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The Water Framework Directive (WFD) and tools within the Common Agricultural Policy (CAP) to support its implementation

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1. INTRODUCTION

This document explains the interaction between the agriculture and water and their overlaying policies (Common Agricultural Policy (CAP) and Water Framework Directive (WFD)). Relevant users could be the authorities in charge of Rural Development planning, river basin management planning, nature protection, and secretariats of international conventions.

The document is a contribution to the discussion process on the link between the CAP and the WFD. As these two policies themselves are under ongoing discussions (CAP: e.g. COM(2002) 394 "Mid-term review of the Common Agricultural Policy" and COM(2003) 23 "A long term perspective for sustainable agriculture; WFD: e.g. implementation strategy) the paper will need to be permanently updated and adapted to modifications in these policies. It therefore can only represent the discussion and status quo at a certain point and should be considered as a working document.

It is obvious that all sectors, i.a. chemical industry, transport, health sector and urban wastewater treatment, will have to contribute to the implementation of the WFD. This document, however, clearly focuses on the agricultural sector.

It is of particular importance to align the planning of measures under the Rural Development policy and the WFD, and therefore one need to be aware of both timetables. A synopsis of these timetables is given in chapter 4.1.1.

Besides the CAP, the Cohesion policy will also be very relevant for implementing the WFD. Several measures under Rural Development (investments, young farmers, training, processing and marketing) are already financed via structural funds in objective 1 areas. Also LEADER+ is an important instrument from the structural funds to support Rural Development. This paper will, however, for simplicity reasons, not distinguish between support payments from EAGGF guarantee or EAGGF guidance, but relate to Rural Development in general.

Above all, the paper should be viewed as an attempt to promote jointed up thinking between two major policy areas with a view to benefiting both.

2. THE OBJECTIVES OF THE WFD

The WFD 2000/60/EC has the following main objectives:

- Expanding the scope of water protection to all waters (surface waters and groundwater),
- Achieving "good status" for all waters (good ecological and chemical status for surface water, and good chemical and quantitative status for ground-waters), by set deadlines,
- Water management based on river basins,
- "Combined approach" of emission limit values and quality standards, plus phasing out particularly hazardous substances,
- Getting the prices right,
- Getting the citizen involved more closely, which means mandatory involvement of interested parties,

- Streamlining legislation,
- Establishing a coherent managerial frame for all water related legislation, thus allowing for consistency in planning and measures at the same time. It does not change obligations and deadlines under already existing legislation. ¹

Summarising, the overall objective of the WFD is good status for surface waters and ground waters. The achievement of this objective will make it easier for a range of use of water resources (drinking water, irrigation, industrial use etc.). For certain selected areas, e.g. water used for drinking water abstraction and for bathing, additional quality requirements and/or measures exists, and will be maintained both under EU and Member State legislation.

3. HOW DOES AGRICULTURE INFLUENCE WATER BODIES AND RELATED ECOSYSTEMS ?²

While agriculture puts pressure on water resources, mainly by diffuse pollution, progress could also be achieved towards better water quality for sources of point pollution, such as urban and industrial wastewater. This has been recently highlighted by the EEA report for 2002³. For the interaction between the sustainable use of water and agriculture, the following issues can be identified:

3.1. Irrigation and drainage

Irrigation as part of intensive agriculture, including horticulture, can lead, and has in fact led, to unsustainable use of water in some Member States. In addition, charges for irrigation water do not necessarily always covering all costs. Problems arising from irrigation are mainly occurring in Southern Member States and are often linked to specific crops, such as i.a. maize, fruit, and vegetables.

Land drainage can result in lowering of the groundwater table as well as destruction of wetlands as important habitats for protected species.

¹ The Bathing Water Directive 76/160/EEC, The Birds Directive 79/409/EEC, The Drinking Water Directive 80/778/EEC as amended by Directive 98/83/EC, The Major Accidents (Seveso) Directive 96/82/EC, The Environmental Impact Assessment Directive 85/337/EEC, The Sewage Sludge Directive 86/278/EEC, The Urban Waste Water Treatment Directive 91/271/EEC, The Plant Protection Products Directive 91/414/EEC, The Nitrates Directive 91/676/EEC, The Habitats Directive 92/43/EEC, The Integrated Pollution Prevention and Control Directive 96/61/EC.

