
GLOBALIZATION AND WATER RESOURCES MANAGEMENT: THE CHANGING VALUE OF WATER

AUGUST 6-8 AWRA/IWLRI-UNIVERSITY OF DUNDEE INTERNATIONAL SPECIALTY CONFERENCE 2001

THE EU WATER FRAMEWORK DIRECTIVE: A NEW REGIONAL MODEL FOR THE APPLICATION OF ECONOMIC MEASURES

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ABSTRACT: The recently adopted Water Framework Directive grants a definitive role to economic measures and instruments, for the first time in EU water legislation. This presentation examines what this means for the Member States and what legal obligations will be placed on them as a result. Special emphasis will be given to analyzing the challenges that lie ahead for the Member States in ensuring the implementation, integration and enforcement of these economic measures/instruments. The provision of specific and clear economic instruments can further develop and strengthen environmental legislation, which has relied upon generally applicable rules. However it is quite apparent that the Water Framework Directive does not readily provide for such a provision. Article 9, in particular, not only provides recourse to non-application of the economic measures but also imparts a considerable amount of flexibility to Member states regarding the determination of decisions at later stages. Therefore whether the Water Framework Directive's economic measures will indeed be successful is difficult to determine.

KEY TERMS: EU Water Framework Directive Article 9 (recovery of costs for water services); Economic Measures; Legal Obligations and Challenges for Member States.

INTRODUCTION

The WFD was adopted by the EU decision-making bodies (the European Parliament, the Council and the European Commission) in September 2000 and entered into force on the 22nd December 2000 (Directive 2000/60/EC). The WFD is now not only the most recent addition to EU Water Legislation, but also perhaps the most eagerly awaited. It will completely remodel existing Community Water Policies by providing for common approaches, objectives, principles and basic measures in ensuring more efficient and effective water protection and sustainability throughout the EU.

Until recently Community Water Policies have attempted to achieve their environmental objectives with 'command and control' instruments. However due to varying success, there is an increasing growth in the recognition of the need to use Economic Instruments to supplement command and control measures. The United Nations Environment Programme recently stated that "*appropriately designed and implemented economic instruments, complemented with appropriate policy frameworks can make an important contribution to achieving sustainable development*" (UNEP, 'The Use of Economic Instruments for Sustainable Development', Meeting on March 2001). Making economic principles and instruments clearly operational is exactly what the WFD intends to achieve (Article 9 of the WFD).

The aim of this paper is to analyse whether or not the WFD provides the necessary legal framework in respect of its economic instruments, to ensure that its environmental objectives, particularly sustainable water use, are met. A short account of the growth of environmental legislation and subsequent development of economic instruments in such policy making will be given, to give an insight into the need for the present WFD. This will be followed by an analysis of the WFD's economic instruments, their purpose and legal content. This will set the scene for determining and analysing the legal obligations they render upon the Member States, as well as what lies ahead in ensuring they are met. This paper will

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then conclude by considering whether or not the legal obligations for Member States under the EU WFD, regarding the economic instruments, can help ensure its environmental objectives are achieved.

HISTORY OF THE EU WFD AND ECONOMIC INSTRUMENTS

Development of Environmental Water Legislation

The last 25 years has seen a dramatic growth in legislative activity in EU water policy. The first wave of legislation in the 1970s and 1980s was primarily aimed at pollution abatement at a time when the scale of environmental damage was not as fully appreciated as it is today. More directives followed in the early 1990s and with a sectoral approach (see ‘The Urban Waste Water Treatment Directive’, Council Directive 91/271/EEC, 1991 O.J. (L135) 40; ‘The Nitrates Directive’, Council Directive 91/676/EEC, 1991 O.J. (L375) 1). The next step for the EU to co-ordinate all its water legislation to ensure coherency of objectives and eradicate conflicting policies between the sectors. In February 1997, with the aim of how to best co-ordinate and develop water policies, the Commission published a proposal for a Directive to establish a framework for EC action in the field of water policy (Commission Proposal for a Council Directive establishing a framework for Community action in the field of water policy, COM (97) 49 final, 1997 O.J. (C 184) 20). The proposal was envisaged to create a framework for all future EU action on water policies.

