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Integration of EPIs with policy instruments adopted in other sectors such as agriculture and energy

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What is an EPI?

Water protection has always been central to the environmental protection efforts of the European Union (EU). Since the early 1970s several legislation have been passed to protect European waters, with the Water Framework Directive (WFD) (EC, 2000) as the latest major piece. However, there is still room for improvement in the quality of aquatic ecosystems as evidence shows. The EEA Water assessment reports and the Commission assessment of the Member States' RBMPs (EC, 2012a) developed under the Water Framework Directive assumes that the WFD objective of "good ecological state" is likely to be achieved in slightly over half (53 %) of EU waters. The "Blueprint to safeguard European waters" (EC, 2012b) therefore concludes that major additional action is needed to preserve and improve EU waters.

The potential of economic instruments to support the achievement of the WFD is mostly underexplored in Member States yet. In order to better understand why this is the case DG Research funded the EU-wide research project EPI-Water (standing for: Evaluating Economic Policy Instruments for Sustainable Water Management in Europe) . Launched in January 2011 for a three-year period, its main aim is to assess the effectiveness and the efficiency of Economic Policy Instruments (EPIs) in achieving water policy goals. Based on its findings policy recommendations to EU and Member States officers for how to design and use outcome-oriented EPIs should be made.

Box 1 · Definition of what is an EPI (Delacamara, et al, 2013)

Following a review of the literature, the EPI-Water consortium defines EPIs as incentives designed and implemented with the purpose of adapting individual decisions to collectively agreed goals. EPIs for sustainable water management are consequently designed and implemented both to induce some desired changes in the behaviour of all water users in the economy (being individuals, firms or collective stakeholders) and to make a real contribution to water policy objectives, in particular reaching the environmental objectives of the EU Water Framework Directive, at least cost for society

The project thereby builds on the work developed in 30 ex-post assessments of EPIs in Europe and around the world, and in-depth ex-ante assessments of the viability and expected outcome of EPIs in five EU areas facing different water management challenges (flood risk and waterlogging in Hungary, water scarcity and drought risk in Spain, biodiversity and ecosystem service provision in France, water scarcity in Greece and water quality in Denmark).

While a wide set of conclusions and recommendations can be made from the project , the specific aim of the paper is to show policy makers what the main barriers and success factors are to use an EPI for policy integration of water management into other sectors such as energy or agriculture.

Policy expectations on EPI´s in regard to integration of water management into other sectors

Environmental Policy integration - What is it about

Environmental policy integration can be seen as a policy process that aims to place environmental considerations at the heart of decision-making in other sectoral policies, such as energy agriculture or industry, rather than leaving them to be pursued separately through purely environmental policy instruments.

Environmental policy integration as a part of sustainable development is commonly understood as balancing environmental interest against economic and social interests and policies in a way that trade-offs (or negative effects) between them are minimised and synergies (or win-win-win opportunities) maximised (Berger and Steuer, 2009). From an environmental perspective integrating common policy aims should result in positive environmental outcomes, economic efficiency and further equity. Also the issue of burden

sharing is a relevant one in particular in relation to the polluter pays principle.

Since 1997, environmental policy integration is a requirement under the EC Treaty. Article 6 of the Treaty states that "environmental protection requirements must be integrated into the definition and implementation of the Community policies [.] in particular with a view to promoting sustainable development".

Accordingly, EU SD strategy's policy guiding principles (EC, 2006) also emphasise the need to “promote coherence between all European Union policies and coherence between local, regional, national and global actions in order to enhance their contribution to sustainable development”. Since the integration of policies between different governments should proceed in a cross-sectoral manner, the concepts of horizontal and vertical integration are obviously closely related as shown in the Figure 1.

