



---

## The Dam Industry, the World Commission on Dams and the HSAF Process

**Peter Bosshard**

International Rivers, Berkeley, CA, USA; [peter@internationalrivers.org](mailto:peter@internationalrivers.org)

---

**ABSTRACT:** Most actors of the global dam industry primarily operate within their national borders, and are either controlled by or do most of their business with the state. Because of this, the dam industry was slow to respond to the creation of the World Commission on Dams (WCD), and did not provide coordinated inputs into the WCD process. The hydropower industry is the part of the dam industry which is most directly affected by international policy developments. Not surprisingly, the hydropower sector provided the most systematic response to the WCD report among all industry actors, initially through a defensive reaction and subsequently through the creation of the Hydropower Sustainability Assessment Forum.

While the hydropower industry was largely united in its rejection of the policy principles put forward by the WCD, its proactive approach has been beset by divisions and contradictions. While some industry actors are trying to strengthen the environmental norms which are being applied in the sector, others do not see a need for this. Trying to balance such diverging views, the hydropower industry would like to establish norms that can create predictability through the certification of projects. Yet it is not prepared to accept binding minimum standards which would confer new obligations to the hydropower industry.

**KEYWORDS:** Hydropower, dams, civil society, World Commission on Dams (WCD), International Hydropower Association (IHA), Hydropower Sustainability Assessment Forum (HSAF)

---

### INTRODUCTION

The environment within which hydropower engineers operate has changed dramatically over the last 50 years. In the 1960s, dams and hydropower were still hailed, for example, as "one of the world's wonders", the "temples of modern India", and "the white gold of Switzerland". The electricity, irrigation and flood control services which these projects provided made dam engineers the heroes of the industrial age, and their works were celebrated on postage stamps and in popular movies.

Since then, however, the benefits of many large dams have proven to be elusive. Their social, environmental and economic costs have often turned out to be higher than expected, and it is no longer considered acceptable to sacrifice the livelihoods of directly affected people for the interests of society at large. The previous heroes' social license to operate has suddenly been cast into doubt.

This paper analyses how the dam industry – and the hydropower industry in particular – has responded to the changes in the environment in which it operates, and the World Commission on Dams report in particular.<sup>1</sup> It describes how the hydropower industry has moved from rejecting the specific recommendations of the WCD framework to preparing a proactive approach to the social and environmental issues of dam projects. It concludes by analysing the divisions and contradictions which have appeared in this approach.

The author brings academic training as a historian, the professional perspective of an environmental activist, and the personal experience of an actor who was deeply involved in the WCD process to the

---

<sup>1</sup> The terms, dam industry and hydropower industry, are used liberally in this paper to mean the private and public institutions involved in planning and building dams and hydropower projects.

task of writing this paper. Where published sources were not available, he relied on confidential documents and oral communication in his research.

### **THE GLOBAL DAM INDUSTRY – A HETEROGENEOUS SECTOR**

There are currently about 50,000 large dams in operation according to the definition of the International Commission of Large Dams (ICOLD). Most of these dams were built for irrigation. Only 18 percent of them have power generation as their main purpose. Yet on average, hydropower projects are the biggest, most expensive and, in terms of contractors and funding involved, the most international dams. The 44 reservoirs with the world's greatest capacity all have a hydropower component (Berga, 2008). The World Commission on Dams estimated that during the 1990s, an annual US\$19-28 billion was invested in hydropower dams and US\$13-18 billion in dams for all other purposes (World Commission on Dams, 2000).

The international hydropower industry is a very heterogeneous group. It consists of project developers, utilities and other operators, turnkey contractors, construction companies, equipment suppliers, and engineering companies (with many companies playing several of these roles). The International Hydropower Association (IHA), the industry's main trade group, for example counts public utilities such as India's National Hydropower Corporation (NHPC), private developers such as Brookfield Renewable Power, equipment suppliers such as Voith Hydro, construction companies such as Odebrecht, engineering companies such as Montgomery Watson Harza, and electricity consumers such as Alcoa among its members.

The suppliers of key hydropower equipment like turbines and generators tend to be large, powerful transnational corporations such as Alstom, General Electric and Siemens. Yet the hydropower sector makes up a relatively small part of their overall business and interest. At the other end of the spectrum, some engineering companies specialise on consulting services for hydropower companies, but are relatively small and do not have a lot of political clout.

Most developers of hydropower projects are public utilities such as Electricité de France (EDF), Hydro Québec, and India's NHPC. Even developers which act like private companies are often at least partially state-owned, as is the case for Norway's Statkraft Norfund Power Invest (SNPI) or the United Kingdom's Globelec. Western-based equipment suppliers and engineering companies are private, but tend to have close relations with the state as one of their primary clients. China's rapidly growing hydropower companies are still fully or partially state-owned.

While the leading equipment suppliers and engineering companies have a global presence, the majority of developers and construction companies still primarily operate within their home countries and do not have a global perspective.

Most professionals in the hydropower industry are male, and many of them have an engineering background. They work together in projects and frequently meet at trade shows, where they develop a strong *esprit de corps*. Yet, at the same time, they compete for the same contracts and often regard each other with a certain distrust.

Its primarily national outlook, its heterogeneity in terms of focus, size and ownership and its competitiveness have made it difficult for the global dam industry to act in coordination, and to develop shared positions on global policy issues.

