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Initiatives in the Hydro Sector Post-World Commission on Dams – The Hydropower Sustainability Assessment Forum

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ABSTRACT: The World Commission on Dams (WCD) has called for developers, governments, civil society, etc. to use its Strategic Priorities as a starting point for dialogue and initiatives to address issues regarding the development of dams. One very notable follow-up initiative has been led by the hydropower industry. The International Hydropower Association developed Sustainability Guidelines (IHA, 2004) and a Sustainability Assessment Protocol (IHA, 2006), and most recently has been involved in a two-year process with governments, NGOs and the finance sector to develop a broadly endorsed sustainability assessment tool based on review and update of the IHA Sustainability Assessment Protocol. This cross-sectoral process, known as the Hydropower Sustainability Assessment Forum (HSAF), has drawn on the knowledge base and many of the findings and recommendations of the World Commission on Dams, as well as a number of other developments in the last ten years. A fundamental premise of the work of the Forum is that an industry-driven and -owned initiative has far-reaching potential to influence performance in the hydropower sector. At the same time, the potential for the use of a broadly endorsed sustainability assessment tool for hydropower by those in other sectors is well recognised and aspired to by the Forum. This paper describes the work of the Forum up to August 2009 and the contents of the Draft Protocol released publicly in August 2009, and considers some of the commonalities and points of departure between this process and the WCD. The Forum's work on the Hydropower Sustainability Assessment Protocol is a work in progress, so this paper can describe but not give a full analysis of the work while it is in train.

KEYWORDS: Hydropower, dams, sustainability, assessment, International Hydropower Association

INTRODUCTION

This paper describes a significant sustainability initiative in the hydropower sector, which came into existence after the World Commission on Dams submitted its final report in November 2000 (WCD, 2000). The WCD process was a prompt for many organisations to consider their role in lifting the sustainability performance of dams; this was explicitly called for in the WCD Report and discussed through the Dams and Development Programme (DDP), with many sectors over the ensuing six years following the WCD. The International Hydropower Association (IHA) developed Sustainability Guidelines and an assessment protocol for hydropower developments and operations. This paper focuses particularly on a current multi-sectoral review of the IHA Sustainability Assessment Protocol.

IHA was formed under the auspices of UNESCO in 1995 as a forum to promote and disseminate good practice and further knowledge about hydropower. It is a non-governmental, mutual association of organisations and individuals with members in more than 80 countries. IHA aims to advance hydropower's role in meeting the world's water and energy needs by championing continuous improvement and sustainable practices; building consensus through strong partnerships with other stakeholders; driving initiatives to increase the contribution of renewables, especially hydropower; and increasing awareness of the role hydropower can play in sustainable development as an important source of renewable energy.

In 2004, IHA adopted its Sustainability Guidelines (IHA, 2004). In 2006, to evaluate the performance of hydropower projects against its Sustainability Guidelines, IHA adopted its Sustainability Assessment Protocol (IHA, 2006) after having internally trialled a previous five versions. Also in 2006, IHA launched its Sustainable Hydropower website (www.sustainablehydropower.org), a joint initiative with the International Energy Agency to demonstrate projects that have successfully implemented sustainability measures on specific sustainability issues. Over the past three years, IHA has offered training programmes in the use of the IHA Sustainability Assessment Protocol, and has been recognising good practice in the hydropower sector through the IHA Blue Planet Prize.

The IHA initiative that has had the most momentum has been the IHA Sustainability Assessment Protocol 2006. This was developed as an industry self-assessment tool, and provides a framework for projects to rate their performance on a number of sustainability aspects covering economic, social and environmental issues on a scale of 1 to 5. Scores are for each aspect, not an overall project score, so

that the project can see areas of strength and weakness and opportunities for improvement based on sustainability criteria.

The IHA Sustainability Assessment Protocol 2006 has been through a process of continuous improvement based on the three years of voluntary trials amongst IHA members, with the present version (2006) being the sixth since it was first initiated in 2003. IHA members consider it a practical approach to measuring sustainability based on their experiences with its development, and IHA has held a number of training workshops to raise awareness and promote its use both within and outside its membership.