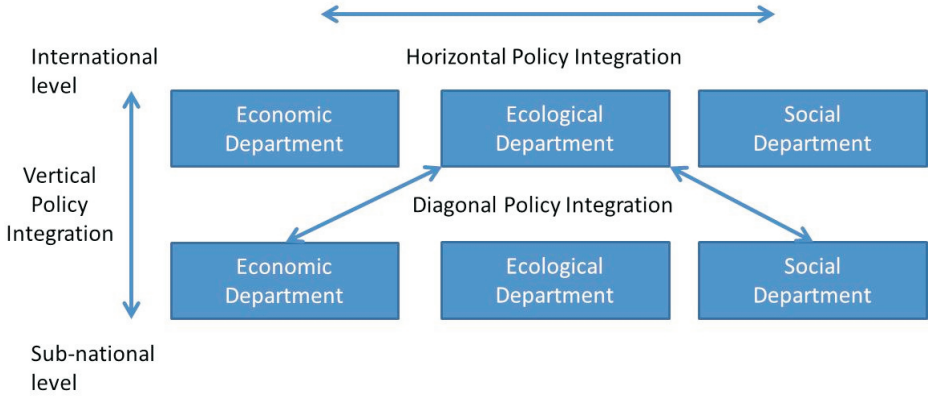

Figure 1: Horizontal, vertical and diagonal policy integration (source Steurer, 2008)

When discussing environmental policy integration it is important to consider two aspects:

- The integration of 'environmental objectives values and norms, ecological capacities, and codes of ecologically good conduct into the political and administrative policy-making process of sectoral agencies and authorities; and,

- Giving 'environmental concerns' specific weight or preference through political decisions at the highest level of authority, and communicating and implementing them into the political and administrative decision-making process of sectoral agencies and authorities”.

In Europe the first step is mostly performed (based on the requirement of the treaty) but the second step often lacks in particular on the local level due to lack of local support and commitment as well as local public resistance. In addition the lack of financial or human resources might result in an implementation lack. However this local level is (and in particular in relation to water management as several water management measures have to be implemented on that level) a crucial factor for achieving full integration. Due to their proximity to the citizens and other important stakeholders, local communities as well as regions are able to tailor their action to people's needs, and to strategically link different areas of policy. Local governments are therefore best placed to make sustainable development a practical reality. However this challenge is often not met and integration (in particular when it comes to the spatial development perspective or land-use planning) is not achieved.

For water the main instrument for policy integration is Integrated Water Resources Management (IWRM), which can be seen as "a process which promotes the coordinated

development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (Rahaman and Varis, 2005). As such integrated water management needs to deal with several sector (such as agriculture, energy, tourism, industry, fishing, transport) activities in order to achieve the goal of sustainability of vital ecosystems.

The role of EPIs as a tool for integration

EPIs can have different targets such as cost recovery, demand management or changing behaviour (Delacamara , et al, 2013). The role as a tool for policy integration was first mentioned at the EU level in the 2000 Communication "Pricing policies for enhancing the sustainability of water resources" of the European Commission (EC, 2000). There in chapter 3.7 "Water pricing and other policy initiatives of the European Union" the following is stated: "Co-ordination and synergy between water pricing and other policy domains of the European Union are key elements for economic and environmental effectiveness. Several policy areas are clearly relevant in this regard." The Communication then further refers in particular to the agricultural policy and Structural and Cohesion policies. Energy policies were not of so much concern at this stage.

In March 2007 the first WFD implementation report was released (EC, 2007a). This report addresses three aspects: the transposition into national law, the set-up of administrative structures (Article 3 WFD) and the environmental and economic analysis of river basin districts (Article 5 WFD). This report emplaced Member States by 2009 to "put in place all the economic instruments required by the Directive (pricing, recovery of costs of water services, environment and resource costs, and the polluter pays principle). Full exploitation of these economic instruments will contribute to truly sustainable water management." Considering the definition in Box 1 pricing can be considered as the only EPI. Full cost pricing takes account of the polluter pays principle through the recovery of all economic costs; including financial, resource (or opportunity) and environmental costs related with water services provision.