### **THE DAM INDUSTRY'S INVOLVEMENT IN THE WCD PROCESS**

Throughout the 1980s and 1990s, it became increasingly apparent that governments and traditional political processes were not able to resolve the world's environmental problems. Non-governmental organisations (NGOs) gained the public trust which governments and other formal political actors were losing. High-level UN conferences such as the 1992 Conference on Environment and Development in Rio de Janeiro acknowledged the important role of civil society in resolving environmental problems.

In the 1990s, international public opinion shifted decisively against large dams. NGOs and social movements quickly adopted emerging new information technologies and formed effective international networks. In 1993, an international civil society campaign forced the World Bank to abandon the highly controversial Sardar Sarovar dam project in India's Narmada valley. As a consequence, the Bank decided not to provide funding for the Three Gorges dam, the world's largest hydropower project, even though it had coordinated the project's environmental impact assessment process. In 1995, the World Bank's new President James Wolfensohn cancelled his institution's involvement in the Arun 3 hydropower project in Nepal after affected people had challenged the project at the Bank's newly established Inspection Panel.

At this stage, the dam funders within the World Bank had their back against the wall. In an effort to rehabilitate the reputation of such projects in 1995/96 the Bank carried out an internal evaluation of the large dams it had funded. The draft evaluation report was of very poor quality, and the Bank management realised it would not be able to defend it in public (McCully, 2001). It decided to hold an expert workshop to discuss a second phase of the evaluation. Organised by the World Bank and the World Conservation Union IUCN, the workshop took place in Gland, Switzerland in April 1997. Some 30 representatives of the World Bank, hydropower utilities, the private sector, civil society and NGOs (including the author of this paper) were invited to attend the multi-stakeholder event.

The representatives of the dam industry attended the Gland workshop with very different mindsets. Theo Van Robbroeck, a veteran dam builder from South Africa and at the time the President of ICOLD, considered the public debate about large dams an uninformed distraction which did not warrant any soul searching. In a presentation entitled, "Some Inescapable Facts", he boldly asserted that "present energy sources i.e. fossil fuels, nuclear and hydro are the only realistic choices in the medium term" (ICOLD, 1997).

Jan Strömblad, the Senior Vice President for Environmental Affairs at Asea Brown Boveri (ABB), one of the world's largest power equipment companies, entered the debate with much more introspection. His company had recently won a US\$5 billion contract to build the Bakun dam in Sarawak/Malaysia – the biggest contract in its history. Yet ABB ran into a highly effective campaign by Malaysian and international NGOs working to defend Sarawak's indigenous peoples and rainforest from the project, and was struggling to secure domestic and international funding for the contract. Strömblad admitted at the Gland workshop that he and his colleagues no longer understood the environment within which they operated.

In March 1997, the First International Meeting of People Affected by Dams took place in Curitiba, Brazil. The participants of the meeting called, among other things, for an "international independent commission (...) to conduct a comprehensive review" of large dams (Curitiba Declaration, 1997). NGO representatives brought this proposal into the Gland workshop, and ABB's Jan Strömblad was the first industry representative to embrace it, in an effort to explore a new *modus operandi* for international dam builders. Other industry representatives were confident that any independent review would confirm the paramount benefits of dam building. After some trepidation, the World Bank delegation also lent support to the idea, possibly because it realised that a global review would remove the spotlight from the Bank's role in dam building.

At the end of the workshop, the participants agreed to initiate a process "to review the development effectiveness of large dams and to establish internationally accepted standards that would improve the assessment, planning, building, operating and financing of these projects" (quoted in McCully, 2001). Thus the World Commission on Dams was conceived. The Commission's twin mandate was a compromise: Civil society had strongly pushed for the review of development effectiveness, while the dam industry was mainly interested in a new set of generally accepted dam standards. Given the industry's eventual response to the proposed new standards, its initial position was rather ironic.

The dam industry actively participated in the WCD process in various ways. Göran Lindahl, the Chief Executive Officer of ABB, and Jan Veltrop, the Honorary Chairman of ICOLD, served as members of the Commission. Six private sector companies and five public utilities and developers of hydropower

projects were members of the WCD Forum, the Commission's multi-stakeholder sounding board. Close to 20 companies and utilities provided funding for the WCD process. Several members of the WCD secretariat, including two of the team leaders, and many authors of the reports in the WCD knowledge base had a long history as industry consultants.

Although the dam industry was actively involved in the WCD process, the different industry actors never tried or managed to harmonise their approach to the WCD. The industry Commissioners, Forum members and consultants never seem to have met to coordinate their efforts. The industry members of the WCD Forum did begin to caucus ahead of the Forum meetings halfway through the process. But unlike the NGOs which cooperated very effectively throughout the WCD process, they were not used to working together and appeared to disagree on key issues such as the need for public acceptance of dam projects. Civil society contributions far outnumbered industry contributions among the submissions to the WCD's knowledge base, and during the question and answer sessions at the WCD's four regional consultations. Members of the WCD secretariat told NGOs that the vast majority of external inputs which the secretariat received as it helped the Commissioners prepare their report were from civil society (Oral communication from a member of the WCD secretariat).

