1968, cited in Bültmann and Wätzold 2002) individuals decide to comply with norms if benefits of compliance exceed those of non-compliance. Deciding elements for this choice are the advantage of non-compliance, the probability of detection and sanction of breaches (depending on control frequency and appropriate control indicators), and the level and effect of sanctions. This theoretical concept implicates that increased control frequency and higher

sanctions can improve compliance with norms. Hence cross-compliance leads to increased sanctions, enforcement is strengthened.

However, an analysis of compliance with agri-environmental law in Denmark has shown that knowledge and acceptance of norms are crucial for compliance (Winter and May, 2001), emphasising the importance of social motivation and moral principles of individuals. Cohen (1998) states that compliance with standards is higher when these norms are perceived as legitimate and equitable, and Bültmann and Wätzold (2002) found information deficits an important reason for breaches. This general observation can be substantiated for agriculture through the fact that many breaches can be observed even in cases where compliance is not expensive, e. g. documentation of fertiliser applications, or technical revision of field sprayers (Bergschmidt, 2003). Co-operative elements are therefore important elements of implementation and enforcement strategies, e. g. technical advice or information why norms are applied. However, administrative resources for technical advice may get scarcer when control rates are increased.

The principles of proportionality and equity are crucial for acceptance of norms and are therefore the basis for the imposition of administrative fines. Thus, in constitutional states it is not possible to increase administrative fines only because breaches are difficult to detect or control is considered to be too expensive. Administrative fines must correspond to the severity of the breach, the damage caused, and the possible economic benefit of non-compliance, and should be coherent with fines in other sectors. Because cross-compliance sanctions are applied to direct payments unequally distributed between farms, the principles of proportionality and equity are difficult to be fully respected. Furthermore, cross-compliance sanctions are enacted in addition to administrative fines which themselves are already considered to be “proportional”. This might lead to severe problems of acceptance and hamper co-operative approaches (Nitsch and Osterburg, 2004b).

The definition of compliance with basic standards as eligibility criteria for public support enables the state to withdraw benefits without considering the principles of proportionality and equity. Nevertheless, the effects of such sanctions are comparable to administrative fines, and the magnitude of cross-compliance sanctions can easily exceed the limits set for fines because of proportionality and equity objectives. In conclusion, the legal and moral implications of this “second” sanction in addition to fines have to be considered.

4 Environmental standards and linkages with instruments of the EU Common Agricultural Policy

Table 1 shows different definitions of environmental standards and the variety of terms used in connection with the CAP. In many Member States GFP is a general term used for statutory requirements based on legislation and not necessarily linked to CAP support. As a voluntary, advice-oriented concept, GFP can also go beyond this legal baseline. Also in the EU environmental legislation, GFP is understood as a general legal standard, independent from support measures.

Table 1: Definitions of environmental standards and their legal basis in the EU

EU environmental legislation and its implementation in the Member States	Additional national, regional and local environmental legislation	Additional criteria beyond legislation
Environmental Legislation defining environmental standards or Codes of “Good Farming Practice“ (GFP)		
Codes of GFP for technical advice		
Environmental requirements within the EU Common Agricultural Policy: Agenda 2000		
Agenda 2000: Regulation (EC) 1259/1999, Article 3: “general mandatory environmental requirements”		
Agenda 2000: Regulation (EC) 1259/1999, Article 3: “specific environmental requirements constituting a condition for direct payments” (cross-compliance, <i>optional for Member States (MS)</i>)		
Agenda 2000: Regulation (EC) 1257/1999, Chapter V, VI: Less favoured area allowance and agri-environmental measures: “usual good farming practices”		
Agenda 2000: Regulation (EC) 1257/1999, Chapter I, II, VII: (investment, young farmers, processing and marketing): “minimum standards regarding the environment”		
Luxembourg CAP reform decisions: Cross-compliance according to Reg. (EC) 1782/2003		
Annex III: “statutory management requirements – environment” (<i>obligatory for MS</i>)	<i>“Good agricultural and environmental conditions” partially covered already by legislation of Member States</i>	Annex IV “Good agricultural and environmental conditions” for cross-compliance (<i>obligatory for MS</i>)

Source: Bergschmidt et al, 2003.