The WFD is an attempt to overhaul the current mass of environmental legislation with its differing and occasionally conflicting methods and water policy objectives. The aim is to rationalise the increasingly fragmented policies adopted since the mid-1970s. This will be done by incorporating all requirements for water management into a single system of “river basin” management (International Environment Reporter, ‘*EU Parliament Invokes Conciliation Procedures for final text of WFD*’ 2000). The framework approach provides the necessary flexibility to allow national and more specifically regional authorities, not only to further develop water policies, but also be able to accommodate for regional variations: European Environment Agency Report, *Water Stress* (Copenhagen, EEA Publications 2000) at 156 – “Wide spatial variability of freshwater resources exists throughout Europe, with annual average runoff (water resource per unit area) ranging from over 3 000 mm in western Norway to 100 mm over large areas of Eastern Europe and less than 50 mm in southern and central Spain.”

Development of Economic Principles in Environmental Legislation

In 1987 the Brundtland Report identified the merging of environmental issues and economics in decision-making, as a critical objective for ensuring the concept of sustainable development. This was developed further by the 1992 UN Conference on Environment and Development in Rio de Janeiro, which not only endorsed the ‘polluter-pays principle’ (“...the approach that the polluter should bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment”), but also addressed the ‘Social and Economic Dimensions’ of sustainable development under its “Agenda 21”. Of particular note is Chapter 7 of Agenda 21; See N.A. Robinson (ed.), (Oceana Publications, 1992) *Agenda 21 and the UNCED Proceedings* at p.179 – Integration of Environment and Development in Decision Making (Chpt.7 of Agenda 21): “In the last two decades there has been some progress through conventional environmental policy applied in parallel with economic policy. It is now clear that this is not enough, and that environment and development must be taken into account at each step of decision making and action in an integrated manner.” The Rio Conference, and in particular Agenda 21, helped reiterate the growing awareness of the need to integrate environmental and economic policies, as well as expanding the use of economic instruments, in order to encourage the appropriate behaviour towards ensuring sustainable development of scarce resources.

In the last decade there has been the emergence and further development of the ‘polluter-pays principle’ as a general principle of international environmental law – See generally Article 2(5)(b) of the UN/ECE Convention on the Protection and Use of Transboundary Watercourses, Mar.17, 1992, 31 I.L.M. 1312 (1992) (entered into force Oct.6, 1996); Article 4 of the Convention on the Protection of the Rhine, 2000 O.J. (L289) 31 (not yet in force); Article 174.2 of the Amsterdam Treaty, 1999 O.J. (C340) 1 (entered into force May 1, 1999). More specific economic instruments in international environmental legislation are, however, somewhat harder to come by despite there being an abundance at the national legislation level throughout the Member States (i.e. Charges, Taxes and Tradeable Permits). Nonetheless, the WFD is set to remedy this situation by giving economic instruments a clear role in water policy making, for the first time in EU environmental legislation (see Environment Commissioner Margot Wallstrom in “*Water of the Europeans Integrating economic assessment in the decision making process*” International Conference, Lille, Sept.13-14, 2000).

WFD ESTABLISHING A FRAMEWORK FOR OPERATIONAL ECONOMIC INSTRUMENTS

Purpose of the WFD's Economic Instruments

The purpose of the WFD's economic instruments is to enable Member States to recover the full costs of providing water services throughout the EU, via water charging and pricing.– Article 9 of the WFD: *“Recovery of costs for water services: Member States shall take account of the costs of water services, including environmental and resource costs, having regard to the economic analysis conducted according to Annex III, and in accordance with the polluter pays principle. Member States shall ensure that water-pricing policies provide incentives for users to use water resources efficiently, and thereby contribute to the environmental objectives of this Directive...Member States may have regard to the social, environmental and economic effects of the recovery as well as the geographic and climatic conditions of the region or regions affected.”* This enables Member States to consider the internal as well as the external costs in determining the costs of recovery. Such full cost recovery ensures that the price of water is a complete reflection of all the costs involved. Users will not only have to pay for the costs involved in abstraction, distribution, collection and discharge, but also for the environmental and resource costs. This ‘internalisation’ of costs takes into account environmental damage that may be caused and subsequently faced by future users.

