RECOMMENDATIONS FOR A COORDINATED IMPLEMENTATION OF THE EUROPEAN WATER PROTECTION LEGISLATION AND THE COMMON AGRICULTURE POLICY

Uta Lange

Wuppertal Institute for Climate, Environment, Energy GmbH, Doeppersberg 19, 42103 Wuppertal, Germany

ABSTRACT

The formulation of realisable water protection measures is an important field of action, which must be integrated further into the Common Agricultural Policy (CAP). Here, two directions of action have to be considered. On the one hand, a homogeneous standard of relevant regulations within the European Community must be implemented while at the same time the capacity to act nationally / regionally and adapted to the location must still be ensured (within regions and environmental sensitive areas). On the other hand, a reasonable differentiation between the application of Community legislation (e.g. water framework directive, nitrate directive) and voluntary / supported measures (e.g. agri-environmental measures, cooperative agreements) has to be defined. Furthermore, the recommendations to be made for CAP have to be practicable for an increasing number of members from 2004 onwards, i.e. it must be feasible to finance them and they have to be compatible with WTO. On the other hand the agricultural sector that covers around 80% of the European landscape and that represents the basis for the rural infrastructure should be duly taken account of in the framework of any water protection policy. Especially at this point in time it seems a convenient opportunity to shape a coherent and sustainable agricultural and water protection policy. Both policy fields are in a process of comprehensive change, which by coordination and integration could yield various synergistic effects.

Keywords: Common Agricultural Policy (CAP), European Environmental Legislation, Good Agricultural Practice (GAP), Water Framework Directive (WFD)1

INTRODUCTION

This paper tries to explain the interaction between agriculture and water policy and their overlaps. Above all, this paper should be viewed as an attempt to promote a coordinated implementation of the two policies to the benefit of both. Therefore it deems necessary to name mistakes and shortcomings of recent years as well as the ones of current proposals and to make recommendations for abating them. Further the paper has to be seen as a contribution to the discussion process about the link between the CAP (respectively it's midterm review) and the European Water Protection Legis lation (especially the implementation of the WFD). Since both policies are still under ongoing discussion2 this paper can only represent the discussion at this point in time and should thus merely be considered as a working document.

DESCRIPTION OF THE ISSUES

There is a growing concern that an unfavourable relation persists for the agriculture sector regarding its economical welfare profit. According to estimates of British scientists in 1996 the agricultural sector caused external environment and health expenses to the amount of about 3.5 Bn. EURO or 89% of the net income of all English farmers.3 The reason is the largely free respectively privileged consumption of natural resources for food production, which really is indeed a subsidy in-kind.4 Particularly grave are the negative external effects of the agricultural sector in regard to water protection. Agriculture puts pressure on water resources, mainly by diffuse pollution and structural damages during maintenance of waters.5 Water bodies can be contaminated by various agricultural inputs, especially the following activities can affect the quality of water bodies:

- Pesticides form application, handling and cleaning equipments 6
- Nutrients form fertiliser and manure application
- Pharmaceuticals from manure application, which derive from livestock farming

¹ This contribution is part of the project "Evaluation of policy measures and methodes to reduce diffuse water pollution" supported by the Federal Environmental Agency (FKZ 201 24 222) that is undertaken by the Wuppertal Institut in cooperation with the Forschungsgesellschaft für Agrarpolitik und Agrarsoziologie e.V. Bonn (FAA), the Kuratorium für Technik und Bauwesen in der Landwirtschaft (KTBL) and the Ingenieursgesellschaft für Stadthydrologie mbH. This paper only displays results for the topic field of agricultural policy.

² COM (2002) 394, COM (2003) 23

³ Pretty, J. N.; Brett, C.; Gee, D.; Hine, R. E.; Mason, C. F.; Morison, J. I. L.; Raven, H.; Rayment, M. D.; van der Bijl, G. (2000): An Assessment of Total External costs of UK Agriculture, in: Agricultural Systems 65, Essex.