In the framework of the CAP, there exist different definitions for environmental standards. The optional cross-compliance of the Agenda 2000 reform allows the EU Member States to define specific environmental requirements beyond legislation, while the option “general mandatory environmental requirements” is exclusively based on legislation. Within the Rural Development Regulation (EC) 1257/1999, the concept of GFP for less favoured areas (LFA) support and agri-environmental measures can include both statutory requirements and standards beyond legislation. Notably, GFP according to the EU definitions for agricultural policy is exclusively attributed to standards for these two support measures of the 2. pillar. Minimum standards regarding the environment for other RDR measures are normally based on statutory requirements. The implementation of GFP and minimum standards is obligatory for the Member States since Agenda 2000.

The obligatory cross-compliance within the reform package decided in Luxembourg in June 2003 refers to EU legislation and its implementation on Member State or regional level (Annex III of Regulation (EC) No 1782/2003). Furthermore, good agricultural and environmental conditions pursuant to Annex IV of this regulation have to be defined regarding requirements beyond EU legislation. Partially, these requirements may be already laid down in the existing national or regional legislation.

5 Experiences since implementation of Agenda 2000

5.1 Cross-compliance as an optional element of Agenda 2000

With the reform decisions of Berlin in the year 1999, cross-compliance has been introduced as an optional instrument for the Member States. Regulation (EC) No. 1259/99 enables Member States to define “specific environmental requirements constituting a condition for direct payments”, based on direct payments of the 1. pillar, which can be considered as a “red ticket” approach. 10 out of 15 EU Member States made use of this option (Petersen und Shaw, 2000; Bergschmidt et al., 2003). In many cases, requirements were defined in order to solve enforcement problems of existing legislation, e. g. the registration of irrigation water use in France. In other countries, standards beyond legislation were defined in order to tackle specific environmental problems, e. g. control of overgrazing in UK, or limited pesticide use in maize in The Netherlands. In Ireland, an „orange ticket“ approach has been applied since 2003. Farmers receiving sheep premium must reduce livestock according to regional ceilings and participate in an agri-environmental farm management scheme (Rath, 2003). After limited results of voluntary programmes, these cross-compliance measures were quite effective.

Other Member States defined a broader bundle of standards, but implementation and enforcement of these standards has been scarcely documented. In most cases, Member States defined cross-compliance conditions for specific direct payments, e. g. control of overgrazing for the beef and sheep premium. In Denmark, one of the most ambitious approaches has been implemented, but was abandoned for political reasons by April 2002, after severe acceptance problems with direct payment reductions of up to 100 %. Table 2 gives a schematic overview on the different national implementation strategies. It has to be considered that no harmonised EU-wide mechanisms for control and sanctions have been implemented. In consequence, maximum payment reductions varied between 10 and 100 % in the different Member States.

Tabelle 2: Implementation of cross-compliance in Member States of EU-15 in 2003

Standards beyond existing legislation	Austria	The Netherlands	Ireland	United Kingdom
Combination of existing legislation and standards beyond				Finland Greece Italy Spain
Legal standards	France			[Denmark, abandoned in 2002]
	few, specific requirements		bundle of requirements	

No Cross Compliance

Belgium, Denmark, Germany, Luxembourg, Portugal, Sweden

Source: Petersen und Shaw, 2000; Bergschmidt et al, 2003.

Obviously, the high variance of implementation in the Member States underachieved the expectations of the EU commission, so that in 2003 cross-compliance became an obligatory element of the new agricultural policy reform.

5.2 Standards of “Good Farming Practice” for rural development measures

In the framework of the Common Agricultural Policy the expression GFP refers only, in contrast to the usage in many Member States, to environmental standards as pre-requisite for agri-environmental payments and less-favoured areas allowances according to Regulation (EC) 1257/1999. A comparison of GFP definitions between Member States shows different strategies in selecting verifiable standards, the thematic focus and the amount of sanctions. Control is frequently carried out using few and indirect indicators (e. g. fertiliser

planning, technical revision of field sprayers), mainly in the field of fertiliser and pesticide use. As the importance of agri-environmental measures and less-favoured areas allowances differs between Member States, regions and farm types, control frequency varies substantially. Considering that the EU Integrated Administration and Control System (IACS) prescribes a control rate of at least 5 % of all beneficiaries, and the controlled farms are predominantly extensive and situated in less favoured areas, the efficiency of such administrative control is questionable (Nitsch and Osterburg, 2004a). GFP and cross-compliance standards remained largely unconnected, hence they are considered as different concepts based on different regulations. However, it will be increasingly difficult to explain this diversity of different standards to farmers.