In providing such mechanisms to ensure that water usage is fully paid for, the economic instruments aim to improve the efficiency of water use and contribute to the effectiveness of the Directive's environmental objectives. Such aims are dependent on Member States ensuring that the water pricing policies they implement to recover costs, contain “adequate incentives” (Article 9 of the WFD). Using economic instruments to recoup the ‘true value’ of water will contribute to the WFD's aims of protecting and enhancing the status of aquatic ecosystems and environments, promoting sustainable water use, ensuring the progressive reduction of pollution of groundwater, and providing for the sufficient supply of good quality surface and groundwater as needed for sustainable, balanced and equitable water use (Article 1(a) – (e) of the WFD).

Substantive Rules/ Legal Obligations

Under Article 9 of the WFD Member States shall take account of the principle of recovery of the costs of water services, including environmental and resource costs, in accordance with Annex III's economic analysis and the polluter pays principle. (Economic Analysis as stipulated by Annex III of the WFD - *“shall take account of long term forecasts of supply and demand for water in the river basin district, and where necessary estimate volumes, prices and costs associated with water services, and estimates of relevant investment including forecasts of such investments”*). If this is compared to EU environmental legislation that has preceded the WFD, the WFD appears to give even more weight to economic instruments to recover the ‘full’ costs of water services. The principle of recovery of costs and the polluter pays principle have been further strengthened in Article 9 (and subsequently Annex III) by the specific provisions for water charging and pricing to act as an incentive and legal obligation on Member States, for sustainable use of water (Communication from the Commission to the Council and European Parliament, *Pricing Policies for Enhancing the Sustainability of water resources*, COM (2000) 477 final). The economic instruments and their subsequent legal obligations are therefore being given this mechanism to be more fully implemented and more widely applicable.

However, the legal obligation for water charging and pricing is immediately ‘watered down’ by the let-out clause in the last subsection of Article 9 (ENDS Report 305, *Water Framework Directive Agreed*, June 2000). Article 9(4) of the WFD allows Member States not to apply the specific requirement of implementation of water pricing policies that provide adequate incentives for users to use water resources efficiently, *“where this does not compromise the purposes and the achievement of the objectives”* of the Directive. Thus providing Member States with the option to opt out of this obligation. This is feasible to an extent, for example, in States where long established national practices provide for other means of recovering costs for water services i.e. Ireland, which finances its water services via general taxation. Nevertheless what is the point of having legal obligations that are not wholly enforceable in that they have ‘let-out’ clauses. Giving scope for opting-out of a key provision will surely contribute to limiting the overall effectiveness of the Directive as commitments made by States to implement the water pricing policies will be undermined by those who decide not to. The WFD may be trying to be flexible here but it is opening up this particular area of water-policy to some degree of uncertainty. This is contradictory to providing for common approaches, objectives, principles and basic measures to ensure efficient and effective water protection and sustainability throughout the EU. If water charging and pricing is deemed the way forward it should be non-negotiable.

THE CHALLENGES AHEAD IN MAKING THE WFD'S ECONOMIC INSTRUMENTS EFFECTIVE

The WFD's economic instruments and their subsequent legal obligations should be made effective on all Member States if they are to contribute to the Directive's objectives and purposes. This will be achieved through the Implementation and Integration of the WFD's provisions into the national legislative systems (Article 24 of the WFD – "*Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive*") and with all other relevant policies, of Member States. As well as analysing the particular challenges to effective implementation and integration of the WFD, there is also the need to examine the challenges in EU law of ensuring compliance with framework instruments and the particular problems that raises. This section will highlight just how much is going to be required of Community Institutions in ensuring the WFD's economic instruments are made effective, particularly in tackling the emotive issues raised in charging for water (J. Morris, *Water Policy: economic theory and political reality* in P. Howsam (ed). (London, E&FN Spon Publishers, 1996), *WaterPolicy* at p. 231 – "*Water charging raises all kinds of social and ethical questions, especially regarding the income distribution effects of charging for an essential, zero substitute good*").