⁴ Burdick, B.; Lange; U. (2003):Considering environmental aspects of direct and indirect subsidies - sector study agriculture, UBA-Texte

⁵ EEA (2002): The report states that, while progress can be seen in reducing discharges of organic matter and phosphorus to European rivers, mainly due to improved wastewater treatment, concentrations of nutrients still remained high during the 1990s. This relates in particular to nitrates, coming mainly from agriculture.

⁶ Main pathway for contamination of water bodies with PPA via point sources

HISTORICAL REFLECTION ON THE DEVELOPMENT OF BOTH POLICY FIELDS

Where agriculture and water protection policy overlap it is essential for consistent policy formulation to abolish the gaps, inconsistencies and neglects of the past. Therefore a brief review of both policy fields is given in the following and issues in respect to water protection are identified.

Common Water Protection Legislation in the EC

The current European water protection legislation was one of the first that was covered by the EC environmental policy and comprises actual more than 25 water-related directives and decisions 7. Its development is marked by three waves 8: The first wave started with the initiation of the first Environmental Action Programmes in 1973. Since the end of the 1970s, several measures for the reduction and prevention of water pollution have been introduced, based primarily on a regulatory approach. These directives subdivided the aquatic eco-systems into individual protected commodities and named environmental quality standards for each specific type of water like:

- Surface water directive (75/440/EWG)
- Bathing water directive (76/160/EWG)
- Fish water directive (78/659/EWG)
- Shellfish water directive (79/923/EWG)

Other directives established values for emission limits that would regulate the permissible level of discharges of dangerous pollutants in the future:

- Dangerous Substances Directive (76/464/EWG) and
- Groundwater Directive (80/68/EWG)

In practice however the dual approach of the first wave did not only lead to highly fragmented water legislation, but also to huge implementation problems.

Within the following development water protection is bounded to the generally upvaluation of environmental protection. With the coming into force of the Single European Act in 1987, environmental protection was established as an independent area of responsibility in the EC Treaty. Thus further possibilities to create secondary Community legislation for water protection opened up. Even stricter environmental protection rules were established in the Treaty of the European Union (1992)9. Along with this the link between two policies, one of the oldest (agriculture) and one of the newest ones (environment) at European level, had become legally bound by e.g. Article 6 of TEC that states:

"Environmental protection requirements must be integrated into the definition and the implementation of all the Community policies and activities... in particular with a view to promoting sustainable development"

Deficits in the Common Water Policy

Although there are still gaps and inconsistencies in the water protection legislation, the biggest problem of the past was not insufficient legislation, but the fact that basically no directive had ever thoroughly implemented and applied by the member states. 10 On the top of the list of judgements of the European Court of Justice are the Dangerous Substances Directive 76/464/EEC and Groundwater Directive 80/86/EEC.

In the case of the Nitrate Directive 91/676/EEC enquiries have been ordered against 13 out of 15 member states. For example, Germany had to stand answer for insufficient implementation at the European Court of Justice because of too high supplements for application losses stipulated in the German Fertiliser Ordinance.11

⁷ Barreira, Ana (2002); The framework Directive and its Non-Deterioration Clause; Practical Implications for the Spanish Hydrological Plan; in Environmental Law Network International 2/2002 p.36

⁸ Federal Ministry for Agriculture and Forestry, Environment and Water Management (2000): EU launches new water policy, in: Aqua press international 5/2000, p. 10f

⁹ The following regulations form the legal basis for creating legal acts with the aim of protecting water.

[•] According to Art. 2 of the EC Treaty the realisation of environmentally sound growth is a task of the Community.

[•] According to Art. 3 of the EC Treaty environmental protection is a joint field of action of the Community. According to Art. 130 r, paragraph 2 of the EC Treaty environmental policy aims at a high level of protection. Essentially it is based on the precautionary principle, the principle of prevention, the polluter-pays-principle and the principle of combating damage at the source. (see Holtmeier; E.-L., (1997) a.a.o)

¹⁰ For example nine Member States were found guilty by the European Court of Justice for non-compliance with water legislation in 42 cases concerning 17 Directives.10. In addition a large number of further infringement proceedings are pending.