In 2007 the Communication "addressing the challenge of water scarcity and droughts in the European Union from the Commission" the following aim at national level, by 2010 was set (EC, 2007b): "Put in place water tariffs based on a consistent economic assessment of water uses and water value, with adequate incentives to use water resources efficiently and an adequate contribution of the different water uses to the recovery of the costs of water services, in compliance with WFD requirements. The 'user pays' principle needs to become the rule, regardless of where the water comes from."

In 2007 also the "Green Paper on market-based instruments for environment and related policy purposes" (EC 2007c) was released and the EU Commission considered such instruments as an important tool for implementing environmental concerns across other sectors. For water it is stated: "How can the Commission most effectively ensure implementation of the water pricing policies set out in the Water Framework Directive? What options could be explored to reinforce the links between investments in national water projects and the introduction of corresponding water pricing to provide incentives for users and avoid distorting competition?"

Twelve years after the 2000 Communication of the European Commission the issue of integration still remains a pending one as shown in the Blueprint (EC 2012b): "However, there is a need for better implementation and increased integration of water policy objectives into other policy areas, such as the Common Agriculture Policy (CAP), the Cohesion and Structural Funds and the policies on renewable energy, transport and integrated disaster management. The reasons for the currently insufficient levels of implementation and integration are complex…. They consist of a series of water

management problems related to the insufficient use of economic instruments, lack of support for specific measures, poor governance and knowledge gaps. Only in a minority of cases have gaps been identified that would require the completion of the current framework by new action of a legislative/legal nature."

Finally published in April 2013, the EU strategy on climate change adaptation (EC, 2013a) is aimed at encouraging the development and implementation of adaptation action by the MS, with special focus on win-win, low-cost and no-regret options. Under such category of options, the document includes sustainable water management. As one of the actions to be promoted under its adaptation strategy, the Commission included the expansion of insurance and other financial products in the context of natural and man-made disasters. This is expected to enhance the resilience of the European economy in the face of climate change. Lastly, the communication also touches upon the importance of financing adaptation action and notes the availability of funding streams at national and EU level that support drought management implementations.

The Communication was accompanied by a Green Paper on disaster insurance (EC, 2013b). The Green Paper poses a number of questions concerning the adequacy and availability of appropriate disaster insurance (such as flood insurance). The objective is to raise awareness and to assess whether or not action at EU level could be appropriate or warranted to improve the market for disaster insurance in the European Union.

In other words since several years economic instruments are considered as a suitable tool for integrating water management concern into other policy areas. However the question why this has not been achieved still prevails. Lessons learned from a dozen of case studies from EPI-water can be used to better show why this gap still exists and what is needed to achieve a higher level of integration resulting in more sustainable water use and more integrated water management.

What is the potential for EPI in terms of

Water policy is ultimately about making economic development and social welfare enhancement compatible with the improvement and protection of water resources. Water and aquatic ecosystems provide the economy with flows of water services or primary goods for the production of a very wide array of valuable goods and services such as drinking water, biomass (either for food or energy production), power, manufactured goods, recreational services, etc. The quantity, the quality of all these water services as well as its stable delivery actually depend on the state of conservation of all those ecosystems.

None of these water services, though, can be provided without a pernicious effect on these ecosystems. Water abstractions, impoundments, diversions, etc. are a binding requirement in most cases. Besides providing water services for the production of goods and services for the economy, water-related ecosystems provide a myriad set of critical environmental services, which are essential for human welfare and for the ceaseless functioning of the economy.

Contemporary water policy objectives are therefore defined in terms of a desired status of conservation of these water-related ecosystems. The choice of the appropriate policy instruments is thus based upon their ability to adapt the functioning of the economy to these goals.

Economic instruments are just but one kind of the different alternative means available to the ends of water policy. The essential characteristic of an EPI is that it is an incentive deliberately designed and implemented in order to make individual economic decisions compatible with some policy goal. Economic instruments for sustainable water

management, as considered in EPI-WATER, if consequently designed and implemented both to induce some desired changes in the behaviour of all sectoral water users (being them individuals, firms or collective stakeholders) and to make a real contribution to the implementation and achievement of collectively agreed water policy objectives.