² For more detailed information refer to: Direction to Sustainable Agriculture – Commission Communication COM(1999) 22 of 27.01.1999, and Agriculture, Environment and Rural Development, Facts and Figures – A challenge for Agriculture, European Communities, 1999
The Environmental Impacts of Irrigation in the European Union, study commissioned by DG ENV, <http://www.europa.eu.int/comm/environment/agriculture/studies.htm>

³ Environmental Signals 2002, EEA: 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. Also, water extraction rates in some areas may be approaching unsustainable levels especially in southern Europe where improved efficiency in water use, especially from agriculture, is needed to prevent seasonal water shortages.

3.2. Water quality and quantity

3.2.1. Groundwater

The following agricultural activities can affect the good chemical and good quantitative status of groundwater, i.a.

- Pesticides (from application, handling and cleaning equipment) from plant protection activities can leach into groundwater,
- Nutrients - mainly nitrates from fertilisation - can leach into groundwater,
- Irrigation and drainage can affect the level of the groundwater table and lead to salinisation,
- Drainage can affect wetland ecosystems, which are influenced by groundwater,
- Intensive water use by specific agricultural sectors (e.g. dairy sector) can affect the level of the groundwater table.

3.2.2. Surface water (rivers, lakes, transitional waters, coastal waters)

Surface waters can be contaminated by various agricultural inputs or their by-products, contaminants, or resulting metabolites/products, leading to i.a. eutrophication and side effects on non-target organisms. The following agricultural activities can affect the chemical and ecological status of surface waters, in particular if applied inappropriately (e.g. on slopes causing erosion, during the wrong season, in inadequate amounts, without respecting established buffer strips), i.a.

- Run-off of pesticides (from application, handling and cleaning equipment) from plant protection activities,
- Run-off of nitrates and phosphates from fertilisation,
- Heavy metals from sewage sludge and manure application, as part of the active ingredients of pesticides (e.g. copper salts) and as contaminants of fertilisers (e.g. Cd in phosphates),
- Sediments from erosion may influence water courses (hydromorphological status) and wetland ecosystems,
- Drainage can affect wetland ecosystems,
- Intensive water use by agricultural holdings,
- Deposition from atmospheric ammonia originating from animal manure, causing also acidification of the soil.

3.3. Competition for land use between water and agriculture

Competitive requirement for land for the agricultural and the water sector – to implement the WFD - can occur due to i.a.

- The need for land to restore a good flow pattern (meaning to achieve a good hydromorphological status) of surface waters,
- The need to protect wetlands,
- The need for land use not to change from agriculture, but to different production systems (i.a. grassland instead of arable),
- The need for land as well as for particular land management to prevent floods.

4. THE MAIN INTERACTIONS BETWEEN AGRICULTURE (AS REGULATED BY THE CAP) AND WATER (AS REGULATED BY THE WFD)

4.1. Interaction on administrative level

The following aspects will be crucial on administrative level:

4.1.1. Timing of planning under WFD and the CAP

A Communication on a mid-term CAP review Communication.⁴ has been submitted to Council, and the Commission has tabled the respective legal proposals, which will now be discussed in Council and Parliament. The current financing period for Rural Development Programmes is 2000 – 2006. The respective Regulations are (EC) 1257/1999 and (EC) 445/2002.

Following a synthesis evaluation of Rural Development in 2003/2004, the next Rural Development planning period is 2007 – 2013. This will have to take into account changes in the CAP as a result of the current Mid-term review and/or other proposals. After a mid-term review of the CAP to take place in 2003, a new financing period will start in 2007, eventually linked to a reform of the Common Agricultural Policy, which is therefore likely to be based on modified Regulations.

In 2004, the evaluation of the situation in the river basins according Article 5 of the WFD Directive will be finalised (analysis of characteristics, review of impact of human activity, and economic analysis of water use). This evaluation could be fed into any discussion of the new financing period/reform of the Common Agricultural Policy, including budgetary issues (allocation of funding for Rural Development). Table 1 shows a

⁴ Com(2002) 394

direct comparison of the probable timetables of the CAP modifications and the WFD implementation.