Implementation

Influencing Behaviour

The WFD's economic instruments will not only have an economic and environmental impact, but a social impact as well. For effective implementation to become a reality social considerations must also be integrated into the economic and environmental objectives. In particular the implementation process will require the influencing of society away from the belief that water is a free common good. In order for Member States to implement water-pricing policies with adequate incentive for using water resources efficiently, all citizens (the stakeholders in water services) must fully appreciate the need and importance for sustainable development of water resources – Communication from the Commission to the Council and European Parliament, *Pricing Policies for Enhancing the Sustainability of water resources*, COM (2000) 477 final: "*There is a need to explain to users how water prices are formed, to justify changes and to link general environmental awareness with prices and consumption. Consumers and stakeholders need to be informed about the functioning of the hydrological water cycle and how their use negatively influences the environment*". People need to know why water has to be paid for and what the WFD is attempting to achieve, otherwise regardless of what prices have to be paid there will still be little incentive to use water resources efficiently. This may result in the overall environmental objectives of the WFD being rendered obsolete. Strategies designed to increase the acceptability of water pricing to the general public, which must involve raising the awareness of the real cost of water (i.e. training programmes and conferences, educational campaigns, exhibitions, press and media appreciation etc.), are needed to ensure that users commit to improving water use efficiency (European Freshwater Programme, *Actions for Internalising Sustainability*, 2001). In every Member State provision must be made for broad stakeholder consultations.

Furthermore, implementation of economic instruments will require a more demand-orientated management process in order to influence societal behaviour towards sustainability. The importance of sustainability of water resources will be more appreciated if water is treated as a finite resource, capable of becoming exhausted if current behaviour does not change. Therefore the water pricing policies will need to improve the efficiency of current demand as a means of achieving sustainable water resources, rather than in trying to increase supply to meet inefficient demand i.e. supply-orientated management (Environmental Issue Report No.19, *Sustainable water use in Europe* – using reduced-volume toilet flushes and water saving devices on taps can cut water consumption in households for these needs by half).

The Right Prices

Involving the different stakeholders in the development of the water pricing policies will go some way to ensuring that the prices are accepted as well as being practical and understood. However, getting the water prices right as regards providing the required incentives, will be the greatest challenge to the successful implementation of the economic instruments. Assessing the environmental and resources costs (*see* Commission Communication, *Opinion of the Economic and Social Committee on European Water Policy*, O.J. 1997 (C 30) 5) for the requirements of full cost recovery will not be easy. It will require a vastly improved information and knowledge base from a host of different disciplines; therefore a complex process with large demands on time and resources. It will require a thorough understanding and evaluation of the functioning of the various hydrological cycles, as well as the effects of the particular uses on the water resources – Communication from the Commission to the Council and European Parliament, *Pricing Policies for Enhancing the Sustainability of water resources*, COM (2000) 477 final: "*The successful development of water pricing policies that account for economic and environmental objectives is highly information dependent. Sound estimates of key variables and relationships are needed to ensure that appropriate price structure and level can be identified, and that its impact on water*

demand, cost recovery and the environment can be assessed.” In addition to such issues, the implementation process will also have to take into consideration the economic difficulties in the poorer Member States and regions, where the imposition of the full cost recovery principle is by no means going to be straightforward (the Environmental Assessment Report No.2, *The Environment in the EU at the turn of the Century* (Copenhagen, EEA Publications, 1999).

Recourse to current successful water pricing policies and ‘best available techniques’ already implemented in certain Member States mentioned earlier in this paper, will help those States for whom water charging and/or full recovery of costs is new. However, it is foreseeable that the provisions of Article 9’s water pricing policy will have diverging degrees of successful implementation throughout the Member States – there are too many variables to be applied by States to determine the final price of water i.e. water availability, technical issues, political motives, financial and resource restraints.