¹¹ The application range of the Nitrates Directive is not touched by the WFD. Its qualitative requirements (max. 50 mg/l Nitrate in groundwater) remain valid.

Development of the Common Agriculture policy (CAP)

The CAP was formulated in the Treaty of Rome (1957) and hence has developed into the most complex policy of the Community. The main objective was to increase agricultural productivity and to ensure a proper living standard for farmers. Environmental objectives were not considered. In order to achieve the main objectives, the EC pursued an income-oriented price support policy, which has stimulated the intensification and concentration of agricultural production and has contributed to rising environmental problems ever since.

From the mid-60s the agricultural production became a surplus production, with growing financial requirements for storage, discreation and export refund. Due to increasing financial burdens on the EC budget and the international pressure on the EC within the GATT negotiations to liberalise the CAP, the EC introduced programmes for extensive agricultural production and for setting aside arable land (1985). The goal of these programmes was primarily to reduce the production surplus and at the same time to reduce the negative environmental effects of agriculture as a side effect. Because this policy did not show the effect expected and due to the ongoing negotiations in the Uruguay Round, the EU passed the strongest change since the CAP came into existence. The central point of the reform of 1992 was that the price for major commodities like cereals and oilseeds was cut. Farmers' income losses were compensated by acreage premiums for these crops, coupled with land set-aside demands. Support for livestock husbandry by per-head payments was linked with livestock density. Within the framework of the so-called "accompanying measures" of the CAP reform, for the first time an independent, EU-wide agri-environmental programme to support environmentally acceptable production methods was created. The environmental goods - through state intervention - received the character of public goods, whose availability in sufficient quantity could not be guaranteed solely by the market. Especially those "horizontal" extensification measures aimed at the protection of abiotic resources served the target of water protection through the reduced use of fertilisers and pesticides.

The main characteristics of the agri-environmental programme its voluntary nature, the time limitations as well as the payment of a premium as compensation and incentives for farmers who want to introduce or maintain environmentally acceptable farming and countryside management procedures over the limits demanded by law.12 Environmental achievement must go beyond the legal standards so that the principle of burden sharing can be applied.13 For the necessary programmes, the EU provided its member states – in contrast to the former market regulating measures – with co-financing of 50% (resp. 75%) from the funds of the EAGFL (alignment) – the so-called 2nd pillar.

Assessing the reform of 1992, it has to be stated that it could neither clearly reduce the high burden on the budget nor the serious environmental problems. Although a slight decrease of fertiliser and pesticide usage could be identified 14, considerable changes in the intensity, for example, cereal cropping was hardly achieved. With only a 10% share of the agricultural budget, the provision of funds for accompanying measures remained low. Also the goal of a "just" allocation of support payments through the conversion to direct transfer of payments was missed. Consequently a further reform became necessary long before expected.

Agenda 2000

The Agenda 2000, after the reform of 1992, is the second most comprehensive attempt by the European Union to fundamentally reform agricultural policy.

The main points of Agenda 2000 are:

- Limiting the expenditure in agriculture to 41.66 Bill. EUR (in the middle of the years 2000-2006),
- further reduction of intervention prices for arable land cultivation and beef,
- further increase of compensatory payments,

With the ordinance to support the development of rural areas (1257/99 EEC), the European Commission set down its policy for rural regions. The ordinance covers a broad scope of measures to support structural adjustment and the development of rural areas. The most important points for water protection within the context of Agenda 2000 are:

Commitment to carry on agri-environmental programmes.15

12 Bromley, D.W. (1997): Environmental Benefits of Agriculture: Concepts. OECD Proceedings: Environmental Benefits from Agriculture: Issues and Policies. The Helsinki Seminar, p. 35-53.