6 Cross-compliance as an element of the CAP reform 2003

The 2003 CAP reform has become necessary since the previous reform Agenda 2000 was not far-reaching enough to tackle problems arising from EU enlargement and the world trade negotiations of the World Trade Organisation (WTO). Core element of the reform is the decoupling of direct payments from production. Because of decoupling, direct payments can be regarded as “green box” measures exempted from support reductions according to WTO requirements. Thus, there is no need to give new legitimacy to this support before WTO through the introduction of cross-compliance. The attachment of requirements of public concern to the direct payments aims at a better public acceptance of this agricultural support policy within the EU. The decoupled direct payments will be bound to agricultural area, and depend on compliance with statutory management requirements based on EU legislation in the field of the environment, food safety, plant and animal health, and animal welfare, specified in annex III of Regulation (EC) 1782/2003, according to their implementation in the Member States. The way to implement EU legislation differs in a wide range between Member States, because only few concrete restrictions for the farm level are defined EU-wide. Therefore, the limit between EU standards and additional national requirements is in many cases not quite clear.

According to annex IV of the regulation, agricultural land has to be maintained in “good agricultural and environmental condition”. Requirements for soil protection (erosion, organic matter, structure), the maintenance of landscape elements as well as a minimum level of land maintenance have to be defined by the Member States. Furthermore, Member States have to ensure that the ratio between arable and grassland does not decrease more than 10 % to the detriment of grassland at regional level, compared to the year 2003. For this, restrictions on farm level can be applied. Additional cross-compliance requirements in other areas, e. g. for irrigation water, can not be applied under the new regulation, thus several existing approaches in several Member States will expire.

In contrast to the former cross-compliance, the new approach has to be implemented by all Member States in a harmonised way. Cross-compliance refers always to the whole farm receiving direct payments, and to the total of 1. pillar direct payments. The minimum control rate is fixed at 1 % of all direct payment recipients. In Germany, and probably also in other Member States, this will lead on average to more systematic controls. Sanctions for intentional non-compliance shall be in general 20 % payment reduction and may vary between 15 and 100 % (Regulation (EC) 796/2004). Regarding requirements of annex III the commission gets a more direct control on enforcement of EU legislation in the Member States. As cross-compliance forms a direct connection between farm payments and implementation of EU legislation, insufficient enforcement can result in disallowance of EU funding. This enables immediate and direct sanctions of the EU against Member States. However, incomplete implementation of EU legislation will remain subject of comparatively long-lasting infringement procedures before the European Court of Justice. In Table 3 objectives and differences between the two sections of cross-compliance are depicted.

Table 3: Focus of the requirements according to annex III and IV

	Annex III: „Statutory management requirements“	Annex IV: „Good agricultural and environmental conditions“
Objective	Instrument for the enforcement of existing legal standards based on EU legislation	Ensure a minimum level of land maintenance, especially for non-cultivated land; avoid the deterioration of habitats, maintain grassland area, and protect soils
Environmental policy impact	Improved compliance due to more systematic control, harmonised control rates and higher sanctions	Introduction of new standards until now not regulated by the EU; these standards can restrict the scope for voluntary agri-environmental schemes
Income effect	No additional reduction of income effects of direct payments, because legal standards have to be respected anyway, but higher risk of sanctions for farmers	Additional standards can diminish income effects of direct payments
Possible problems	Intensive administrative co-operation between different special agencies necessary; no clear limit between „EU requirements“ (relevant for cross-compliance) and additional standards of Member States	Land without direct payments and not registered in the base period is not reached which might hamper grassland protection and management of marginal land

6.1 *Effects of decoupling*

The decoupled payment entitlements allocated to farms in the year 2005 will be tradable within defined regions and can be activated on any eligible agricultural land. The two main possibilities of introducing the decoupled, payments, which shall be based on a historic reference situation, are the single farm payment (Regulation (EC) 1782/2003, Art. 33ff.) and flat rate area payments (Art. 58ff.). These forms of implementing the decoupled payments have not only different distributional effects between farms and regions, but also impacts on the area controlled through cross compliance.