More concretely economic policy instruments can play different functions in the process of integration. Based on the work in the EPI-WATER the following functions have been identified:

- To implement the polluter/user pays principle. In other words if economic costs reflect real resource costs the polluter/user competitiveness is increasing if these costs (and therewith the use of water) are kept low. For example the large majority of EU domestic / manufacturing water facilities nowadays is facing waster pricing which has the aim of rationalizing water uses and allowing for the application of the polluter / user pays principle. However it is rarely used in the agricultural sector. Application of pricing at national and local level can be found in e.g. Hungary, Netherlands, UK, Italy, or Cyprus.

- To implement full cost recovery. For instance, in seeking to incorporate the environmental and resource cost requirement to rural development policy, the Commission has proposed water pricing and cost-recovery to be a pre-requisite to the allocation of funds from such plans (EC, 2012b).

- Be part of risk management: 1) Agricultural insurance is seen as an important instrument to help farmers manage risks associated with production. Given the uncertainties concerning the incidence of droughts; residual production and income risks would still persist despite the application of water markets or smart pricing (Volaro et al., 2013). Ultimately, without compensation mechanisms that cover total income losses faced by farmers due to adverse weather conditions, the real insurance system for income stabilization is often found in alternative water resources. Illegal water abstractions, especially from aquifers (as an example in Spain), offer a source of income coverage from the production losses that are not compensated for during a period of droughts. As a criticism to the current regulatory framework in Spain these sources of water are scarcely controlled and rarely pursued and punished (Gómez and Pérez, 2012).

2) Payments have been widely used in the UK, Germany and the Netherlands notably for temporary flood storage on agricultural land. Lump-sum and annual payments for creating flood storage are becoming more frequent across Europe, usually on a project basis but also through more established programmes such as payments for natural flood management via the Scottish RDP.

- Triggering innovation. For example the efforts made under the European Innovation Partnership (EIP) on Water will also be crosscutting and will aim for integrated solutions that can address water scarcity issues in urban and rural areas. In this line the pricing mechanism proposed in the WFD could be expanded into a smart pricing system that factors issues like current climatic conditions, geographic location and productivity of water use types into the price of water services.

- Increase cooperation across sectors. For example payments for ecosystem services (PES) schemes are cooperative agreements based on voluntary transactions between at least two social actors with the aim of securing the provision of ecosystem services (ES) (e.g. clean water supply, flood risk mitigation, etc). Most PES schemes involve the buying of an ecosystem service (by e.g. a drinking water company) through maintaining a specific land use (by e.g. the agricultural sector) or securing a land use change that will produce that service.

Main barriers and success factors for integration

Across case studies within the EU, synergies were found between the EPI and the Water Framework Directive. The impact of Energy related EU policies on the EPI implementation needs to be viewed in a more differentiated manner. Generally it can be said that EU policies, such as the Renewable Energy Directive, showed synergies with EPIs addressing Hydropower (e.g. . Contrary, barriers between the EU Renewable Energy Directive and the German Atomic Energy Act were identified for the implementation of EPIs addressing diffuse pollution from agriculture. These directives, by increasing demand for biofuels and thus changing market incentives, overrode the incentives provided by the "Marktentlastungs- und Kulturlandschaftsausgleich" (MEKA) and "Schutzgebiets- und Ausgleichsverordnung" (SchALVO) programs in Baden-Württemberg which were intended to reduce intense agricultural practices . Additionally, incentives provided by the EU Common Agricultural Policy presented barriers to the successful implementation of EPIs targeting diffuse agricultural pollution. EU policies which target effluent quality from point sources, such as the IPPC and Urban Wastewater Directive, created synergies with the EPIs addressing point source pollution, such as the effluent tax in Germany (Möller-Gulland et al, 2011b). Based on this assessment of case studies and additional work in the WP 4 case studies the following key success and barriers for using an EPI as a tool of integration have been identified:

Barriers

Integrated Water Resources Management (IWRM) considers multiple viewpoints and dimensions of how water should be used in the sector, but also in other sectors. While for IWRM the sustainable use of water is a key issue other sectors have different viewpoints or conflicting objectives. When formulating these sector objectives there is often a negative trade off to the water sector challenging the concept of IWRM. For example the aim to increase the share of renewable sources within the energy mix indirectly implies a higher water use in agriculture (due to irrigation and increased pollution) or morphological destruction due to hydropower generation.

Box 2 · Failure of integration: EU Renewable Energy Directive and the German Atomic Energy Act forcing intense agriculture (Möller-Gulland et al, 2011)

Barriers between the EU Renewable Energy Directive and the German Atomic Energy Act were identified for the implementation of EPIs addressing diffuse pollution from agriculture in Germany. These pieces of legislation, by increasing demand for biofuels and thus changing market incentives, overrode the incentives provided by the MEKA and SchALVO programs in Baden-Württemberg which were intended to reduce intense agricultural practices.

As the example shows some policy interventions (based on [2]conflicting objectives) are overriding the incentives provided by the water EPI.[1]

In addition several EPIs also do not have a clear objective and therefore integration is difficult to obtain. For example, the OECD (2010) provides a detailed discussion of potential tensions between four sets of objectives (economic, social, financial, environmental efficiency) in the case of tariffs for water supply and sanitation services. They are designed to suit multiple purposes (e.g. fixing budgets and mitigating negative impacts of water use) which is not always possible. In the context of the EPI-WATER research project, it was considered that environmental objectives were the priority since they have been placed as an overarching and cross sectoral policy goal by the WFD, while

1 · It should be noted that also the Common Agricultural Policy has been a long time over riding incentive. The decoupling of payments introduced in 2005 by the Common Agriculture Policy reform (CAP) likely helped in the reduction of the quantity of water used (see Mysiak et all, 2011a)

financial and development objectives remain instrumental. However as the example below shows this assumption is not always reality.

Box 3 · Example that environmental objectives are not always the main focus of an EPI (Központ et al, 2011a;b)

The shared perception of an EPIs cannot be easily identified. Clear instruments without any identifiable purpose (at least in what concerns water policy) are nothing more than a rarity. Some EPIs, for example, have been able to survive long after the obsolescence of the original objectives for which they were conceived. For example, the water load and the water resource fee in Hungary, which were already in place before Hungary's accession to the EU, and even to the economic downturn that came along the evolution from a centrally planned towards a "free" market economy. The survival of these instruments owes more to their convenience to raise public revenue rather than to the social and political commitment to improve water governance and preserve the environment.

There is no doubt that with the implementation of the WFD the conflict of policy objectives has become obvious (EC, 2012c) and the WFD mechanisms (e.g. Art 4.7) to balance them are widely used (e.g. new hydropower is built without using EPI´s to let the polluter pay for the environmental damage).

Another barrier for the limiting integrating impacts of EPI´s the enforcement and control of the EPI is often weak. Pressure from other sectors to not enforce and implement such mechanisms limit the effectiveness of the EPI.

Box 4 · Weak implementation of existing safeguarding mechanisms (Kossida et al, 2013)

In the Pinios RB in the last decade a copiousness of Regulations, Decisions, Laws, Circulars, Common Ministerial Decisions, etc. have been edited concerning the implementation of agricultural activities in the framework of the CAP, WFD and National Agricultural Policy. Yet, this legislative framework was not satisfactory implemented in the Pinios RB. All of the analysed interventions have a common pre-condition: controlling the illegal abstractions and applying a robust institutional setting. The governance framework is currently loose and many actors are involved in the water and irrigation management, resulting in an inability to control, monitor and enforce policy. In general the successful implementation of all the studied interventions and EPIs requires a robust early design which adequately considers all the necessary, preconditions, a targeted consultation with the stakeholders, a strong implementation strategy, built around a solid

Economic instruments, as with any other policy instrument, are not without cost. In some cases, the transaction costs beard by other sectors may outweigh the benefit of the transaction, in which case the transaction may not occur, and the benefits of the economic instruments will not be achieved.