4.1.2. Co-ordination in programming of measures

Rural Development Programmes will need in the future to be at least partly co-ordinated 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. Equally, measures of the Rural Development Programmes may become part of the programme of measures under the WFD or vice versa. As in many instances, river basin catchments will be larger than the geographic regions for Rural Development, it is possible that river basin authorities will need to seek input into several regional Rural Development Programmes, and it is also possible that individual rural regional authorities may have to be involved in more than one river basin plan.

4.1.3. Synergies from CAP and WFD regarding the identification of environmental issues

The monitoring of water bodies, as regulated by the WFD, will be beneficial for the water and the agricultural sector. When designing the network of sampling points, agricultural activities (type of agricultural activity, crop rotations and inputs used) need to be considered. This should lead to a close co-operation (e.g. representation on each other's committees) between authorities competent for water and agriculture in Member States, and to a better understanding of problems identified through monitoring.

The lists of areas protected under Community legislation for the conservation of habitats and species directly depending on water to be established by Member States – as laid down in Annex IV of the WFD - will allow better targeting of measures i.a. under articles 16 and 22 of the Rural Development Regulation towards their conservation.

4.1.4. Competition for land

Measures under the WFD might require changes in land use and management and therefore might result in competition for land (e.g. changing from arable to grassland, afforestation, and in extreme cases taking land out of agricultural activity). This could put pressure on the agricultural sector regarding income development, and may lead to discussion on the necessity to compensate. This will in particular be difficult for areas outside agricultural use, or areas to be taken out of agricultural use, where CAP funding may not to be available.

Table 1: Timetable of CAP modifications and WFD implementation

Year	Rural Development Policy	Water Framework Directive
2000	Approval of rural development Programmes under Agenda 2000	Adoption of the WFD and coming into force
2002	Commission communication on the Mid-Term Review of the CAP	
2003	<p>CAP-reform: A Long Term Perspective for Sustainable Agriculture (legislative proposals following the Mid-Term Review)</p> <p>Synthesis report on Regulation 1259/1999/EC, including environmental protection requirements for directly supported agriculture</p> <p>3rd Report on Economic and Social Cohesion setting out future orientations for EU Structural Funds and Rural Development Policy</p>	<p>Transposition of the WFD into national legislation by Member States (according articles 3 and 23) into national legislation; designation of river basin districts and competent authorities</p>
2004	<p>Commission synthesis report on Member States' mid-term evaluation of the Rural Development Programmes</p> <p>Commission communication on "AGENDA 2007" including the next financial perspective 2007 - 2013</p> <p>Late 2004, where necessary, legislative proposals in the framework of "AGENDA 2007"</p>	<p>Analysis of the characteristics, pressures and impacts in river basins (according Article 5 of the WFD)</p>
2005	Discussions and adoption of "AGENDA 2007" including next financial perspective	
2006	Discussion and approval of the new Rural Development Programmes	<p>Monitoring network (according article 8) must be established</p> <p>Public consultation of timetable and working programme for the production of a river basin management plan (according Article 14)</p>

2007	Start of new Rural Development Programmes	
2008		Public consultation on the river basin management plans (according article 14).
2009		River basin management plans (according article 13)
2013	End of 2007 – 2013 Rural Development programming period	
2015		Achievement of good status (according Article 4)

4.1.5. Derogations

The WFD provides for certain derogations for waters considerably affected by human activities. These could be agricultural activities. Such derogations could apply for

- the time to achieve the objectives,
- lower environmental objectives.

In both cases it needs to be demonstrated that achieving the standard objectives is either impossible or disproportionately expensive. Policy and administration would need to judge and set priorities.

4.2. Interactions on farm level

4.2.1. Measures under the WFD

Under the WFD, Member States draw up measures, which must if appropriate be co-ordinated on river basin level by a river basin management authority, in the frame of a river basin management plan (according Article 11 of the WFD).

This river basin management plan should provide for the following:

- (1) **Basic measures** represent the minimum requirements to be complied with in a river basin. Those with relevance for agriculture are i.a.
 - Measures required under the relevant **Community legislation** (e.g. action plans and codes of Good Agricultural Practice on fertilisation under the Nitrates Directive, application of best available techniques in intensive farming of pigs and poultry).