¹³ In contrast to measures in water and nature conservation areas in which rights of disposal are limited without compensation within the framework of social bondage of property or against payment of compensation by sovereign requirements and prohibitions, agri-environmental measures differ because participants agree voluntarily and are able to withdraw unconditionally.

¹⁴ Stoyke; C. and Waibel, H. (1997): The development of land use and resource use in crop farming under the influence of the EU agricultural reform – Effects on the environment and the need for ecopolitical action. The Magazine for Environmental Policy and Environmental Legislation 3/97, p. 289-316.

¹⁵ The environmental targets of the agri-environmental measures in Art. 22 of 1257/99 EEC are described more precisely than in the previous ordinance, and targets relating to income and markets are no longer named.

12B Regulatory Framework:

- Conversion of compensatory payments for disadvantaged areas to a pure land premium that is linked to the implementation of the Good Farming Practice (GFP).16
- For the first time there was the possibility of support in the form of compensation for obligatory requirements in accordance with Art. 16 of 1257/99 EEC. Compensation can be awarded in areas with specific environmental limitations. Here protection areas according to the Flora and Fauna Habitat Directive or the Bird Protection Directive apply. New are also measures to protect the environment in accordance with Art. 33 of 1257/99 EEC, which make projects and investments in nature conservation and environmental protection possible.

Of greatest importance for the ecological alignment of European agricultural policy and therefore also for water protection is the so-called "Horizontal Ordinance" establishing Community rules for direct payments (1259/99 EEC). In this set-up member states are authorised to cut or delete direct payments to agricultural operations under certain conditions. The main points of the ordinance are:

- Direct payments (e.g. premiums for land and animals) can depend on whether specific environmental regulations are followed (cross-compliance);
- Direct payments can be cut by up to 20% depending on the workforce, the economic situation or on the total amount of support to the agricultural operation (modulation);
- Cuts in funds, which result from applying the horizontal ordinance, can be used for rural development measures.

The application of these measures has until now been optional for member states. Furthermore the Agenda 2000 was not able to solve the main conflicts of the agricultural sector: to achieve a just allocation of support payments and to reduce the negative environmental effects. In regard to environmental and especially water protection, the abandonment of the member states to make use of the instruments cross-compliance and modulation was hindering the initiation of a real change towards the improvement of water quality.

INTERACTION OF THE CAP AND THE WATER PROTECTION POLICY IN COURSE OF THE CURRENT DEVELOPMENT OF BOTH POLICY FIELDS

With the mid-term review of Agenda 2000, the present agricultural policy will have to stand to the test and comprehensive amendments are to be expected. At the same time the WFD will be implemented. Taking into account the implementation plans for both policy fields far-reaching changes of the following year are likely to happen. As far as the CAP is concerned the current financing period for Rural Development Programmes stretches from 2000- 2006. The next Rural Development planning period (2007-2013) will have to take into account changes in the CAP as a result of the current mid-term review. In 2004 the evaluation of the river basins according to Article 5 of the WFD will be completed. This evaluation could be fed into any discussion on the new financing period of the CAP, including budgetary issues (allocation of funding for Rural Development).

Proposal of the mid-term review and it's potential contribution to support the objectives of the WFD

The current proposals of the mid-term rewievs17 in contrast to the Agenda 2000 contain especially a change from an up to now voluntary to a mandatory application of the instruments cross-compliance and modulation and a complete decoupling of support payments. This could rend many synergies for water protection. On the other hand the proposals may also pose new threats to environmental and water protection.

<u>Decoupling</u>

Decoupling means the establishment of farm income payment by introduction of a single decoupled income payment per farm. 18 That means, farmers are completely flexible in the pattern of crops they grow. Evidently negative effects for water protection can be triggered by the fact that decoupling will make land-use change easier. Grassland that up to now was more or less protected by the valid support system from conversion to arable land can now be converted much easier with grave effects for water protection. The planned price decreases in the dairy market, that will take place at the same time, will pressure the dairy farming on top of it and the closing down of farms in extensive grassland locations has to be apprehended. At this point a mechanism must be found at EU level to guarantee an effective stability especially in sensitive areas that will secure the maintenance of grasslands independently even from the receipt of support payments. Advantages for environmental protection can be expected from the fact that through the gained flexibility of cultivation also crops are revived that were not compatible up to this time (agro-biodiversity). Albeit for water protection this will

only yield little effect.19

¹⁷ COM (2003) 23

¹⁸ This is basied on the average payment of the years 2000-2002.