### **THE DAM INDUSTRY'S RESPONSE TO THE WCD REPORT**

The WCD launched its final report in the presence of Nelson Mandela in London on 16 November 2000. The report found that "dams have made an important and significant contribution to human development", but that "in too many cases an unacceptable and often unnecessary price has been paid to secure those benefits" (World Commission on Dams, 2000). It put forward a new decision-making framework for the water and energy sectors which was based on four Core Values and consisted of seven Strategic Priorities with 26 specific Policy Principles.

Most importantly, the WCD report espoused a new approach for decision-making, and stated: "Involuntary risk bearers must be provided with the legal rights to engage with risks takers in a transparent process to ensure that risks and benefits are negotiated in a more equitable basis". Further, "where rights compete or conflict, negotiations conducted in good faith, offer the only process through which various interests can be legitimately reconciled. This suggests an approach to water and energy policy that provides for negotiated processes within a legal and procedural framework, including arbitration, recourse and appeal mechanisms to ensure equitable adjudication in cases where negotiated settlements are not achievable or are contested" (World Commission on Dams, 2000).

When the WCD report was published, it was immediately welcomed by international civil society, international organisations such as UNEP and the World Health Organisation, and financial institutions such as the African and Asian Development Banks. The new rights-and-risk approach turned affected communities from passive victims or beneficiaries into active participants in dam projects. It also reflected the experience of civil society groups that dam projects often created conflicts among different stakeholders, and that explicit rights and clear-cut standards were preferable to vague promises in such conflict situations.

At the launch event, 109 NGOs from 39 countries called on all public financial institutions to "immediately and comprehensively adopt the recommendations of the World Commission on Dams, and [to] integrate them into their relevant policies" (Berne Declaration, 2000). While many policy principles of the WCD report could be adopted as binding norms, they were not by themselves binding on anybody. Commenting on the public reception of the report, the chair of the WCD stressed in February 2001 that the Commission's recommendations were "not laws to be obeyed rigidly" but "guidelines, with a small 'g'" (World Commission on Dams, 2001).

The dam industry was once again split in its response to the WCD report. Skanska, a Swedish construction company, found the report to be "extremely valuable", and expressed the hope "that the Commission's new criteria and guidelines become accepted globally" (Skanska, 2000). The Australian Committee on Large Dams "welcome(d) the final report of the World Commission on Dams and

encourage(d) ICOLD to not only accept the report but to actively promote it" (ANCOLD, n.d.). Geoff Sims, a Vice-President of ICOLD from the United Kingdom, argued that "the report is the nearest we have to global guidelines", and that "to avoid the waste involved with the bitter arguments of the past we have a duty to adapt our working methods to conform to the guidelines WCD have [sic] revealed" (Geoff Sims, quoted in British Dam Society, n.d.).

Other dam building institutions rejected the WCD report wholesale. Turkey's hydropower utility, the General Directorate of State Hydraulic Works, commented that the Commission was "intentionally assessing the negative aspects of the large dams, with prejudices against the large dam projects all around the world" (General Directorate of State Hydraulic Works, n.d.). The Indian Commission on Large Dams denounced it as "more like a nominated group of NGOs and anti dam campaigners" (Gopalakrishnan and Prasad, n.d.). And a delegate of the Russian National Committee of Large Dams stated: "All thousand year experience of the mankind shows and supports by the numerous concrete facts that dam engineering means benefit, energy, water supply, rich crops, better quality of life, but suddenly an organisation shows up which is only two years old but very rich and says that it is not true and white is black" (Lapin, 2000).

Most organised voices of the hydropower industry took an approach between acceptance and full rejection of the new WCD framework. The IHA and an industry group made up of Harza Engineering, Hydro Québec, Siemens and EDF embraced the rather general Core Values and Strategic Priorities of the report, but rejected its specific recommendations. In particular, the hydropower industry opposed the WCD's basic rights-and-risk approach – the concept of negotiated settlements in which the rights of the participants were determined by the risks which were at stake. "We are concerned about the practicality of all affected people being part of the negotiation process", the IHA wrote in its comments. "The approach is a heavily legalistic process with binding contractual agreements. (...) The intent is noble, but the end result would be a lawyer's dream, diverting resources from the just beneficiaries" (IHA, 2001).

With the exception of some dam building agencies particularly in developing countries, the strongest opposition to the WCD framework was orchestrated by the World Bank. Soon after the report was published, the Bank's senior water adviser set out on a tour to visit developing country governments, during which he strongly advised them against adopting the WCD recommendations.<sup>2</sup> In February 2003, the Bank adopted a new Water Resources Sector Strategy which completely disregarded the WCD framework, emphasised the role of governments as the ultimate decision-makers, and announced that the Bank would re-engage "in developing high-reward/high-risk hydraulic infrastructure" (in other, carefully omitted words, dams) (World Bank, 2003b).

The timing of the publication of the WCD report was unfortunate. A few weeks after the report was launched, George W. Bush became the new US President. After the terror attacks of 11 September 2001, governments focused on the Bush administration's 'war on terror' and the looming war against Iraq. The protection of the environment and human rights were not high on the official agenda or the public's mind in the early years of the new century.