In addition to these, and with relation to agricultural production, basic measures shall also consist of the following measures:

- To promote efficient and sustainable water use,
- To protect drinking water,
- To control water abstraction,
- To provide for recovery of costs for water services,
- To prevent or control the input of pollutants from diffuse sources,
- To ensure a hydromorphological status of water, allowing the achievement of good ecological status,
- To eliminate pollution of surface waters from priority substances and to progressively reduce pollution by other substances to achieve the objectives of good status.

(2) Where basic measures do not achieve the objectives, **supplementary** measures need to be taken up. On this supplementary measure, Member States have the discretion of choice provided they achieve the objectives of the WFD. Out of the non-exhaustive list of possible measures, those with relevance for agriculture could include i.a.:

- Establishment of codes of Good Practice (this means that additional and special standards may be introduced on river basin level).
- Measures affecting land management and use (i.a. to restore previous flow patterns, to establish buffer strips, to recreate and restore wetland areas),
- Abstraction controls,
- Requirements to adapted agricultural practices,
- Promotion of water saving technologies,
- Research, development, education and training measures.

In addition, in order to protect groundwater, which is used now for drinking water purposes, Member State can

- Provide for measures to protect the water bodies used for drinking water abstraction in order to reduce purification,
- Establish safeguard zones for water catchment areas.

Once these measures are introduced by Member States, they will apply to farmers.

4.2.2. *Standards*

Existing standards for nitrates and pesticides remain, and will continuously evolve with the respective legislation. Further details on groundwater will be regulated with the upcoming Groundwater Directive. The concept of trend reversal of the WFD offers a new tool to start measures at an earlier date.

However, interaction between groundwater and surface water, such as an exchange of water between ground water and surface water bodies, may make it necessary to consider the impact of groundwater on the ecological status of surface water. This could result in tighter standards to be set, if the ground water standards are not sufficient to meet the objective of good quality status of surface water. E.g. if a pesticide residue of 0.1 µg/l in groundwater would locally affect a particular specie in adjacent surface water due to an exchange of water, this groundwater standard would need to be tightened for that particular ground water area.

In addition, Member States may set tighter standards in water catchment areas for groundwater used for drinking water abstraction to reduce the level of purification treatment. This would have implications for the regional/local code of Good Farming Practice and for the standards resulting from the implementation of the Directive on Integrated Pollution Prevention and Control in intensive pig and poultry farming.

4.2.3. *The polluter pays principle*

For the impact of agriculture on the environment, and with regard to payments to farmers for specific activities and to meet standards, the polluter principle is very relevant. According to the Strategy on the environmental integration and sustainable development in the CAP established by the Agricultural Council (Council Document 13078/99 from 17 November 1999), “farmers have to bear compliance with costs up to a reference level of good agricultural practices in the area concerned. In general, beyond this level it is inappropriate to pay farmers for environmental services that they provide through their own private resources or factors of production. However, in areas with serious environmental problems, temporary government intervention, consistent with the Treaty, might be needed to improve sustainability up to the reference level.”

4.2.4. *Competition issues for farmers in different river basins*

Codes of Good Farming Practice (refer also to chapter 5.3) need at least partly be designed on river basin level, resulting in competitive disadvantages of farmers inside “problematic” river basins (e.g. prohibition of specific pesticides or specific use restrictions, restrictions on

fertilisation). This is likely to increase the reluctance of the agricultural sector to comply with specific measures and restrictions. Hence reflections on if and how to compensate farmers in such situations are necessary (refer to chapter 7).

4.2.5. *Broadened objective of the WFD compared to earlier water legislation*

Regarding agricultural production at farm level, the following issues going beyond the objectives of previous Community water legislation can be identified to be relevant:

- (1) Water abstraction may not result in significant damage to terrestrial ecosystems, which depend directly on the groundwater body. This might result mainly in irrigation and drainage restrictions. Member States/Regions may have to define “significant”.
- (2) Contributions to restore previous flow patterns will influence farming patterns (grassland versus arable land, restrictions on crop rotation etc.).