Integration

A potential obstacle to the WFD, in general, in being made effective is the integration of its provisions and policies with that of other sectoral policies. Conflicts exist, particularly in relation to sustainable development. Current agricultural policies in a number of Southern European States, for example, still do not promote improvements in water use efficiency, specifically in relation to irrigation systems (European Freshwater Programme, *What role for water pricing*, 2001). As a result the incentive is to use more water than less. So despite what the WFD is trying to achieve as regards sustainable use, it will be seriously under-mined by conflicting policies in other sectors. Such policies will affect the effectiveness of the WFD’s water pricing policies and any impacts they hope to have on the environment.

Achieving the harmonisation of all sectors and their policies will require yet more behavioural changes in society. Policy makers from each sector i.e. transport, agriculture, industry etc. must take into account environmental concerns when they formulate their policies. The Amsterdam Treaty (Treaty of Amsterdam amending the Treaty of European Union, 1999 O.J. (C 340) 1) makes provision for the implementation of sustainable development in all economic activities. Article 6 of the same treaty even establishes an obligation to integrate environmental concerns into all EU policies and activities. Nevertheless, agricultural subsidies continue to be prevalent throughout Europe to the detriment of environment. They will continue to beset unless all Community institutions commit themselves more resolutely to developing provisions that ensure the integration of environmental provisions into all policies (See European Commission Communication on Environmental Integration, *Partnership for Integration – A Strategy for Integrating Environment into EU Policies*, Journal of Environmental Law Vol. 11, Oxford Uni. Press 1999).

Enforcement

Enforcement of EU Directives in themselves raises many issues and problems, particularly in relation to implementation at Member State level – T.T. Smith, 2000. *Designing Enforceable Environmental Requirements in the EEC*: “Much of EC environmental law is promulgated as ‘directives’--- a form of Community legislation that in general must be implemented at the Member State level before it can apply directly to the regulated community. Without adequate implementing provisions in member state law to fill out the regulatory framework effective enforcement against that community cannot be ensured. Of course, some member states themselves face analogous issues due to their own governmental structure.” I believe further enforcement challenges will be encountered as a result of the Directive being a ‘framework’ instrument (See generally J. Cameron & J. Werksman, (London, Earthscan Publications 1996) *Improving Compliance with International Environmental Law*. The WFD establishes the principles and framework for the subsequent activities, it provides for mechanisms to ensure the stipulated policies are applied. Consequently most provisions, including Article 9, are open-ended in that the placing of responsibility for the crucial decisions is not determined, and left to processes later on (See generally EEB Open Seminar on EU Water Policy under the WFD, *Making the WFD Work*, Brussels, Nov.3-4, 2000). It is virtually impossible to determine how things will “pan out”, and whether or not the whole process will indeed be successful in its aims. However, this can be countered with the argument for the need of flexibility in attempting to harmonise EU water policy. The WFD’s foundation is based on the premise of being able to cater to the particular needs of the highly variable regions across Europe. Therefore the crucial decisions can indeed only be decided successfully at a later stage once all the information and particular requirements have been analysed. This is a very tricky situation indeed as there is no right or wrong answer. The WFD has obviously taken the flexibility route, for sound reasons, but will have to expect problems en route and deal with them as they appear. Both arguments have their merits, but enforceability and flexibility may be inherently incompatible here.

Finally some consideration should be given towards highlighting some of the shapes and forms the water pricing and charging policies will probably take. As discussed what is required are instruments that influence behaviour towards conservation and more efficient use of water resources, and as a result limit undesirable environmental impact.

A likely option is that of “environmental taxes”. The use of taxes to recover costs, particularly environmental costs, has proven very effective throughout Europe during the last 10 years in the Energy and Transport sectors (See Environmental Assessment Report No.6, *Environmental Signals 2000*(Copenhagen, EEA Publications 2000)). Taxing consumers for environmental damage caused from using the resource, provides the required incentive to use it more efficiently – ENDS Report 305, *Water Framework Directive Agreed*, June 2000: “Those consumers that can reduce environmental damage at a cost lower than the levy or tax will do so, while those that cannot will pay the tax, or lower consumption.”. Broadening environmental taxes to encompass costs for water services may not make the Member State popular, but such an enforceable mechanism would certainly satisfy the requirements of the WFD – World Water Forum, *EU WFD*, 2001: “In addition to making environmentally compatible behaviour financially attractive, environmental taxes also provide signals that increase attention, awareness and concern about the environmental issue to which they relate.”. Water pollution taxes have in fact been in operation in a number of Member States for some time now and with encouraging signs of success (See Environmental Report No.6, *Recent Developments in the use of Green Taxes* (Copenhagen, EEA Publications 2000).