¹⁹ Möller, C.; Kreins, P.; Gömann, H. (2003): Impact and Cost-Efficiency of Alternative Policy Measures to Reduce Diffuse Pollution Caused by Agriculture, Nr. MO62

Cross Compliance

Support from the CAP will be conditional on respect of statutory management requirements directly linked to farming 20, covering environmental, animal welfare, food safety and occupational safety aspects. Agricultural production will have to be carried out according to these statutory management requirements, and land will have to be maintained in good agricultural condition.21 This seems legitimate before the background that there is no legal right to the payment of subsidies and therefore the support payment is connected with a real consideration.

Based on the experiences of the past it is doubtful if legal compliance will be enforced by the member states. In particular the EU that is responsible for controlling the member states, has to develop the necessary pressure. In case of inadequate implementation and control by the member states, the support payments can be lowered or delayed. The farm advisory audit that shall support and enforce on single farm level - mandatory for farms receiving more than 15.000 EURO per year direct payments – is possibly not able to fulfil the function of an effective control mechanism. Neither an external assessment by an authorised verifier is planned nor essential problems like intent or inadequate knowledge could be managed with this system.

In addition farm types which get few support up to now and also in the future are mostly not reached with this measure and which in consequence can also be steered little with this instrument. These farm type – specialized farms for pig and poultry production – highly relevant for water protection because of their big amount of manure – can only be reached by regulatory and specific agricultural law.

Modulation and degressivity

The application of the modulation is an essential step towards a further callocation from the finance of market organisation (1st pillar) to the Rural development programs (2nd pillar) of the CAP. The Commission is proposing to reduce direct payments progressively over the period form 2006 to 2012 for all producers who receive support of more than 5000 EURO annually. This level of the reduction for producers in receipt of less than 50.000 EURO annually will reach 12 % in 2012 while for producer receiving more than this amount, the reduction will be 19%. But comparing the changes in the reform concept in the two communications COM (2002) 394 and COM (2003) 23 it implies a significant deterioration for environmental protection. The most incising modification of the reform concept is, that the application of the modulation has been delayed and the shifting of money from the 1st pillar into the instrument of rural development has been reduced clearly.22 For this reason the objective to strengthen rural development has been debilitated again.

Rural Development Programs

Rural Development Programmes provide for several measures to support farmers and the rural community. Some of these, in particular agri-environmental measures, support for less favoured areas and training and education, could directly contribute to the implementation of the WFD. But the increasing spectrum of measures can be seen critical due to the clearly reduced financial funds of the 2nd pillar in the last communication. In fact of abolishing the proposal to increase the co-financing quota there is no privileging of agri-environmental measures anymore.

Water Framework Directive - Reform of the common water protection policy

Adopted in December of 2000 the WFD introduces a remarkable change in Community water legislation by moving form protection of particular waters of special interest to protection and use based on overall appreciation of the hydrology and ecology of the entire natural cycle of each river basin. From a legal point of view, the WFD forms an umbrella for the implementation of various instruments of European water policy as well as an introduction of new standards and tools for the protection of the ecological quality of waters. It sets common objectives for water policy and establishes a legal and administrative framework, which may facilitate implementation of these objectives through co-ordinated measures within an overall planning process. Even the territorial validity has expanded strongly. The WFD sets common approaches and goals for the management of water in 27 countries (15 Member States and 12 pre-accession countries). The directive should also contribute to achieving the objectives of relevant international agreements (e.g. OSPAR and HELCOM).