If the single farm payment is introduced, which will be the case in about 8 Member States of EU15, there is an incentive for farmers to exclude – if possible – area from the base area for which they will receive payment entitlements. This is because the single farm payment is fixed according to an individual historic baseline. A significant share of grassland is not included in the IACS statistics, at least in Germany, since it was not relevant for the receipt of payments, so that exclusion of grassland would be possible. Concentration of entitlements on less area leads to higher payment entitlements per hectare and to a higher independence from land owners, because less land is needed to activate the payment entitlements. As a result, more land remains without payment entitlements. In addition, when implementing the single farm payment certain crops (sugar beets) receive no payment entitlements, but are eligible for payments. Also land users without direct payments in the reference period will not receive payment entitlements, but have eligible land, e.g. horse owners with grassland. Thus, eligible land for activation of payment entitlements will possibly exceed the number of hectare-based payment entitlements to a significant extent.

In case that regional flat rate payments are introduced, farmers get a strong incentive to increase their eligible land, as for each additional hectare they will receive an additional area based payment entitlement. Thus, only few area will remain without payment entitlements, but payments per hectare are “diluted” because more land is included into the system. Nevertheless,

also in this approach agricultural land “discovered” after the start of the decoupled system in the year 2005 will not get payment entitlements .

Decoupling of support from production can lead to abandonment of productive land use in less favoured areas. Therefore, minimum requirements for land management were introduced. Through trading, payment entitlements can be transferred to more favourable areas which are kept in agricultural use anyway or which can be maintained more easily with machinery. In the single farm payment system, more land without payment entitlements will fuel the trade with premium titles. Especially grassland with difficult management conditions, e. g. on slopes or in wetlands, will be in danger to lose payment entitlements , which would lead to the situation that cross compliance will not be binding on such land, if it doesn't belong to a farmer who receives direct payments. Marginal lands often offer high value for biodiversity but maintenance of those areas could become more difficult in future.

Positive income effects of the payment entitlements will benefit the first recipients of these rights in 2005 or land owners in accordance to relative scarcity (Isermeyer, 2003). Farms with a high share of rented land or expanding farms which do not own sufficient payment entitlements realise less income from support payments as premium rents are transferred to owners of land and payment entitlements . Thus, such farms are much more affected by cross-compliance sanctions, as sanctions are based on the full amount of the received payments.

6.2 Cross-compliance based on EU legislation

In this sections, aspects concerning the enforcement of EU legislation according to annex III of Regulation (EC) 1782/2003 are discussed.

6.2.1 Comparison of administrative fines and payment reductions

After introduction of cross-compliance farms can be sanctioned in three different ways for non-compliance with relevant legal standards: administrative fines, cross-compliance payment reductions in the 1. pillar, and sanctions for non-compliance of GFP standards in the 2. pillar. As an example, administrative fines in Germany reach a maximum of 15,000 € in the area of fertilising and 50,000 € for pesticide use. In practice, fines remain far below these maximum values and amounted up to 4,500 € for exceeding the ceiling of organic manure applied per hectare, or 550 € for the absence of soil analyses (Bergschmidt, 2003).

According to the respective German law (Gesetz über Ordnungswidrigkeiten (OwiG)), administrative fines are only applied in case of intentional infringements. The equivalent cross-compliance sanction would be at least the minimum payment reduction of 15 % in case of intention. Assuming an area payment of about 300 €/ha, payment reduction would amount to 45 €/ha. Payment reductions equivalent to maximum fines are reached for breaches of organic manure ceilings in farms with more than 100 ha, and fines regarding soil analyses even exceed administrative fines in farms above 12 ha. In this case, in about 60 % of all farms and on 90 % of utilised agricultural land cross-compliance sanctions would exceed 100 % of the maximum administrative fine, and this sanction would be applied in addition to legal, “proportional” fines. This means that in many cases the amount of sanctions is at least doubled through cross-compliance and, if payment reductions of 100 % are applied. This can put into question the existence of the respective farm (Nitsch and Osterburg, 2004b).