When the WCD report was published, building large hydropower projects was still the preserve of Western companies, backed by Western and international financial institutions. In the following years, new competitors appeared in the international market, supported by financiers that did not necessarily subscribe to international environmental standards. The traditional financiers argued that this made it more difficult for them to uphold or strengthen their policies and standards. In May 2006, Philippe Maystadt, President of the European Investment Bank, commented: "The competition of the Chinese banks is clear. They don't bother about social or human rights conditions". As a consequence, Maystadt

---

<sup>2</sup> Representatives of several institutions – including a multilateral development bank, a developing country electric utility and a European export credit agency – informed the author confidentially that they had been reprimanded by the World Bank's senior water advisor after making positive comments about the WCD report.

warned, international financial institutions had to "think about the degree of conditionality we want to impose" (Maystadt, quoted in Financial Times, 2006).

Even in this difficult environment, the WCD report held its ground. In the months and years after the publication, the new framework was endorsed by the German government, other government agencies such as the US Overseas Private Insurance Company, private banks and insurers such as HSBC, Dexia and Swiss Re, national multi-stakeholder processes in South Africa and Sweden, and the European Union's Linking Directive. It was referenced in the environmental policies of several Export Credit Agencies and an agreement of the OECD's Export Credit Group, and became the most widely accepted international benchmark for dam building.

The IHA, the World Bank and other actors of the international hydropower industry publicly endorsed the Core Values and Strategic Priorities of the WCD. They also engaged in the Dams and Development Project (DDP), the follow-up process to discuss and disseminate the WCD report which was housed by UNEP. Their endorsement added to the report's public legitimacy, but did not confer any specific obligations to dam builders. Behind the scenes, the hydropower industry and the World Bank tried to close the book on the WCD process and avoid any reference to the WCD report in the DDP's work.

Writing almost ten years after the publication of the WCD report, Fujikura and Nakayama (2009) conclude that the report's recommendations "have not yet been adopted formally by the major international financial institutions" or "by any national government involved in dam building", but that the debates triggered by them "have resulted in many changes being implemented in terms of how dams should be planned and built". Dubash (2009) notes a "rhetorical acceptance of the WCD without formal operationalisation", but points out that "rhetorical acceptance can lead over time to changes in practice", and sees a "long-term process of socialisation around the norms propagated by the WCD".

### **THE HYDROPOWER INDUSTRY ASSERTS ITSELF**

While governments and other institutions debated the merits of the WCD framework, specific dam projects continued to run into controversy and deadlock. In the first three years after the WCD report was published, investors and financiers pulled out of the Masheshwar dam in India, the Ilisu dam in Turkey, the Bujagali dam in Uganda and the Nam Theun 2 dam in Laos. (All four projects were later revived, some of them with new backing.) The Brazilian government dropped its plans for the large Santa Isabel dam, and the Thai government was forced to open the gates of the Pak Mun and Rasi Salai dams.

Compared with irrigation and water supply, hydropower is the sector of the global dam industry which most strongly depends on international funding and expertise, and is thus most exposed to international policy changes. Although the hydropower industry had not prepared any effective, coordinated input into the WCD process, once the WCD report was published, it asserted itself. Major hydropower companies strengthened the capacity of the IHA and created the Hydropower Equipment Association (HEA) as a means to engage in the DDP process.

The IHA was created in 1995 in order to enhance knowledge and encourage good practice in the hydropower sector. The IHA was not invited to attend the 1997 Gland workshop, and remained largely passive throughout the WCD process. In 1999, its annual budget amounted to less than UK£33,000 (International Hydropower Association, 1999).

After the WCD report was launched, the hydropower industry used the IHA as a lobbying platform to influence the declarations coming out of high-level international events such as the World Summit on Sustainable Development in Johannesburg (2002), the International Conference for Renewable Energies in Bonn (2004), and the African Ministerial Conference on Hydropower and Sustainable Development in Johannesburg (2006). The IHA organised events at the World Water Forum meetings of 2003, 2006 and 2009, and started publishing brochures and newsletters for an interested public. Like HEA and NGOs

such as International Rivers, the IHA was also represented in the steering committee of the DDP. By 2006, its budget had increased to UKE214,000 (International Hydropower Association, 2007).

After the WCD report was launched, the IHA began developing its own set of social and environmental criteria in the form of the IHA Sustainability Guidelines. Conversations with IHA representatives suggest several distinct motives for the creation of these guidelines. Forward-looking elements of the hydropower industry realised that they could more effectively discourage regulators and financiers from adopting the WCD framework if they offered an alternative policy tool. Additionally, fearing that further social and environmental scandals around hydropower projects could strengthen the public backlash against dam building, many of them effectively hoped to strengthen the social and environmental practices in the industry. They also viewed a focus on project quality, including the avoidance of serious environmental impacts, as a way of distinguishing themselves from the low-cost competition from emerging economies. Finally, IHA representatives hoped that by following credible sustainability guidelines, hydropower developers could attract carbon credits, public subsidies and green finance for their projects.