In 2007, two NGOs – the Nature Conservancy (TNC) and the World Wide Fund for Nature (WWF) – approached IHA with an interest in a joint review of the IHA Sustainability Assessment Protocol 2006, with an aim to strengthening it and, ultimately, endorsing it. They felt that the Protocol could be improved in addressing some emerging concepts, for example environmental flows, in tightening areas of potential subjectivity, and in providing further technical guidance notes. Out of this approach, the Hydropower Sustainability Assessment Forum was born. Between the three organisations, other parties and potential donors were approached, and a process to review collectively the IHA Sustainability Assessment Protocol commenced.

THE HYDROPOWER SUSTAINABILITY ASSESSMENT FORUM

The HSAF is a cross-sector collaboration that looks at an existing performance measurement tool, the IHA Sustainability Assessment Protocol (2006), and proposes enhancements based on the views of a diverse collection of sectors. Parties represented on the Forum are the hydropower sector, developing and developed country governments, social and environmental NGOs and commercial and development banks. Reference groups for the Forum's members, and open consultation periods, were built into the process to obtain views beyond the immediate Forum membership. The Forum's objective is to agree on a measurement tool that is practical, objective and able to be implemented globally across a range of contexts, which can facilitate objective decision-making and transparent arbitration on critical hydropower sustainability issues, is committed to by the hydropower sector and is endorsed by external organisations. These are key drivers for the work of the Forum.

Strong ownership and support for the Protocol by IHA's membership, and the view of IHA members on the proven practicality of this assessment tool, were seen to be strong advantages to Forum members in focusing on the IHA Sustainability Assessment Protocol 2006.

Identified opportunities in the work of the Forum included:

- broader endorsement outside of the hydropower sector to produce wider promotion and application;
- greater harmonisation of the Protocol with other standards;
- improvements on emerging concepts;
- increased objectivity; and
- improved support information, e.g. technical guidance notes.

There are 14 Forum members, as shown in figure 1. The Forum has an independent Chair and Coordinator funded by the Forum budget, with supplementary secretariat support provided by the IHA Programme Director and an IHA Project Officer.

A fundamental premise of the work of the Forum is that an industry-driven and -owned initiative has far-reaching potential to influence performance in the hydropower sector. The lack of adoption by industry of the WCD Guidelines is a disappointing outcome at the end of such an investment in time, money, stakeholder input and analysis. If an industry-owned tool incorporates a substantial amount of the good outcomes embedded in WCD and other standards, i.e. disparate approaches start to

converge, it is better for everyone. At the same time, the potential for the use of a broadly endorsed sustainability assessment tool for hydropower by those in other sectors is well recognised and aspired to by the Forum. For example, the involvement of the Equator Banks in the Forum is an important indication of the interest for such an assessment tool by other sectors, and it may be the case that a practical and broadly endorsed Protocol could be helpful to banks making decisions on investment in the hydropower sector.

Figure 1. Forum members.

Developing Countries

- Dr Yu Xuezhong, Institute of Water Resources and Hydropower Research, PR China
- Mr Zhou Shichun, China Hydropower Engineering Consulting Group Co., PR China
- Mr Israel Phiri, Manager PPI, Ministry of Energy and Water Development, Zambia

Developed Countries

- Mr Geir Hermansen, Senior Advisor, Department of Energy, Norad, Norway
- Prof Gudni A Johannesson, Director General, National Energy Authority, Iceland
- Ms Kirsten Nyman, Policy Advisor for Sustainable Hydropower, GTZ, Germany (observer)

Hydropower Sector

- Dr Refaat Abdel-Malek, President, International Hydropower Association
- Mr Andrew Scanlon, Coordinating Author, IHA Sustainability Assessment Protocol