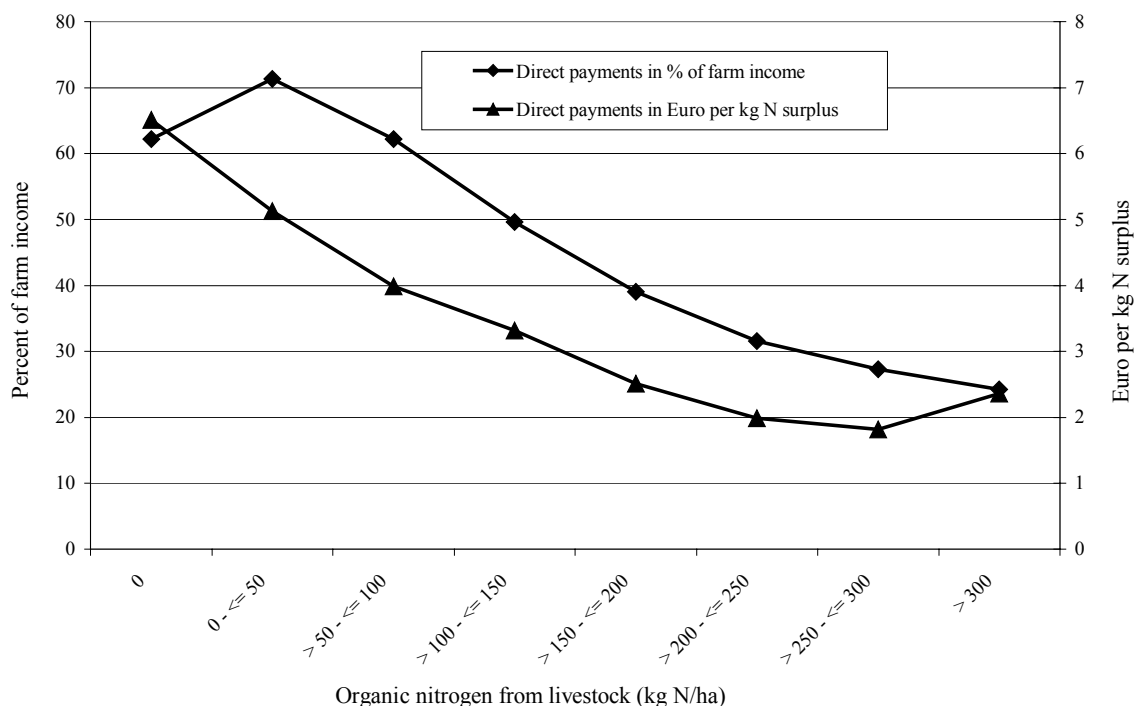
Although cross-compliance sanctions shall depend on severity, extent, permanence and repetition of infringements, the minimum sanction of 15 % for intentional breaches can lead to disproportional sanctions. In case non-compliance is detected in an unimportant branch of a farm, or on a small proportion of farm area, the sanction nevertheless is applied on the basis of all direct payments. The existing implementation rules make it difficult to consider the principles of proportionality and equity. Controls of GFP in the 2. pillar which must be carried out at a rate

of 5 % can increase the risk of revelation of infringements, thus affecting the acceptance of voluntary 2. pillar measures (Nitsch and Osterburg, 2004a).

6.2.2 Ecological targeting

The preciseness of targeting cross-compliance towards environmental problems depends on the definition of control indicators, selection of farms to be controlled, and on the relative importance of direct payments in the different farms. Farm data of 16,000 farms of the years 1999/2000 and 2000/2001 have been analysed focussing on nitrogen surplus as one main environmental problem of agriculture in Germany (Nitsch and Osterburg, 2004b). As the EU Nitrates Directive was included into the set of relevant EU standards, this problem will be tackled through cross-compliance. In the following, the connection between the importance of direct payments and nitrogen surplus is analysed. Figure 1 shows regional flat rate payments of about 300 €/ha as percentage of farm income for farm groups stratified according to organic nitrogen from animal manure per hectare. On the right hand side Y axis the relation between direct payments in €/kg nitrogen surplus is illustrated. This is an indicator for possible cross-compliance sanctions related to nitrogen surplus.

Figure 1: Direct regional area payments as percentage of farm income and payments in Euro per kilogram nitrogen surplus in farms with different amounts of nitrogen from animal manure



In general, direct payments are so important that cross-compliance will be substantial for farm income in all of the analysed farm groups. However, importance of direct payments is much lower in farms with high livestock densities. Thus, the environmental problem addressed is not correlated with the importance of direct payments. Possible sanctions per kilogram nitrogen surplus are highest in farms with low livestock density. Although these farms cause less environmental problems, they could breach requirements, e. g. book keeping, used as indirect indicators for cross-compliance. As the experiences since Agenda 2000 show, indirect indicators

will probably be preferred in order to reduce administrative cost of cross-compliance control. Such indirect indicators can lead to sanctions which are not really reflecting the severity of environmental impacts. In this example, cross-compliance obviously is poorly targeted towards environmental problems. This shortcoming could be addressed through more targeted risk assessment of farms to be controlled. Furthermore, especially when applying indirect indicators for cross-compliance control the setting of appropriate, proportional sanctions is crucial.

