

SUSTAINABLE DEVELOPMENT AND WATER INFRASTRUCTURE: IMPLEMENTATION OF THE WCD STRATEGIC PRIORITIES IN EUROPE

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The World Bank and the World Conservation Union (IUCN) set up the World Commission on Dams (WCD) in 1998. Following a wide ranging global review of the world's dams, 3 years ago it published a report (*Dams and Development: A New Framework for Decision-making*) that provided a comprehensive and integrated framework for decision-making on the provision of water and energy services. It gave clear guidelines and recommendations for decision makers aimed at safeguarding rights, reducing the risk of conflicts and lowering overall costs, including social and environmental ones.

The implementation of WCD recommendations

Case studies such as the Polish Wloclawek Dam options assessment (http://www.wwf.pl/publikacje_en.php) demonstrate the usefulness of the WCD recommendations, resulting eg in the current blockage of funds for the mentioned project by the Polish Parliament due to the doubts about the project viability.

Nonetheless, an upcoming WWF Study on Water Management⁴ shows that in the wide majority of European countries no evidence could be found that the recommendations of the WCD are adopted in the dam policy. In particular, and regarding river fragmentation by dams, water stakeholders out of a set of European countries⁵, identified some key gaps in the National water policies:

No strategies to maintain free-flowing rivers. Dams are considered sources of green electricity and a solution to water shortage problems. In many countries, especially in Northern and Western Europe, dams' construction rate has rapidly fallen during the past decade because most of the usable river stretches have already being built upon. On the other hand, in Southern and Eastern European countries dam construction still continues without an overarching approach ensuring ecological values are taken into account. Proof of this is the fact that none of the countries planning new big dams in the next 10 years include the principle of maintaining selected rivers in their natural free-flowing state in their dam development strategy.

Too few regulations for 'old' dams. While the Environmental Impact Assessment (EIA) procedures oblige, at least formally, to take into account and limit the impact of newly built dams, there are still too few binding requirements to monitor and reduce the impact on the river and the riverine inhabitants of already existing dams. This means that issues such as the monitoring of the

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⁴ WWF (in preparation): WWF's Water and Wetland Index. A snapshot on Water Policy in Europe.

⁵ Austria, Bulgaria, Finland, France, Greece, Hungary, Latvia, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland and Turkey

environmental and social impact of the dam or the evaluation of its economic performance is left to the voluntary initiative of dam operators in more than 70% and 50% of the surveyed countries, respectively.

The obligation of maintaining ecologically acceptable flow regimes downstream of dams in all or almost all the cases exists in less than 40% of the surveyed countries and building fish ladders or passes specifically tailored to the site and species where the dam is located is normally required in less than 30% of the surveyed countries.

Countries that have more binding requirements are Switzerland, Poland, Hungary, Slovakia and Turkey. However, in the survey it was stressed that even where these requirements exist, their practical implementation and effectiveness is poor and there are few or no controls to check that measures have been put into place. In particular the construction of fish-ladders is often just a 'green-washing' measure and the way minimum river flow is defined is questionable.

Scarce Public Participation. Public participation on new dams takes place only as part of the Environmental Impact Assessment procedures, once the dam construction has been decided and sticking to legal requirements. As a consequence, involvement of the public can help only to partially reduce the environmental damages but not to push for an alternative to the dam itself.

The SNHP Case study

Are dams 'bad'? In most of the surveyed countries dams remain controversial and only a few or no negative impacts are explicitly recognised in water policy. Particularly striking is the situation of Spain's National Hydrological Plan (SNHP), which⁶ foresees the construction of 119 new dams and 22 transfers and insists on old-fashioned water development models and omits any reference to the negative impacts of dams.

As shown by different WWF studies, the Plan will have a severe impact on at least 46 Natura 2000 sites⁷ and will reduce significantly the non-regulated rivers⁸.

WWF considers that the Spanish water policy is severely hijacking EU water policies from addressing sustainability (eg via the WCD recommendations); and this issue is affecting in an increasing range the credibility of the EU global water policies. A specific WWF report⁹ clarifies that none of the WCD strategic priorities has been adequately addressed by the SNHP and how these have been "infringed".

This analysis is especially severe regarding the failure to address an adequate options assessment. The Government analysed only 3 options (zero Option; transfer or supply by desalinisation of sea water) after the legal approval of the preferred transfer option, and no public participation was permitted regarding these options.

A WWF survey has identified 7 alternative studies for the Ebro water transfer, the main project of the SNHP. The Government has not taken all their different settings for options into account although all of them pretend to address water problems in Spain. It seems very clear that the SNHP has not been planned as a tool to solve water problems but to promote new water infrastructures.