5. POLICY MEASURES OF THE CURRENT COMMON AGRICULTURAL POLICY TO SUPPORT AND IMPLEMENT THE WFD

The current Common Agricultural Policy contains several tools, where support to farmers is given for either specific services (Rural Development) or linked to respect of environmental requirements (Common Market Organisations). Both could contribute to implement the WFD in the agricultural sector to implement good ecological status in general.

5.1. The Common Market Organisations

According to Regulation 1259/1999/EC, Member States shall take the environmental measures they consider to be appropriate in view of the situation of the agricultural land used or the production concerned and which reflects the potential environmental effects. These measures may include i.a. specific environmental requirements constituting a condition for direct payments. Farmers may then lose partially or totally, direct aid in case they do not comply with such requirements.

While Member States have so far been rather reluctant in using this tool, it could be used for numerous aspects of water pollution and unsustainable use of water. More information on the importance of codes of Good Farming Practice and the WFD are given in chapter 5.3.

5.2. Rural Development

Rural Development Programmes provide for several measures to support farmers and the rural community. Some of these, in particular agri-environment, less

favoured areas, and training, could directly contribute to the implementation of the WFD. It has to be noted that the rural development Policy of the European Union is subject to possible modification for the next financing period (2007 – 2013).

5.2.1. *Investments in agricultural holdings*

Such aid can be given to farmers i.a. to preserve and improve the natural environment. E.g. farmers could buy up-to-date technical equipment or upgrade existing equipment to meet specific standards. While as a general rule the polluter pays principle applies, under specific circumstances aid can be given to comply with newly introduced standards for manure storage capacities under the Nitrates Directive.

Under that chapter, the following investments to help implementing the WFD seem already possible:

- Water saving irrigation equipment,
- Stables meeting emission standards going beyond existing legislative standards (i.a. to reduce ammonia emissions),
- Machinery to spread manure and apply pesticides in a more environmentally friendly way, i.a. to reduce ammonia emissions and nitrates run-off
- Manure storage capacities (as newly introduced standards) to i.a. reduce ammonia emissions.

Such investment aids can only be given to farmers who comply with minimum environmental, hygiene and animal welfare standards.

Besides using the opportunities listed above for the WFD, for the next financing period, similar provisions regarding newly introduced standards as for the manure storage capacities could reasonably be made regarding standards newly introduced by the WFD (e.g. for irrigation equipment). Refer also to chapter 6.1.4.

5.2.2. *Setting up of young farmers*

Young farmers receiving such aid have to comply with minimum standards as for investments described above.

5.2.3. *Training*

Training measures are designed to prepare farmers for i.a. the application of production practices compatible with the maintenance and enhancement of the landscape, and the protection of the environment. With regard to implementing the WFD, this includes:

- Training for organic farming or Integrated Crop Management (ICM) practices, which would allow a more water-friendly agricultural production.
- Training for farming practices for specific nature or water protection agricultural management.

For the next financing period, Member States could target special training on the interaction between agricultural practices and water friendly environmental management to farmers in environmentally sensitive areas.

5.2.4. *Early retirement*

Aid can be given i.a. to reassign agricultural land to non-agricultural uses where it cannot be farmed under satisfactory conditions of economic viability.

For the next financing period, this could be targeted particularly to farmers with e.g. wetlands affected by groundwater which have to be restored.

5.2.5. *Less favoured areas*

Farms in less favoured areas (due to i.a. natural handicaps) receive a compensation to avoid land abandonment and to ensure agricultural activity. The designation of the less favoured areas in Member States is done mainly on specific criteria, so that no direct implication for the WFD is given.

In addition, in areas where Community environmental protection rules apply, farmers benefit from compensatory payments for such restrictions (Article 16). This article has been designed for implementing NATURA 2000 and will be applicable in cases NATURA 2000 areas and areas relevant to achieve the objectives of the WFD are identical, e.g. protected wetlands.

A prerequisite for farmers to receive funds under Less Favoured Areas is compliance with Good Farming Practice.

5.2.6. *Agri-environment*

Agri-environmental measures allow compensation of farmers for activities:

- to promote ways of using agricultural land which are compatible with the protection and improvement of the environment, the landscape and its features, natural resources, the soil and genetic diversity,
- an environmentally-favourable extensification of farming and management of low-intensity pasture systems,

- the conservation of high nature-value farmed environments which are under threat,
- the upkeep of the landscape and historical features on agricultural land,
- the use of environmental planning in farming practice.