6.3 *Cross-compliance beyond EU legislation (Annex IV)*

In the following, selected aspects concerning the enforcement of standards according to annex IV of Regulation (EC) 1782/2003 are discussed. These standards are beyond existing EU legislation.

6.3.1 *Conflicts with existing agri-environmental schemes*

Environmental standards beyond legislation can be in general enforced through disincentives such as cross-compliance or supported through incentive schemes like agri-environmental schemes. The normative decision how far cross-compliance should regulate standards beyond legislation is crucial for voluntary agri-environmental schemes which could lose legitimacy when requirements become *de-facto* obligatory in almost all farms through cross-compliance. Annex IV contains many aspects which could lead to conflicts with voluntary schemes when an ambitious implementation is intended. Through introduction of payments for grassland in conjunction with minimum maintenance requirements, basic agri-environmental grassland support schemes might lose legitimacy, and ambitious definitions of soil conservation standards could put into question the support of crop rotation, cover crops and conservation tillage (Osterburg et al., 2003). Against this background, in Germany it is a declared political goal not to affect existing agri-environmental measures (Nitsch and Osterburg, 2004b). However, cross-compliance standards intentionally kept at a low level will lead to high administrative cost without major environmental benefits, and only formally will comply with EU requirements.

6.3.2 *Standards for land management*

Low management requirements for non-cultivated land may result in large-scale mechanistic land management in less favoured regions, e. g. mulching. This form of land use will compete with extensive arable farming and grassland based extensive livestock keeping. If requirements for management of non-cultivated land are increased, as it is discussed e. g. in Germany, productive land use gets more attractive, because a higher share of the decoupled direct payment would be lost on non-cultivated land due to higher cost of management. Thus, high management requirements can result in a significant “re-coupling” of the decoupled direct payments. Trade relevant supply effects might occur especially when a high share of total agricultural land is marginal. On this land, ambitious, costly management requirements can lead to higher production. Less requiring standards for land maintenance enforce decoupling, as non-productive land management offers a low-cost option for activating payment entitlements. This is true e. g. for Denmark, where areas which have been set-aside or abandoned must be mowed at least every fifth year. In Germany, at least yearly mulching is required.

In Denmark, maintenance of permanent grassland and uncultivated areas as open areas with no establishment of trees and scrubs has been introduced in the Danish Agricultural legislation in 2004 as a *general* rule applying independent from cross-compliance. Farmers can avoid the legal and cross-compliance maintenance standards if they notify their uncultivated areas as ‘nature areas’. Additionally the rules do not apply for permanent grasslands which are placed on ‘very steep’ and ‘very wet’ locations where it is not possible to use a machine. However permanent grasslands protected under the Danish Nature Protection Act can not be notified as ‘nature areas’ implying the maintenance demand always will apply for these areas. Thus, farmers will be affected by maintenance requirements to a very different extent.

A particular problem arises from the fact that cross-compliance is binding for the whole farm area, i. e. also for land without premium entitlements. Farmers receiving direct payments are obliged to maintain all their land in good condition. Voluntary schemes can in principle not be applied in order to support this kind of basic land management because maintenance even of land without payment entitlements is *de-facto* obligatory for all recipients of direct payments. Without exemptions, management of land without payment entitlements through farmers could get more difficult in future.

6.3.3 Maintenance of grassland

Decoupled payment entitlements can be activated on any eligible land. This could put into question the existing relation between arable and grassland in the EU, which has been stabilised through the old arable support regime. Under this regime arable support payments were excluded for grassland. Therefore, grassland shall be maintained through a special cross-compliance requirement, although this might mean a coupling of payments to grassland based livestock production. The implementation regulation Reg. (EC) 796/2004 provides two requirements for the grassland area. In the first step, Member States are obliged to maintain grassland at the ratio to arable land of the year 2003. If the ration between arable and grassland decreases more than 10 %, in a second step measures have to be applied in order to restrict grassland conversion at the farm level. Replacement of ploughed grassland through seeding of new grassland is allowed, so that no site specific maintenance of grassland is possible. This regulation gives a strong incentive to “plough first” before the regional minimum level is reached and farm individual restrictions are applied. In spite of the new cross-compliance requirements, the protection of particular, ecologically valuable grassland sites will remain subject to specific national or regional environmental regulations or agri-environmental schemes.