At the moment, the success is difficult to assess and depends on future decisions. It will strongly depend on political will, on the participation of all stakeholders as well as on the exploitation of synergies between the various legislative

20 Annex III of the legal proposal as laid down in Communication COM (2003) 23, containing i.a. Directive 80/68/EEC on the protection of groundwater against pollution caused by certain dangerous substances, Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources, Directive 75/442 /EEC on wast, Directive 91/414/EEC conceringin the placing of plant protection products on the market, Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge ist used in agriculture, Directive 79/409/EEC on the sondervation of wild birds, Directive 92/43/EEC on the sonservation of natural habitats ans of wild flora and fauna, Directive 76/464/EEC on plooution caused by certain dangerous substances discharged into the aquatic environment of the community.

²¹ See Annex IV of the legal proposal as laid down in Communication COM (2003) 23, making reference to erosion, soil structure, organic matter, salinisation, and minimum level of maintenance

²² instrument modulation not from 2004 but only from 2006 onwards, a shifting will happen in the 2nd pillar by 1% (2006) rising up to 6% (2013), the biggest part of the means of up to 19 % will be used to finance measures of the 1st pillar and for direct payments for the accession states.

instruments provide for under the directive. One important question is whether enforcement of directives, which will be repealed by the WFD (in 6 and 12 years) will lose its current momentum. This is particularly critical with regard to the Dangerous Substances Directive (76/464/EEC) and the Groundwater Directive (80/86/EEC) because the clear and strong preventative approach of both pieces of legislation which could be at stake under the WFD. However, mainly the long deadlines, ambiguous provisions, an unclear level of protection as well as large number of opt-out clauses and time extensions are causes for some concern.

RECOMMENDATIONS FOR A CO-ORDINATED AGRICULTURAL AND WATER PROTECTION POLICY

In order to create a consistent legal framework as a basis for a coherent water policy it is of major importance to enforce the principles of the European environmental policy first. This entails in regard to the conflict of water protection and agriculture that the implementation deficits of the common water protection policy have to be eliminated and the Polluter-pays-principle for the agricultural sector must be defined and applied. Important options for creating special measures are assuming of the implementation of the WFD and the upcoming CAP reform.

Recommendations for a co-ordinated implementation of the WFD and the Agenda 2007

Due to the bonding of the support payments on legal compliance, it is important to define the legal term of "Good Farming Practice" more precisely and to enable monitoring on the farm level. In this context an operational version of a farm audit like EMAS with certified verifiers and regular, mandatory inspections should be considered.23 In case of a successful certification the governmental agencies responsible for monitoring can decide on a relaxation of controls and thus step by step reduce state involvement and costs. Though for water protection it is difficult and contra-productive that pig and poultry farmers that in general only receive minimal direct payments, withdraw from control by selling their land-based premium rights. In this context it is important to define precisely if and where there is a difference between the "Minimum Standards" and the GFP24.

For the environment performances, which go out of the legal framework stable markets, must be created. These are established in form of agri-environmental measures, but in modest masses: Only about 5% of the EC-agrarian budget is spend on these measures It is of significance to formulate up to what point services prescribed by the GFP have to be performed by the agricultural sector without payment and which tolerations, omissions or expenditures for achieving best environmental practice should compensated (e.g. agri-environmental measures).

A strict enforcement of the WFD will probably support the trend of tightening the legal framework and therewith the use of compensations is largely reduced. On account of the rising demand, the agri-environmental measures, which until now were supportable, would no longer be so. Therefore the agri-environmental programs will have to become more elaborated.25

For a synergistic implementation it is important to create sufficient "freedom of movement" within the WFD and the CAP so that improved water protection including regional differences in natural conditions and susceptibilities as well as stabilisation of income in the agriculture sector through the production of environmental services can be gained. This is only possible when the 2nd pillar of the CAP will be furnished much better than is currently planned.