Only costs incurred and income forgone for actions going beyond Good Farming Practice plus a small incentive can be compensated. The measures must be voluntary.

Agri-environmental measures are a very important tool to introduce environmental friendly farming. With a view to water protection, agri-environmental measures of the current planning period already provide for possibilities to support:

- Reduced input use (fertiliser, pesticides),
- Specific farming systems (ICM, organic farming, extensive farming),
- More environmentally friendly irrigation techniques (e.g. water metering) and for growing less water demanding crop rotations,
- Protection of wildlife and habitats (wetlands),
- Promotion of extensive grazing systems in specific areas,
- The growing of catch crops and buffer strips along surface waters, which go beyond Good Farming Practice provisions.

An additional implication of this measure is that all farmers receiving support under agri-environment have to comply on their entire farm with the codes of Good Farming Practice.

Of all tools of the CAP, agri-environment seems the most useful for helping implementing the WFD. Therefore, in the next financing period, Member States should provide for specific agri-environmental measures to support the objectives of the WFD. In addition, Member States need to allocate sufficient funding to this issue to meet the requirements of the implementation of the WFD. Specific measures could be:

- Target extensive production/organic farming to sensitive areas (water catchment etc.) to reduce nitrogen and pesticide pollution, including book keeping and use of input/output systems,
- Target protection/restoration of wetlands (habitats and species) identified as protected zones,
- Design specific measures to meet specific requirements in river basins (e.g. to reduce identified main pollutants, to re-instate good

hydromorphological status of surface waters), which require an effort from farmers going beyond Good Farming Practice.

- Target specifically erosion/run-off issues.

5.2.7. *Improving processing and marketing*

This article is currently not used for water protection. However, as participation is linked to compliance with minimum environmental, hygiene and animal welfare standards, this could contribute to help implementing the WFD. In the next financing period, products produced in a “water-friendly” way, e.g. in specific protected zones, could be specially targeted by the measure.

5.2.8. *Forestry*

According to the Regulations, support for forestry shall include afforestation of agricultural land (conditions apply regarding some environmental issues).

This measure could support, in the next financing period and if targeted appropriately e.g. with incentives or by giving priority to it, the afforestation in particular sensitive zones of the WFD (e.g. groundwater catchment areas), as well as helping to restore the previous flow patterns of surface waters.

5.2.9. *Promoting the adaptation and development of rural areas*

Support under Rural Development can also be granted for adaptation and development of rural areas. The measures foreseen under this chapter with relevance for the WFD are support for:

- Land improvement,
- Reparcelling,
- Agricultural water resources management,
- Protection of the environment in connection with agriculture, forestry and landscape conservation as well as with the improvement of animal welfare,
- Restoring agricultural production potential damaged by natural disasters and introducing appropriate prevention instruments.

The above listed measures should support the WFD by not being counterproductive to its objectives. This means that e.g. drainage of protected wetlands should be prohibited, and land parcelling should not negatively influence the ecological status of water bodies. In addition, such measures could, in the next financing period, also actively contribute to the objectives of the WFD, by i.a. providing support:

- for structures to develop sustainable irrigation practices,
- for flood plains (grassland instead of arable crops),
- for re-parcelling to re-install the hydromorphological status of surface waters,
- for general protection of wetlands and surface waters.

5.3. Good Farming Practice and Minimum Standards

In the frame of their Rural Development Programmes, Member States have to define codes of Good Farming Practice and a list of minimum standards on environment, hygiene and animal welfare. Codes of Good Farming Practice is the standard of farming a reasonable farmer would follow in his region, and shall entail as a minimum compliance with general mandatory environmental requirements. Farmers receiving support under less favoured areas and agri-environment have to comply with Good Farming Practice, investments for farmers and support for processing and marketing, and young farmers are linked to compliance with minimum standards.

Also the WFD provides for codes of Good Practice as a part of the supplementary measures of river basin management plans. This will be a new element to be respected without compensation by farmers.