7 Conclusions

The linkage between agricultural support of the CAP and environmental standards provides new control procedures and punishments in case of non-compliance. Sanctions in the framework of cross-compliance or GFP control and enforcement procedures will be additional to other fines and in case of cross-compliance probably much higher than usual administrative fines. Regarding their economic effect on behaviour of farmers they can be understood as surrogate fines. Their amount depends not only on severity of the breach and/or compliance cost but as well on the height of the direct payments. Therefore, there remain doubts about their targeted orientation and effectiveness as environmental problems addressed by cross-compliance often do not correlate with the importance of direct payments. Considering the unequal importance of direct payments in different groups of farms and widespread use of indirect indicators it can be questioned how targeted cross-compliance will be. For example, farms with very low livestock density depend more on direct payments, and expanding farms and young farmers, whose income effect of direct payments is lower, might be affected more by potential sanctions. Participants of agri-environmental measures or beneficiaries of less favoured area support are controlled above average (5 instead of 1%) and thus will have a higher risk of punishment not only for 2. pillar support but as well for 1. pillar payments, while many intensive farms are excluded from the 2. pillar “high control rate” procedures. This means a completely new situation for farmers participating in voluntary measures and might affect the acceptance of voluntary agri-environmental measures. However, from an environmental policy perspective the increased risk of punishment is seen as a key element for better enforcement of environmental standards in agriculture.

Compared to cross-compliance in the 1. pillar implemented in different Member States before the 2003 reform, the new obligatory approach is much broader. GFP in the context of the 2. pillar as well as the new requirements for cross-compliance, that are now to be harmonised for all Member States, constitute sets of minimum standards for agriculture, but they are as yet

unconnected. Both codes are influencing the design of agri-environmental measures. Together with the fact that Member States themselves are controlled by the EU, this can be an incentive of keeping the baseline, defined by these standards, at a low level.

Inefficient parallel control structures for cross-compliance and GFP can result in misallocations of scarce administrative capacities. Cross-compliance will be a more general approach compared to the verifiable standards of GFP. In this context, the existing GFP controls in the 2. pillar have to be critically revised. As not to risk voluntary agri-environmental measures defined above an obligatory baseline and in order to minimise control costs there is an incentive for the EU Member States and regions to define low standards and simplified indicators for control, which might have little regulatory impact. Indirect indicators may lead to less targeted procedures and disproportional, imbalanced cross-compliance punishments. Disproportional sanctions could affect acceptance of cross-compliance and can have detrimental effects on co-operative approaches in the field of agri-environmental policy. Furthermore, high cross-compliance sanctions might make politicians reluctant to further develop environmental standards.

Due to the high dependence from direct payments, cross-compliance requirements beyond existing legislation constitute *de-facto* obligatory requirements for agriculture in the EU. When direct payments is reduced in future, cross-compliance will loose importance, too. Cross-compliance will be used as a new justification for area based direct payments and thus might help to stabilise such support. However, the direct payments can not be understood as equivalent compensation for additional standards as amounts of payments per hectare as well as cost of compliance differ within a wide range throughout the EU.

In the long run, cross-compliance can not substitute effective environmental legislation and its enforcement as well as agri-environmental schemes. If politicians and administrations want cross-compliance having an environmental impact and being more than an additional set of standards to be administrated and controlled, it should be made sure that those farms are targeted which are most likely to cause environmental problems. As the farm data analysis has shown, some counter-balancing is needed:

- When selecting farms for control, risk assessment according to the potential environmental impact is crucial rather than considering the amount of direct payments per farm.
- Sanctions must consider the actual environmental impact, especially when indirect indicators are used. A standardised implementation of payment reductions based on percent rates could lead to imbalances and loss of target orientation.

Compliance with standards is not only a matter of control and sanctions but of awareness of the requirements. Therefore, the importance of information and advise has to be kept in mind. New approaches should focus on co-operative elements in implementation of environmental standards, which can include providing basic information, obligatory technical assistance after a first breach instead of monetary sanctions, and incentives for self-reporting and farm audits. The new measures in the 2. pillar, in particular the farm advisory service, provide opportunities to cope with this challenge.