Box 5 · Transaction costs as a barrier in intra-basin water trading (Gomez et al, 2013)

Transportation fees (which are considered as transaction costs) in the Tagus-Segura Water Transfer are 0.1 €/m3, while transportation losses are estimated at 10%. Bearing in mind just these two cost categories, the potential for water trading is reduced by 30 hm3 (10% reduction), along a price increase of 16%. The average technical efficiency in the irrigated areas of the TRBD connected to the Water Transfer is estimated at 39.9%, meaning that 60.1% of water is actually "lost" and either returns to the watercourse or evaporates. Return flows are estimated at 19%. Considering that ratio, the potential for water trading would be reduced by 19.6% (from 240 to 193 hm3 per annum), while prices would be 3.7% higher. Under precautionary principles (return flows at 60%), water-trading potential would fall by 65% and water prices would increase over 40%.

Finally another barrier identified is related to social acceptance and perception of EPI´s outside the water sector. Factors which create the perception of risk in the minds of those who develop an EPI or are political responsible for its implementation also produce scepticism and uncertainty at the stakeholder level.

Box 6 · social acceptance and perception outside the water sector as a barrier (Gomez et al 2013)

For example an important political barrier to implement water markets is the fear that such markets will lead to the commodification of water (and not only the privatization of water use rights), making it accessible to whoever can actually pay for it, including through importation, irrespective of other social and environmental goals. As a matter of fact, as shown by the case study in the Tagus and Segura interconnected river basins (Spain), as long as some provisions to account for third-party effects are adopted, the potential of inter-basin water trades significantly decreases. Markets may then remain relevant at a local level.

Water prices and taxes raise the cost to industry and agriculture. Thus prompt fears of decreasing competitiveness even if water is only a small fraction of the budget (energy costs for pumping might be much higher).

All the issues mentioned above are often combined and reflect an insufficient design of an EPI.

Success factor

The main success factor for using an EPI as a tool for policy integration is to avoid or overcome the above mentioned barriers by designing the EPI right from the beginning. Guidance to do so is given in the EPI- Guidance document (Delacamara, et al, 2013). In addition some more success factors hen identified have been identified.

Earmarking (and labelling) are important instruments in selling water policies to other sectors and generating revenues.

Box 7 · Successful integration: "The effluent tax in Germany" by earmarking the revenues (Möller-Gulland et al, 2011b)

All discharges of effluent require a permit. This permit is issued only if the effluent to be discharged is kept as low as possible for the required process and with the best available technology. The effluent tax is based on these permits, rather than on actual measurements. The tax rate is based on damage units, which are calculated as the equivalents of pollutants in the discharged effluent.

The revenue of the effluent tax is earmarked for investments in water quality programs by the Länder, such as the construction of municipal sewage treatment and the administration of water quality programmes tax's incentive effect in improving water quality and implementing the Polluter Pays Principle.

Industries, such as the paper industry, developed production processes which required less wastewater development. Others, like the chemical industry, invested in effluent abatement measures and considerably reduced the discharge of pollutants. In other words the EPI has integrated water management into the sector of industry.

Another relevant success factor is the issue of sequencing. According to the WP 4 case study in Tagus and Segura basins phasing up the legal reform and sequencing the setting up of the EPI might be the key to water reform success. Promoting good practices and substitution of water sources also needs a stepwise approach in order to gain broad political and social support. Sequencing the implementation also minimizes institutional transaction costs.