The IHA's governing council adopted the Sustainability Guidelines in November 2003. The document lists a set of criteria to be used in comparing different energy options and hydropower project alternatives. It also presents principles and strategies to address the environmental, social and economic aspects of sustainability. The guidelines include a lot of aspirational statements regarding the beneficial outcomes of hydropower projects, but unlike the WCD report, they do not recognise any specific rights of dam-affected communities to participate in the decision-making process (International Hydropower Association, 2004).<sup>3</sup>

The new guidelines were complemented by detailed Guidance Notes on Compliance with the Sustainability Guidelines. Yet compliance with the new tool was completely voluntary, and very few sustainability assessments were ever carried out.<sup>4</sup>

## THE HSAF PROCESS

After their launch, the Sustainability Guidelines were repeatedly updated, and the Guidance Notes were turned into a Sustainability Assessment Protocol. At the same time, the IHA realised that its approach needed buy-in from actors outside the dam industry if it was to have any public legitimacy. As early as 2004, the IHA started discussions with WWF and The Nature Conservancy about how the Guidelines and Protocol would need to be strengthened so that they could be endorsed and used by these NGOs. WWF International's freshwater programme participated in the testing of the Protocol in some projects and provided feedback on its weaknesses.

In 2007, the IHA created the Hydropower Sustainability Assessment Forum (HSAF) together with government agencies (from China, Iceland, Norway and Zambia), NGOs (Oxfam, The Nature Conservancy, Transparency International and WWF) and financial institutions (the Equator Banks, with Germany's GTZ and the World Bank as observers). The stated purpose of HSAF was to "jointly review and recommend enhancements" to IHA's Sustainability Assessment Protocol by early 2010 (see International Hydropower Association, n.d.).

At the time of writing, the HSAF process has not yet been completed, and has not yet produced a final version of the revised Protocol. Yet some fundamental problems with the process and the likely outcome have already become apparent.

The HSAF members did not agree on the goal of their process at the outset. WWF and The Nature Conservancy representatives hoped that the process would come up with a substantively new Protocol, which would allow for the implementation of the WCD recommendations. Internal WWF

---

<sup>3</sup> For a civil society critique of the Guidelines, see McCully, 2004.

<sup>4</sup> A table prepared for an HSAF meeting in October 2008 lists 35 projects for which assessments were supposedly carried out. Most assessments do not appear to have been completed, and only seven are publicly available on the Internet.

correspondence at the time referred to HSAF as "WCD by another name". The IHA in turn stressed that the basis of the Forum's work was the existing Sustainability Assessment Protocol, and tellingly, the revised draft Protocol was published under the IHA logo, "after review and modification" by HSAF (International Hydropower Association, 2009). In February 2010, the Forum agreed that a revised Protocol would first have to be adopted by IHA, and would then be recommended for "endorsement by HSAF members" (HSAF, 2010). This indicates that the hydropower industry has asserted its role as the Protocol's final arbiter.

At the beginning of the process, the IHA hoped that its existing Sustainability Assessment Protocol could become "a future sustainability standard for the sector" and the basis for third-party certification (International Hydropower Association, 2008). However the HSAF process does not comply with the code of good practice prepared by the International Social and Environmental Accreditation and Labeling Alliance (ISEAL) for standard setting processes. In order to comply with this code, a standard needs to be developed "with the active development of a balance of interested parties" (International Social and Environmental Accreditation and Labelling Alliance, n.d.). Yet the hydropower industry is the final arbiter within HSAF, while dam-affected people were not even invited to participate in the Forum process.

The revised Protocol is expected to be completed in mid-2010. The Forum is considering a second phase in which the implementation of the Protocol, including through a certification scheme, could be discussed. It is not clear whether the hydropower industry will be prepared to participate in a standard-setting process which follows the criteria of ISEAL and which the IHA cannot control.

### **THE DRAFT HSAF PROTOCOL**

In August 2009, HSAF published the draft of its Hydropower Sustainability Assessment Protocol for comment. The draft consists of four sections that deal with different stages of a hydropower project, from strategic assessment to implementation. Each section is divided into up to 28 different topics, and each topic is again elaborated in seven criteria.<sup>5</sup> The criteria do not define standards that need to be met, but allow the performance of projects to be measured and scored on a scale from 1 to 5.

The draft Protocol requires the scoring of many rather marginal criteria, but does not include rules which have been essential for protecting the interests of affected communities and the public at large in many dam projects. It stipulates the consultation of dam-affected people on a long series of aspects, but does not confer any rights to them. The draft Protocol does not require compliance of a project with binding standards, laws or international conventions such as the right to access to information, the ILO core labour standards, international competitive bidding, or the requirements of regulatory approval. It also fails to address essential aspects of resettlement and rehabilitation such as the respect of traditional land rights of affected communities and the importance of land-for-land compensation for affected farmers.

The HSAF purports that, unlike the WCD framework, compliance with the proposed Protocol can be measured based on "objective evidence". Yet this evidence will be provided to the auditors primarily by the developers or owners of a project, and "can be qualitative or quantitative information, records or statements of fact, either verbal or oral" (International Hydropower Association, 2009). This is a rather generous interpretation of "objective evidence", and many of the draft Protocol's criteria will be difficult to measure in the first place. It is hard to imagine how auditors will meaningfully measure criteria such as the "degree to which negative project impacts to catchment users and uses are identified, and are being or likely to be avoided, mitigated and/or compensated, mindful of the proponent's role and responsibilities" (under topic III-20).

---

<sup>5</sup> In the draft protocol, the topics were still called 'aspects', and the criteria, 'attributes'. HSAF changed its terminology in February 2010. In this paper the revised terms are used in order to avoid confusion.