NGOs - Environmental Aspects

- Mr David Harrison, Senior Advisor, Global Freshwater Team, The Nature Conservancy
- Dr Joerg Hartmann, Lead, Dams Initiative, World Wildlife Fund

NGOs - Social Aspects

- Mr Michael Simon, Lead, Development Banks/NRM, Oxfam
- Dr Donal O'Leary, Water Sector Specialist, Transparency International

Finance Sector - Economic Aspects

- Ms Courtney Lowrance, Environmental Specialist, Equator Principles Financial Institutions Group
- Ms Daryl Fields, Senior Water Resources Specialist, World Bank (observer)

Forum Chair

- Mr André Abadie, Sustainable Finance Ltd.

Forum Coordinator

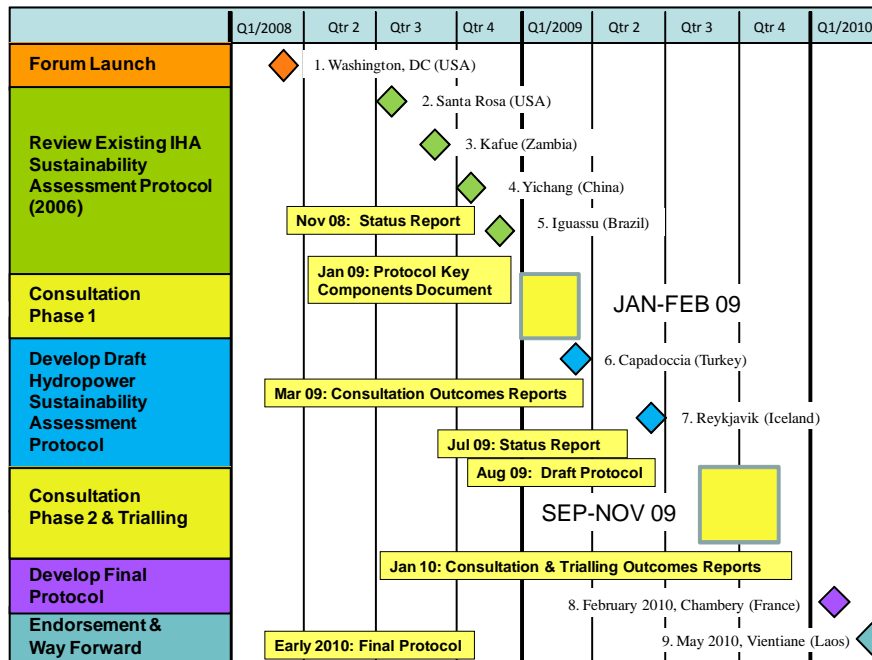
- Dr Helen Locher, IHA

Following its launch in March 2008 (figure 2), the Forum completed a phase of foundation work in Meetings 2-5, aimed at a better understanding of the existing (2006) Protocol and key issues (including economics and finance, technical considerations, transparency, governance, anti-corruption, environmental flows, strategic assessments, transboundary issues, resettlement and benefit sharing) and involving expert presentations and project assessments. Proposals concerning revised Protocol structure and content were presented to stakeholders as a Draft Hydropower Sustainability Assessment Protocol Key Components document in January 2009, and were subject to a first round of public consultation in January and February 2009. The outcomes of this Phase 1 Consultation were considered in Forum Meetings 6 and 7, and were incorporated into the Draft Hydropower Sustainability Assessment Protocol made available publicly in August 2009 (the 'Draft Protocol').

By the end of the two-year process in 2010, the HSAF aims to have a measurement tool for assessing hydropower sustainability that is endorsed broadly by the Forum members. Key challenges are to keep this tool practical, objective and able to be implemented across a range of contexts.

The Forum's two-year work plan (figure 2) is seen as a first phase in developing a broadly endorsed sustainability assessment tool for which there are many possible future pathways, including the development of a sector standard.

Figure 2. Forum work plan.