References

- Baldock, D. and Mitchell, K. (1995). Cross-Compliance within the Common Agricultural Policy. Institute for European Environmental Policy (IEEP) London
- Bergschmidt, A. (2003). Country Report Germany. In: Bergschmidt A, Nitsch H, Osterburg B. (2003) Good Farming Practice – definitions, implementation, experiences. Annex II G [online]
<www.ieep.org.uk/research/Cross%20Compliance/Project%20timetable%20and%20available%20documents.htm> [cited in May 2004]
- Bergschmidt, A., Nitsch, H., and Osterburg, B. (editors) (2003). Good Farming Practice – definitions, implementation, experiences. Report on the results of workpackage 2 within the EU Concerted Action „Developing cross-compliance in the EU – background, lessons, opportunities“ including a European seminar in 2-3 June 2003, Braunschweig [online]
<www.ieep.org.uk/research/Cross%20Compliance/Project%20timetable%20and%20available%20documents.htm> [cited in May 2004].
- Bültmann, A. and Wätzold, F. (2002). Der Vollzug von Umweltrecht in Deutschland. Ökonomische Analysen und Fallstudien. Metropolis-Verlag, Marburg.
- Christensen, T. and Rygnestad, H. (2000). Environmental Cross Compliance: Topics for future research. Danish Institute of Agricultural and Fisheries Economics. SJFI - Working Paper no. 1/2000.
- Claassen, R., Breneman, V., Bucholtz, S., Cattaneo, A., Johansson, R. and Morehart, M. (2004). Environmental Compliance in U.S. Agricultural Policy, Past Performance and Future Potential. Economic Research Service Agricultural Economic Report Number 832.
- Cohen, M. A. (1998). Monitoring and Enforcement of Environmental Policy [online]
< www.vanderbilt.edu/vcems/papers/enforcement.pdf> [cited in May 2004].
- Dwyer, J., Baldock, D. and Einschütz, S. (2000). Cross-compliance under the Common Agricultural Policy. Institute of European Environmental Policy (IEEP) A Report to the Department of the Environment, Transport and the Regions, UK.
- Isermeyer, F. (2003). Umsetzung des Luxemburger Beschlusses zur EU-Agrarreform in Deutschland - eine erste Einschätzung. FAL, Arbeitsber. Inst. Betriebswirtsch. Agrarstruktur ländl. Räume 03/2003.
- Latacz-Lohmann, U. and Buckwell, A. E. (1998) Einige ökonomische Überlegungen zu „Cross Compliance“. Agrarwirtschaft 47 (1998) Heft 11: 429-431
- Lehmann, B. (2001) Das Beispiel Schweiz: Agrarumweltprogramme und Cross Compliance. Landbauforschung Völkenrode SH 231: 111-117
- Nitsch, H. and Osterburg, B. (2004a). Umweltstandards in der Landwirtschaft und ihre Verknüpfung mit agrarpolitischen Förderinstrumenten. Landbauforschung Völkenrode 2/2004 (54): 113-125.
- Nitsch, H. and Osterburg, B. (2004b). Cross Compliance als Instrument der Agrarumweltpolitik. Landbauforschung Völkenrode 3/2004 (54): 171-185.
- OECD (2003). Agri-Environmental policy measures: Overview of developments. Paris.
- Osterburg, B., Plankl, R., Bernhards, U., Klockenbring, C., Rudow, K., Becker, H., Gömann, H., Kreins, P. and Stegmann, S. (2003). Auswirkungen der Luxemburger Beschlüsse auf ländliche Räume, Agrarumweltmaßnahmen und die Ausgleichszulage : Studie im

Auftrag des BMVEL. FAL, Arbeitsber. Inst. Betriebswirtsch. Agrarstruktur ländl. Räume 9/2003.

- Petersen, J.-E. and Shaw, K. (2000). Overview of cross-compliance measures in EU member states. IEEP [online]
<imperia.wwf.de/imperia/md/content/pdf/landwirtschaft/landwirtschaft_agrarpolitik_cross_compliance.pdf> [cited in May 2004].
- Rath, F. (2003) Presentation at a seminar of the EU CA on cross compliance, „Potential for environmental cross-compliance measures“ 24./25.11.2003, Roskilde/DK.
- Russell, N. P. and Fraser, M. (1995). The potential impact of environmental cross-compliance on arable farming. *Journal of Agricultural Economics* 46 (1) (1995): 70-79.
- Webster, P. and Williams, N. (2001). Environmental Cross Compliance – Panacea or Placebo? 13th international IFMA Congress of Farm Management, 8.-13.Juli 2001 [online]
<www.ifma.nl/files/papersandposters/PDF/Papers/Webster%20&%20Williams.pdf> [cited in May 2004].
- Winter, S. and May, P. J. (2001). Motivation for Compliance with Environmental Regulations. *Journal of Policy Analysis and Management*, Vol.20, No.4, 675-698.