These two exercises on drafting codes of Good (Farming) Practice for agricultural production and river basin management plans will need to be carefully aligned to come to a common regional code applicable under Rural Development and under the WFD. While currently these codes are drafted on regional or national level, they would need to be designed at least partially on river basin level for at least the relevant areas of agricultural production.

The box below shows an example how minimum standards and codes of Good Farming Practice having special emphasis on water protection could look like.

Box 1: Hypothetical example of minimum standards/codes of Good Farming Practice:

- Pesticides
 - Prohibitions or restrictions on the use of certain pesticides (e.g. those identified as priority substances or main pollutants for specific river basins according Annex VIII),
 - Appropriate rules on plant protection equipment (cleaning of equipment, more environmentally friendly application techniques, inspections of equipment, handling of hazardous pesticides etc.).
- Fertilisation
 - Specific storage capacities for manure,

- Limited use of fertilisers (N and P) in identified areas (e.g. water catchment areas),
- Appropriate rules on fertilisation equipment (cleaning of equipment, more environmentally friendly application techniques, inspections of equipment etc.),
- Contamination from other sources
- Limitations on pollutants other than pesticides and fertilisers, such as heavy metals in fertilisers, sewage sludge, compost etc.,
- measures to avoid erosion,
- Specific rules on emissions (ammonia and nitrous oxides e.g. from stables) and waste.
- Irrigation
- Prohibition or restrictions (e.g. having adequate water saving technology) on abstraction of waters for irrigation purposes,
- Prescriptions on technology and equipment for irrigation.
- Preservation of good ecology status
- Environmentally significant physical interventions (e.g. environmentally significant farm restructuring, irrigation and land-drainage projects as well as projects for the conversion of uncultivated land/semi-natural areas to intensive agriculture),
- Management restrictions for protection of species and habitats in wetlands.

5.4. Consultation process

Regarding the consultation process foreseen by the Regulation, the co-operation between the competent authorities for Rural Development Planning and the water authorities in Member States and regions need to be further ensured and even strengthened. Vice versa, competent authorities for rural development planning need to be involved in the drafting of river basin management plans. According to the subsidiarity principle, it will be the tasks of Member States to ensure this co-ordination between authorities, but also between Member States themselves.

5.5. LEADER+ as part of Structural Funds

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

6. FURTHER DEVELOPMENT OF POLICY TOOLS OF THE COMMON AGRICULTURAL POLICY TO SUPPORT AND IMPLEMENT THE WFD

6.1. The mid-term review of the Common Agricultural Policy and its potential effects on the WFD implementation

In its Communication to Council and Parliament on the mid-term review of the Common Agricultural Policy (Com(2002) 394), the Commission has laid down its proposal. The respective legal proposals, based on that Communication, taking also into account discussions with Member States in the Council contain the following main elements of relevance for the implementation of the WFD:

6.1.1. Decoupling

Establishment of a farm income payment by introduction of a single decoupled income payment per farm. This is based on historical payments. The effect regarding the implementation of the WFD results from the complete flexibility for farmers on the pattern of crops they grow. This influences the environmental impact of farming in the different regions. Decoupling will also make land use changes easier.

6.1.2. Cross compliance

Support from the Common Agricultural Policy will be conditional on respect of statutory management requirements directly linked to farming⁵, 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 condition⁶. Failure to do so will result in part or total loss of direct support. This will be supported by a farm advisory system, mandatory for farms receiving more than € 15000 per year direct payments.

The Water Framework Directive is not part of the list of statutory management requirements, due to its limited immediate impact on farming activities. However, the statutory management requirements are part of the codes of Good Farming Practice (refer also chapter 5.3). This means that

⁵ 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 waste, Directive 91/414/EEC concerning the placing of plant protection products on the market, Directive 86/278/EEC on the protection of the environment, in particular of the soil, when sewage sludge is used in agriculture, Directive 79/409/EEC on the conservation of wild birds, Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna, Directive 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

⁶ Annex IV of the legal proposal as laid down in Communication COM(2003) 23, making reference to erosion, organic matter, soil structure, salinisation, and minimum level of maintenance.

many statutory management requirements of relevance for achieving the objectives of the WFD, such as the Nitrates Directive, are parts of this cross compliance approach. It will therefore be important to design these codes, at least partly, on river basin level.