An important insight from the analysis is that EPIs are but one piece of the institutional change required in current water management practice. According to Ostrom (1992) the water governance challenge consists in finding a suitable non-coercive mechanism that motivates collective action. Finding the right policy mix (different EPI´s for water

Box 9 · EPI´s as part of a policy mix can ensure successful integration (Möller-Gulland et al, 2011b)

The German effluent tax is one piece of a policy mix, which also consists of discharge permits, pollution limits and mandatory technological standards. The policy mix has been mostly successful in obtaining its objectives but the real contribution of the effluent tax is impossible to single out. The tax is also based on permitted effluents both in volume and composition in such a way that incentives for further pollution reduction without technological change are missing. However, at least three complementary instruments may have played a significant role in reducing pollution and increasing the dependability of water quality targets. First, monitoring systems help verify that pollution limits are not surpassed and to set non-compliance fines that provide an incentive to stay within limit alues. Second, along the implementation process three-quarters of private enterprises and two-thirds of municipalities had increased, accelerated, or modified their abatement measures for water pollution in anticipation of the charge. Finally, although the role of the effluent charge to reduce pollution substantially faded once the prescribed limits were obtained, firms still have the option to prove they are below these limits and are subsequently eligible for a tax rebate.

management, EPIs for different policies, command-and-control instruments, information) is crucial.

Recommendations for policy makers to make better use

Based on the assessments made and the experiences gained in the EPI-water project the following recommendations to policy makers can be made:

- Clearly express policy integration aspects as part of the objective of the EPI. The EPI should have clear (environmental) objectives (and frameworks for implementation) and a clear focus on the sectors it addresses. In other words it should be made clear what the EPI is aiming for (e.g. reduced nitrate) and who will be addressed by the EPI (e.g. the agricultural sector only). Making this clear is important in the screening phase (see Delacamara, et al, 2013) to select the right EPI.

- Integration in policy formulation and the design of the detailed mechanism. This does not only referred to the EPI itself, but also to the surrounding policy mix which has been mentioned before. An example of a comprehensive framing is the checklist for "improving policy coherence and integration for sustainable development" developed by OECD (2002)[2] which can also be used in this context as well as the EPI-water Guidance document (Delacamara, et al, 2013). In particular attention should be paid to:

? - clear commitments and leadership. If this does not exist within the water sector, other sectors might stop the process or claim a design which reduces the environmental outcomes.

? - a high level of transparency as this often triggers discussions with other sectors building the foundation for better integration of water issues in other sectors. It also triggers a common understanding of the EPI across the affected sector

? - encourage stakeholder involvement in decision-making

? the key barriers identified above are avoided in the design and the key success factors are applied.

? - that from the design the economic, social and environmental benefits justify the costs, the distributional effects are considered and the net benefits are maximised.

? - the use of adequate assessment methods when designing EPIs which evaluate their performance under different scenarios within different sectors. Thereby it needs to be ensured that the diversity of sectorial knowledge and the scientific input is

2 · OECD (2002): Improving policy coherence and integration for sustainable development: A checklist, Paris: OECD.

adequately managed;

setting safeguards in such a way that would not impair the achievement of the environmental objectives

- Ensure implementation and enforcement by government agencies and other actors in a cross policy way. This should not only cover the fact that other sectors consider/built on the EPI when developing their own policies, this also could cover aspects of shared implementation and responsibilities (e.g. the Nitrate Directive is often implemented by the agricultural ministries in EU- Member States and not by the environmental ministry), data and information sharing

- Sequence the implementation of the EPI. Sequencing can also reduce initial costs, gain political and market acceptance, and build trust through learning by doing. For example, sequencing the introduction of drought insurance may involve starting with the inclusion of permanent crops where exposure to risk is easier to control, and extending coverage to new crops and areas. A proper sequencing will reduce insurance firms' incentives to engage in rent seeking and regulatory capture and will link the development of the market to its own performance.

- Allow exemptions or extensions of deadlines for sectors into which integration should take place in order to allow the sector to cope with the changes. However this may impede the functioning of the EPI and thus the achievement of the desired results.

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