In spite of these shortcomings, the hydropower industry started to push back after the draft Protocol was published. The IHA Reference Group, a group of IHA member companies monitoring the HSAF process, commented that "[m]ajor condensation and simplification is [sic] required, before the protocol will become an acceptable tool for the industry". Leading IHA members were not prepared to accept a Protocol that would not award their current practice the highest score. And after IHA and the Forum at large had spent two years preparing a draft Protocol to assess hydropower projects, the Reference Group proposed that the final Protocol "measure the performance of a project proponent" and not of projects (Smith, 2009). HSAF responded to this backlash by inviting the IHA to propose a final Protocol which it could accept, while other Forum members would only be asked to endorse the Protocol after the adoption by the IHA.

### **THE WCD, HSAF AND THE ROLE OF THE STATE**

While it was ongoing, the World Commission on Dams' multi-stakeholder process was celebrated as an "almost archetypical trisectoral network" of governments, private sector and civil society, and an innovative model of global governance (Reinicke and Deng, 2000). Government representatives played a prominent role on the Commission (including through its chair, South Africa's water affairs minister Kader Asmal) and in the WCD Forum. Yet unlike civil society and the dam industry, dam-building governments inside and outside the Forum remained largely passive throughout the WCD process. Patrick McCully of International Rivers identified this passive role as one of the reasons why the WCD was able to come up with a new framework of decision-making (McCully, 2001).

At the launch ceremony of the WCD report, World Bank President James Wolfensohn said: "The critical test for us will be whether our borrowing countries and project financiers accept the recommendations of the Commission and want to build on them" (World Bank, 2000) This was the first sign of a break with the much-lauded multi-stakeholder approach to conflict resolution. In response to the WCD report, the dam industry and the World Bank argued that governments, rather than unelected third parties, should be the primary decision-makers in the hydropower sector. The Bank's 2005 Country Water Resources Assistance Strategy for Pakistan is a typical example for this new discourse. In it, John Briscoe, the Bank's point person on the WCD, argued as follows: "In short, while all voices must be heard, much greater weight must be given to the voices of those who have responsibility and face the voters, and less to those who are self-appointed or who represent small special interests" (World Bank, 2005).

While the state undoubtedly needs to play a central role in decision-making, the claim that the WCD framework unduly infringes on the role of democratic institutions as the final arbiters of dam projects is spurious. Key recommendations of the WCD reflected commitments which governments had taken on themselves in the Rio Declaration, the Biodiversity Convention and other instruments. Further, more than half of the world's approximately 50,000 large dams were built by governments which had no democratic legitimacy.<sup>6</sup> (When John Briscoe contrasted the democratic legitimacy of Pakistan's government with the "self-appointed" nature of special interests, the country's government was headed by a self-appointed military dictator.) Finally, the World Bank has often not shied away from putting pressure on governments to follow its own agenda in the water and energy sectors. As reported above, the World Bank's senior water adviser reprimanded several governments and institutions for praising the WCD report after its publication. The World Bank applied strong pressure for the privatisation of power utilities in the 1990s (see World Bank, 2003a), and advocated for a weakening of the environmental safeguards in Brazil's hydropower sector in 2005 (see Wolfowitz, 2005).

Most hydropower projects involve government agencies, companies and financiers from different countries. Many are built in some kind of public-private partnership. While hydropower projects cannot be built against the will of governments, many require decisions by a host of other actors – companies,

---

<sup>6</sup> See World Commission on Dams 2000 for the country-wise distribution of large dams.

public and private financiers and sometimes NGOs – to go forward. Ignoring the range of actors influencing decisions on dams led to the deadlock of the 1990s. Multi-stakeholder processes tried to overcome this impasse by recognising and addressing the roles of different stakeholders in decision-making over such projects.

The dam industry strongly argued for a more active role of dam-building governments in the follow-up process to the WCD report. Yet when the IHA decided to revise its Sustainability Assessment Protocol, it did not simply consult governments, but created a stakeholder forum for this task instead. Along with nine other members and observers, HSAF included representatives from Chinese, Icelandic, Norwegian and Zambian government agencies. As in the case of the WCD, government interest in the HSAF process was however limited. "Relatively few responses were received via any mechanism from governments" in the first round of the HSAF consultation (Hydropower Sustainability Assessment Forum, 2009). HSAF invited 222 government agencies to participate in the second consultation round, and received 30 official responses from 16 countries (Hydropower Sustainability Assessment Forum, 2010).

### THE CONUNDRUM OF ENVIRONMENTAL STANDARDS

The question of social and environmental standards, in the sense of clear conditions that a project needs to achieve, lies at the heart of the hydropower industry's conundrum with the WCD and HSAF Protocol. While the industry accepted the WCD's general Strategic Priorities, it dismissed the standard-based rights-and-risk approach as a "heavily legalistic process" and a "lawyer's dream" (see above). The industry initially hoped that the HSAF Protocol could turn into "a future sustainability standard for the sector" (see above), but eventually shied away from such an approach during the HSAF process.