The economic instruments could also take the form of Abstraction Licenses and/or Trade-able Permits. Both can help ensure a more efficient use of water resources – Environmental Assessment Report No.2, *The Environment in the EU at the turn of the Century* (Copenhagen, EEA Publications, 1999): “With such programs a fixed total quantity of allowed pollution is set and allocated in the form of permits and/or licences to the regulated community. The polluters have the choice which regulated policies to use to comply with the overall target. Such programs limit or control resource extraction...the more you pollute the more you will have to pay” – and have begun to find support in certain Member States i.e. the United Kingdom (see ENDS Environment Monthly, *DETR pushes ahead with economic instruments for water* (ENDS Report 304, May 2000)). Though such instruments are only really commonplace in the industry and energy sectors, they will certainly be a serious consideration when Member States come to design their economic instruments for the purposes of the WFD. However, regardless of what type of water pricing policy is decided upon it must influence the behaviour of those causing the environmental impact. To what extent /level will depend on the particular requirements of the State and region in question, and how desperate or not the situation is. To be effective water prices and charges need to be set at the right level. If the right level is attained behaviour will be sufficiently manipulated to bring about the level of outcome desired. If too high or too low the desired outcome will not be fully realised.

Whatever form the economic instruments take they must be effective in recovering the costs of providing water, and thus help ensure the WFD’s objectives are met. Only time will tell whether or not they will be successful. Success, however, will have more chance of being realised if ‘Benchmarking’ procedures and strategies are put in place and followed up. Benchmarking is the process of comparing the quality of services, allowing decision-makers to assess which service provides the highest quality and/or cost-effectiveness (See *The European Economy – Directorate General for Economic & Financial Affairs, Economic Policy Guidelines 2000*, European Commission Convergence Report 2000, No.70). Once comparisons have been made improvements can be carried out on the less effective/efficient services. It is basically a matter of taking all best practices and analysing which offers the best results. If Member States ensured such a practice was implemented throughout Europe, as the WFD goes through its implementation process, water-pricing policies providing adequate incentives will be established sooner rather than later.

In a number of Member States economic instruments have long been part of the regulation of water usage, so it is not as if the benchmarking process has to wait (see OECD Report, 2000. *Economic Instruments for Pollution Control and Natural Resources Management: A Survey*). The WFD is attempting to bring all Member States up to the level of those States where the economic instruments have successfully achieved the required results. However, what is apparent in these ‘Benchmarking’ States is the time it has taken to get to where they are today – Danish EPA, 2000. *Economic Instruments in Environmental Protection in Denmark* Danish environmental legislation has ensured that the polluter pays principle has been supplemented by economic instruments, for over a decade (since 1991). For Member States experiencing the use of economic instruments for the first time proper, the transition will not be easy.

CONCLUSION

The legal obligations under the WFD regarding economic instruments can help ensure environmental objectives are met. Provision of specific and clear instruments can only further develop and strengthen environmental legislation which until now has relied upon generally applicable rules i.e. the polluter pays principle. The WFD provides powerful tools, which in theory could ensure a more sustainable use of water resources. However, there is potential for such a reality not to actually come to fruition. The first cause for concern is the recourse to possible non-application of such economic instruments, available to Member States. More likely is the possible mountains of integration, implementation and enforcement issues that are still to be addressed by the Member States. All of which need to be resolved before the economic instruments can be effective.

In conclusion, the WFD as it stands, will have difficulty in ensuring economic measures are successfully implemented throughout the EU. The WFD's legal obligations leave for too much to be determined by the Member States, at later stages – the WFD imparts with too much flexibility. Therefore it is difficult to predict whether the economic instruments will indeed help to ensure that EU environmental objectives are met.

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