⁶ in a country with already more than 1200 large dams

⁷ WWF (2003): Damming Nature -Impacts of SNHP dams on Natura2000 sites- (www.panda.org/dams).

⁸ WWF (in preparation): Sustainable Use of resources in the Iberian Peninsula.

⁹ WWF (in preparation): SNHP Performance of WCD recommendations.

The mentioned WWF survey makes clear that the options are not theoretical, and detail much their impact. As an example, WWF wishes to detail the option responses to the Government's requirement for a transfer of 315 hm³/year from the Ebro to the Júcar basin area. Different reports quantify options with a lot of emphasis on water savings technologies.

ALTERNATIVES	ACCORDING TO:					
	ARROJO	PSOE	EEA	SHAMIR	AYALA	VALENCIA ¹⁰
Improved use of groundwater	60-100 hm ³				495 hm ³	
Reuse wastewater	65-100 hm ³	50 hm ³	164-232 hm ³			60%
Desalinization		50 hm ³				90 hm ³
Water saving (irrigation)	230 hm ³ (10%)		150 hm ³			200 hm ³
Water saving (urban)	169 hm ³	260 hm ³		10%		15%
Total	524-599 hm ³	360 hm ³	314-382 hm ³		495 hm ³	290 hm ³ +

From an additional economic point of view, the Governmental transfer option does not even seem to be the most efficient one, leading once more to the WCD discussion whether dams or transfers are the “most suitable” option in economic, social and/or environmental terms.

€/M ³	ACCORDING TO:					
	ARROJO	ESTEVAN	EEA	VALENCIA	MARTÍN	MMA
Ebro water transfer	0,08-1,08 (0,72) ¹¹		0,60		0,59	0,31
Water savings	0,12-0,21					
Reuse wastewater ¹²	0,21-0,24 (drinking water)	0,10 (irrigation)				
Desalinization	0,42	0,36		0,68-1,22		0,81

The current WWF “Dam Right” initiative¹³ is asking to analyse adequately the costs and benefits of new water infrastructure, which often is NOT the best way to invest money and has developed the WCD guidance to wards a specific “Investor’s Guide”.

The lack of political will to discuss about options to the SNHP water infrastructure is overlapping geographically and institutionally with corruption scandals, certain political parties, decreasing environmental protection, undercapacity of water management bodies, illegal water use in agriculture, tourism development expectations, increasing social conflicts, manipulation of media, persecution of critical researchers and environmentalists, increasing illegal immigration and a chaotic black labour market.

The SNHP is a particularly tough example of non sustainable water policy and infrastructures, but WWF considers that the options assessment to water infrastructures continues being a pending task for many European governments.

¹⁰ These data come from a report by the Valencian government. It's not clear if these numbers are also used in the SNHP or should be added as alternatives.

¹¹ The Spanish government proposes to ask the same price for the transferred water (postal tariff), regardless of the geographical location. Pedro Arrojo states that the real price will differ per trajectory and so he assumes a price ranging from 0,08 to 1,08 €/m³, which results in an average price of 0,72 €/m³.

¹² The price of the reuse of wastewater depends on the water quality needed. Drinking water needs a higher water quality.

¹³ more information at www.panda.org/dams

The WWF Water and Wetland Index¹⁴ concludes that concrete infrastructure continues to be the first answer from authorities to extreme flood events, often due to the fact that they have to face social pressure for safer towns and lands. However, an intense debate is on-going in flood management sectors on how to achieve more sustainable flood management.

WWF looked for evidence of this debate into the existence of ‘soft’ measures in the existing national flood-defence strategies or set of measures. The survey found that there is a slow but generalised shift towards more sustainable flood management principles as an answer to flooding. At least ‘on paper’ the leading countries in this sense are the Belgian-Flemish region, Finland, Hungary, Slovakia and Switzerland.

Nevertheless, it is striking to see that important actions such as restoration of abandoned or active meanders and river arms or measures to prevent deforestation are mentioned as flood-defence measures in less than 50% of the surveyed countries¹⁵.

Conclusions

In WWF’s understanding, there is a need for this Conference to reflect on the WCD report and call to attention once more the need to implement transparently the WCD “common sense” strategic priorities in all water infrastructure projects, and especially inside the EU in order to maintain its political credibility.

Regarding the SNHP, a particularly striking initiative, WWF considers necessary that this Conference establishes a special call on the Spanish Government in order to stop the current SNHP and to restart a discussion on the options to solve the water management problems all over Spain.

¹⁴ above mentioned.

¹⁵ Austria, B-Flanders, B-Wallonia, Croatia, Finland, Hungary, Ireland, Italy, Poland, Portugal, Slovakia, Switzerland, UK-England/Wales, UK-Northern Ireland and UK-Scotland.