In January 2009, HSAF carried out a five-week consultation on what it termed its Key Components Document. During this consultation, civil society organisations, financiers and government institutions stressed the need of clear minimum standards for hydropower projects. (Civil society groups did not want HSAF to prepare such standards, but asked that the future Protocol integrate existing standards such as those of the WCD framework). The consultation report summarised the responses from different parties as follows:

- The Equator Bank representatives want guidelines to help them direct their project funding decisions, which they would like to set a minimum standard under which funding is not applicable.<sup>7</sup>
- The environmental and social NGOs want a tool that dam builders, affected communities, governments and international organisations can refer to when building, planning and refurbishing dams and reservoirs.
- The donor governments would like a tool to help them assess the extent to which environmental and social standards are taken into account in dam building projects to inform their planning and funding decisions.
- The hydropower industry wants a sustainability standard to assess prior to an investment which issues will arise during the construction and commissioning of a dam. (All responses quoted verbatim from Ove Arup & Partners, 2009)

The Equator Banks, which have to assess the compliance of their projects with international standards anyway, commented that a protocol without standards would be "toothless" (quoted in Ove Arup & Partners, 2009). Interestingly, even the hydropower industry expressed a desire for a standard that would allow it to assess the acceptability of a project. Indeed, minimum standards which are widely

---

<sup>7</sup> The Equator Principles are a voluntary set of standards that deal with social and environmental risks in project finance. By October 2009, 67 banks had signed on to them.

endorsed would greatly improve the predictability for developers, financiers and contractors who have to commit large amounts of resources to a project. They would help to weed out sub-standard projects early in the process, and would define generally accepted decision-making processes for the projects that do go forward.

Many governments and international institutions have already adopted and endorsed international standards which are relevant for specific aspects of dam projects: governments have adopted and ratified the Biodiversity Convention; the European Union has issued the Linking Directive on the standards to be fulfilled by hydropower projects selling carbon credits on the European market; international financial institutions have adopted safeguard and procurement policies; the International Labour Organisation has adopted core labour standards; and the UN General Assembly has approved the Declaration on the Rights of Indigenous Peoples. Given the desire for predictability, it would have made sense for HSAF to acknowledge and endorse these existing international standards for hydropower projects. Yet representatives of the hydropower industry made it very clear throughout the HSAF process that they did not want the future Protocol to define any clear standards or minimum thresholds of acceptability.

The Forum adopted the industry position and rejected the integration of minimum standards into the Protocol. HSAF's response to the consultation states: "The Draft Protocol will set out a spectrum of performance on key hydropower sustainability issues without specifying guidelines or minimum standards on acceptable hydropower sustainability performance" (Hydropower Sustainability Assessment Forum, 2009). As a consequence, the draft Protocol does not use any labels such as 'satisfactory' or 'acceptable'. And it does not require the compliance of project developers with national law or international conventions as a mandatory condition of sustainable hydropower projects.

Certain environmental aspects of dam projects, such as environmental flows or catchment area treatment, can be measured and scored on a sliding scale as suggested by the draft HSAF Protocol. Many social and governance aspects, such as community consent and international competitive bidding, will comply or not comply with existing international standards, but cannot be meaningfully measured on a sliding scale from 1 to 5. Given the lack of mandatory rules against which the output of the HSAF process is referenced, it will amount to a scorecard or checklist rather than a protocol.

In conclusion, the position of the hydropower industry regarding social and environmental standards for its projects is contradictory. The industry was largely united in its rejection of the policy principles proposed by the World Commission on Dams. It is interested in gaining more predictability about problems that may arise in hydropower projects, and the IHA would like its Sustainability Assessment Guidelines and Protocol to serve as the basis for the certification of projects. Yet under pressure from some of its members, the IHA does not seem to be prepared to accept current international social and environmental standards – or, in fact, any minimum standards of acceptability – as the criteria according to which projects could be certified. The hydropower industry is interested in gaining more credibility for its own Protocol and more predictability for the projects it engages in, but hesitates to accept the price of the obligations that this may entail. It appears to seek gain without pain.

The contradictions of the hydropower industry's approach to the HSAF process reflect contradictions in the industry's operations. The IHA and its leading members are aware of the social and environmental risks of dams, have endorsed the Core Values and Strategic Priorities of the WCD framework, and would like to improve the social and environmental performance of their sector. Yet developers and contractors often take on projects which violate the WCD's Strategic Priorities and other international standards, arguing that they will do less harm in implementing them than their competitors would. Binding minimum standards could provide a floor for all competitors and prevent the occurrence of such an environmental race down to the bottom. But the hydropower companies seem to prefer the current situation over minimum standards that would foreclose certain projects for them.

## ACKNOWLEDGMENTS

Shannon Lawrence and Patrick McCully (both of International Rivers).