The Commission proposals allow Member States to add supplementary management requirements to the list of statutory requirements. If a MS wishes to add the WFD to the list of specified legislation, it shall send a corresponding request to the Commission. It can then be added by the Commission subject to the advice of the relevant Management Committee.

6.1.3. Modulation and degressivity

The Commission is proposing to reduce direct payments progressively over the period from 2006 to 2012 for all producers in receipt of more than €5000 annually. The level of the reduction for producers in receipt of less than €50,000 annually will reach 12.5% in 2012 while for producers receiving more than this amount, the reduction will be 19%. Part of the reduction, representing eventually 6% in total, will be available for rural development. The extra funding made available annually will reach €1.48 Billion in 2012.

6.1.4. New measures under Rural Development to meet statutory EU standards

A new chapter on meeting standards has been proposed, where temporary, degressive aid for implementing statutory EU standards could be given. Such measures could be used to help implementing statutory standards resulting from river basin management plans, e.g. those resulting from river basin management plans for Good (Farming) Practice.

6.1.5. Environmental set-aside

Long-term rotational set-aside will replace the current rotational set-aside on arable land. This will be a condition to receive farm payments. This long-term set-aside could be useful for areas of specific interest for the WFD, such as groundwater catchment areas or broad buffer strips along borders of rivers.

7. NEW STANDARDS

The WFD will introduce new standards on river basin level. In this context, Member States/Regions will need to reflect on how to use the different possibilities described above to implement such new standards. Possibilities would then include:

- (1) Introducing new standards via statutory management requirements. They would then be compulsory for farmers, and under the cross compliance approach also compulsory to get direct support, and no compensation is possible.

- (2) Giving priority to offer compensation to farmers in those NATURA 2000 areas which are also of relevance to achieve the objectives of the WFD (e.g., wetlands) via Article 16.
- (3) Offering temporary, degressive compensation via the new measure under rural development to meet statutory EU standards to help farmers complying with new standards.
- (4) Offering sufficient incentives via agri-environmental measures in affected, special areas.

8. CONCLUSION

For the next round of Rural Development Programmes in 2007 - 2013, specific account need to be taken of the consequences of the WFD for the agricultural sector.

8.1. Support of the CAP for the WFD

The CAP can support the implementation of the WFD via:

- (1) Its Rural Development policy, where several possibilities already exist. These need to be used to the extent possible to help implementing the WFD.
- (2) Statutory management requirements/codes of Good Farming Practices, which need to be aligned between the WFD and those already defined by MS under the CAP. The link of compliance to these management requirements with payments under the CAP will also support the implementation of the WFD.
- (3) Compensations of farmers for activities going beyond the statutory requirements/codes of Good Farming Practice. This can best be compensated via agri-environment schemes.
- (4) Support for farmers for compliance with newly introduced restrictions or standards. These can be given
 - (a) via a new measure (proposed by the Commission in the mid-term review) to compensate for new obligations or restrictions in farming practice, such as those resulting from river basin management plans.
 - (b) via the instrument currently already existing under less favoured area payments (Article 16 of Regulation (EC) 1257/1999) to compensate for restrictions from Community legislation in NATURA 2000 areas.
- (5) The co-operation between authorities responsible for Rural Development planning and river basin management plans need to be ensured.

8.2. Rural development planning by Member States

In order to use these tools of Rural Development to best advantage, MS will need in their next Rural Development Programmes 2007 – 2012 to reflect on how

- (1) to provide specific incentives to target measures to issues of the WFD,
- (2) within the budgetary ceiling to allocate sufficient funding to such measures,
- (3) to ensure harmonisation – on river basin level - of appropriate measures in plans from different regions/Member States sharing that same river basin,
- (4) Ensure that NATURA 2000 areas of relevance for the WFD objectives receive compensation under Article 16.
- (5) to align as good as possible measures designed to help the implementation of the WFD with measures to support other relevant Community initiatives, such as the organic farming action plan, and the thematic strategies on soil and on sustainable use of pesticides.

8.3. Open questions

Several issues remain to be discussed thoroughly in this context, such as

- (1) Funding for land use changes from agricultural use to other land use requirements such as to restore previous flow patterns,
- (2) Approaches to trend reversal to be seen as a tool or as a new standard.