Synergies on the local level by a co-ordinated implementation of Rural Development Programs and River Basins Plans can be expected. The River Management Plans and the Rural Development Programs have to be adjusted to each other because of the spatial extension by the WFD. This entails that on the level of the river basins a coordinated and adequate participation of the agricultural sector has to be ensured. As a result of this adjustment process the Rural Development Programmes will need to be at least partly coordinated on river basin level – and aligned with river basin management plans- making a close co-operation between competent authorities responsible for Rural Development programming and the water authorities necessary. This means that representatives from the authorities in charge of Rural Development planning need to be represented in the river basin authorities and vice versa. Equal measures of the Rural Development Programmes may become part of the programme of measures under the WFD.26 A consensus-based understanding of a "duly farming practice"27 has to be developed that might eventually go beyond GFP provisions. In order to protect the agricultural sector Article 58 can be applied that allows the member states to fix stepped farm premiums. By this mean it seems possible to balance considerable disparities between favoured and less favoured areas of agricultural production and thus to secure extensively managed regions.

²³ Systems like Umweltsicherungssystem Landwirtschaft (USL)23, Agra-Öko-Audit 23 oder REPRO23 are still under development.

²⁴ Farmers receiving support under programms like less favoured areas, agri-environmental measures have to comply with GFP, investments for farmers ans support for processing and marketing, and young farmers are linked to compliance with minimum stardards, see COM (2003) The Water Framework Directive (WFD) and tools within the Common Agricultural Policy (CAP) to support its implementation, Working document, DG Env.

²⁵ If at the same time the acreage premiums have to be raised depends on the special efforts, that is necessary for each single program.

²⁶ COM (2003) The Water Framework Directive (WFD) and tools within the Common Agricultural Policy (CAP) to support its implementation, Working document, DG Env.

²⁷ Haakh, F. (2003): Agrar-Reform und Grundwasserschutz in Wasser Special, 144, Nr. 13, p. 13-22

In addition to Rural Development Programs, Leader+ programs in Member States referring to water issues should pursue the objectives of the WFD and could thereby help implementing the WFD.

Maintenance of grassland that is highly relevant for water protection has to be fixed by corresponding legislative regulation because of the above described problems of support-independent farms.

REFERENCES

Barreira, Ana (2002); The framework Directive and its Non-Deterioration Clause; Practical Implications for the Spanish Hydrological Plan; in Environmental Law Network International 2/2002 p.36

Bromley, D.W. (1997): Environmental Benefits of Agriculture: Concepts. OECD Proceedings: Environmental Benefits from Agriculture: Issues and Policies. The Helsinki Seminar, p. 35-53

Burdick, B.; Lange; U. (2003):Considering environmental aspects of direct and indirect subsidies - sector study agriculture, UBA-Texte

COM (2002) 394

COM (2003) 23

COM (2003) The Water Framework Directive (WFD) and tools within the Common Agricultural Policy (CAP) to support its implementation, Working document, DG Env

Federal Ministry for Agriculture and Forestry, Environment and Water Management (2000): EU launches new water policy, in: Aqua press international 5/2000, p. 10f

Haakh, F. (2003): Agrar-Reform und Grundwasserschutz. GWF Wasser-Abwasser, 144, Nr. 13, p. S13-S22

Möller, C.; Kreins, P.; Gömann, H. (2003): Impact and Cost-Efficiency of Alternative Policy Measures to Reduce Diffuse Pollution Caused by Agriculture, Nr. MO62

Pretty, J. N.; Brett, C.; Gee, D.; Hine, R. E.; Mason, C. F.; Morison, J. I. L.; Raven, H.; Rayment, M. D.; van der Bijl, G. (2000): An Assessment of Total External costs of UK Agriculture, in: Agricultural Systems 65, Essex

Stoyke; C. and Waibel, H. (1997): The development of land use and resource use in crop farming under the influence of the EU agricultural reform – Effects on the environment and the need for ecopolitical action. The Magazine for Environmental Policy and Environmental Legislation 3/97, p. 289-316