## REFERENCES

- ANCOLD (Australian National Committee on Large Dams). n.d. Response to World Commission on Dams report. [www.unep.org/dams/documents/default.asp?documentid=459](http://www.unep.org/dams/documents/default.asp?documentid=459) (accessed on 19 November 2009)
- Berga, L. 2008. Dams for sustainable development. Paper presented at High-level International Forum on Water Resources and Hydropower, Beijing, 17-18 October 2008.
- Berne Declaration, International Rivers Network. 2000. Open Letter, signed by 109 NGOs from 39 Countries, 16 November 2000.
- British Dam Society. n.d. Contributions from the British Dam Society to the ICOLD formal response to the WCD Report. [www.unep.org/dams/documents/default.asp?documentid=483](http://www.unep.org/dams/documents/default.asp?documentid=483) (accessed 19 November 2009)
- The Curitiba Declaration. 1997. *Affirming the right to life and livelihood of people affected by dams*. Approved at the First International Meeting of People Affected by Dams, Curitiba, Brasil, 14 March 1997.
- Dubash, N. 2009. Global norms through global deliberation? Reflections on the World Commission on Dams. *Global Governance: A Review of Multilateralism and International Organizations* 15(2): 219-238.
- Financial Times. 2006. EIB accuses China of unscrupulous loans, 28 November 2006.
- Fujikura, R. and Nakayama, M. 2009. Lessons learned from the World Commission on Dams. *International Environmental Agreements: Politics, Law and Economics* 9(2): 173-190.
- General Directorate of State Hydraulic Works (DSI). n.d. [www.unep.org/dams/documents/default.asp?documentid=482](http://www.unep.org/dams/documents/default.asp?documentid=482) (accessed 19 November 2009)
- Gopalakrishnan, E. and Prasad, Y. n.d. Detailed comments supported by INCOLD. [www.unep.org/dams/documents/default.asp?documentid=469](http://www.unep.org/dams/documents/default.asp?documentid=469) (accessed 19 November 2009)
- HSAF (Hydropower Sustainability Assessment Forum). 2010. Final minutes. HSAF Meeting 8, France, 2-5 February 2010.
- Hydropower Sustainability Assessment Forum. 2009. *Response to Consultation Phase 1 Issues*. London: HSAF.
- Hydropower Sustainability Assessment Forum. 2010. *Phase 2 Consultation Final Outcomes Report*, January 2010.
- IHA. 2001. IHA Comments on the Final Report of the WCD, February 2001. [www.unep.org/dams/documents/default.asp?documentid=455](http://www.unep.org/dams/documents/default.asp?documentid=455) (accessed 19 November 2009)
- ICOLD (International Commission on Large Dams). 1997. Some inescapable facts which may put the issue in perspective. Paper presented at the World Bank/IUCN workshop, Large Dams – Learning From the Past, Looking at the Future, Gland, Switzerland, 10-11 April 1997.
- International Hydropower Association. About the Forum. [www.hydropower.org/sustainable\\_hydropower/HSAF\\_About\\_the\\_Forum.html](http://www.hydropower.org/sustainable_hydropower/HSAF_About_the_Forum.html) (accessed 18 November 2009)
- International Hydropower Association. 1999. *Financial Statements for the Year Ended 31 December 1999*. London: International Hydropower Association.
- International Hydropower Association. 2004. *Sustainability Guidelines*. London: International Hydropower Association.
- International Hydropower Association. 2007. *IHA Activity Report, August 2005 to May 2007*. London: International Hydropower Association.
- International Hydropower Association. 2008. Hydropower Sustainability Assessment Forum launched in Washington, In *IHA Connect*, Issue 1, 2008.
- International Hydropower Association. 2009. *Draft Hydropower Sustainability Assessment Protocol*. London: International Hydropower Association.
- International Social and Environmental Accreditation and Labeling Alliance. n.d. *Code of good practice for setting social and environmental standards*.
- IUCN (The World Conservation Union) and The World Bank Group. 1997. *Large dams, learning from the past, looking at the future*. Paper presented at the World Bank/IUCN workshop, Large Dams – Learning From the Past, Looking at the Future, Gland, Switzerland.
- Lapin, G. 2000. Comments by G.G. Lapin, Deputy Chairman, Russian National Committee of Large Dams, 23 November 2000. [www.unep.org/dams/documents/default.asp?documentid=477](http://www.unep.org/dams/documents/default.asp?documentid=477) (accessed 19 November 2009)

- McCully, P. 2001. The use of a trilateral network: An activist's perspective on the World Commission on Dams. *American University International Law Review* 16(6): 1453-1475.
- McCully, P. 2004. Hydropower group sidesteps WCD Guidelines. *World Rivers Review* 19(1): 6-7.
- Ove Arup & Partners. 2009. HSAF Phase I Consultation, Consultation Outcomes Report, 27 February 2009. Ove Arup & Partners
- Reinicke, W. and Deng, F. 2000. *Critical choices, the United Nations, networks, and the future of global governance*. Ottawa: International Development Research Centre.
- Skanska. 2000. Skanska supports the World Commission on Dams' recommendations. Press release, 16 November 2000.
- Smith, P. 2009. Communication to all IHA members from the Chair of the IHA Reference Group, electronic message, 9 December 2009.
- Wolfowitz, P. 2005. Reaching for a double dividend. Remarks made at the Forum on Global Climate Change and Biodiversity, São Paulo, Brazil, 20 December 2005.
- World Bank. 2000. *World Bank welcomes Commission on Dams report*. News Release No. 2001/119/S, 16 November 2000.
- World Bank. 2003a. *Power for development. A review of the World Bank Group's experience with private participation in the electricity sector*. Washington, DC: World Bank.
- World Bank. 2003b. *Water resources sector strategy. Strategic directions for World Bank engagement*. Washington, DC: World Bank.
- World Bank. 2005. Pakistan's water economy: Running dry. Draft. 23 June 2005. Washington, DC: World Bank.
- World Commission on Dams. 2000. *Dams and development. A new framework for decision-making*. The Report of the World Commission on Dams. London: Earthscan.
- World Commission on Dams. 2001. *Final WCD Forum report, responses, discussions, and outcomes*. Cape Town: The World Commission on Dams.