THE DRAFT HYDROPOWER SUSTAINABILITY ASSESSMENT PROTOCOL AUGUST 2009

This paper describes the work of the Forum up to its release of the Draft Protocol in August 2009. The Draft Protocol is a set of four documents, each a stand-alone assessment tool addressing a specific stage of the project lifecycle, as shown in table 1.

The Draft Protocol reflects the sustainability topics that have been identified and discussed by the Forum, which represent a diversity of sectoral views and are presented in a structured manner intended to suit a sustainability assessment process. Table 2 provides a list of the 'aspects' assessed in the Draft Protocol, grouped by perspective.

Each aspect in the section being applied is assessed on up to seven 'attributes', each of which is relevant to that aspect. These attributes are divided into process and performance, as shown in table 3.

Table 1. Draft Protocol sections.

| |
|--|
| SECTION I - STRATEGIC ASSESSMENT |
| Assesses the strategic basis for a hydropower project. This section of the Protocol can be used prior to and to inform the decision that there is a strategic basis to move forward with project preparation. |
| SECTION II - PROJECT PREPARATION |
| Assesses the preparation stage of a hydropower project during which investigations, planning and design are undertaken for all aspects of the project. This section of the Protocol can be used prior to and to inform the decision to move forward with project implementation. |
| SECTION III - PROJECT IMPLEMENTATION |
| Assesses the implementation stage of a hydropower project during which construction, resettlement and other management plans and commitments are implemented. This section of the Protocol can be used to inform the timing and conditions of project commissioning. |
| SECTION IV - PROJECT OPERATION |
| Assesses the operation of a hydropower facility. This section of the Protocol can be used to inform the view that the facility is operating on a sustainable basis with active measures in place towards continuous improvement. |

Table 2. Draft Protocol aspects.

| Perspective | Aspect Name | Sections |
|---|--|-------------|
| Development Perspective | - Demonstrated Need & Strategic Fit | I, II |
| | - Options Assessment | I |
| | - Regional & National Policies & Plans | I |
| Governance Perspective | - Political Risk | I |
| | - Institutional Capacity | I |
| | - Public Sector Governance | II, III |
| | - Regulatory Approvals | II, III |
| | - Corporate Governance | II, III, IV |
| | - Integrated Programme Management & Communications | II, III |
| Technical Issues Perspective | - Construction Management | II, III |
| | - Technical Issues & Risks | I |
| | - Hydrological Resource Availability & Management | II, III, IV |
| | - Project Siting & Design Optimisation | II |
| | - Asset & Community Safety | II, III, IV |
| Financial & Economic Issues Perspective | - Asset Reliability & Efficiency | IV |
| | - Economic & Financial Issues & Risks | I |
| | - Economic Viability incl. Additional Benefits | II, III, IV |
| | - Financial Viability | II, III, IV |
| | - Procurement | II, III, IV |
| Social Issues Perspective | - Markets, Innovation & Research | IV |
| | - Social Issues & Risks | I |
| | - Social Impact Assessment & Management | II, III, IV |
| | - Project Affected Communities | II, III, IV |
| | - Indigenous Peoples | II, III, IV |
| | - Resettlement & Land Acquisition | II, III |
| | - Benefit Sharing | II, III, IV |
| | - Labour & Working Conditions | II, III, IV |
| | - Cultural Heritage | II, III, IV |
| - Public Health | II, III, IV | |
| Environmental Issues Perspective | - Environmental Issues & Risks | I |
| | - Environmental Impact Assessment & Management | II, III, IV |
| | - Biodiversity & Invasive Species | II, III, IV |
| | - Erosion & Sedimentation | II, III, IV |
| | - Water Quality | II, III, IV |
| Geographic / Spatial Perspective | - Waste, Noise & Air Quality | III |
| | - River Basin & Transboundary Issues | II, III, IV |
| | - Catchment Management | II, III, IV |
| | - Reservoir Management | II, III, IV |
| | - Environmental Flows & Downstream Sustainability | II, III, IV |

In the assessment process, the auditor interviews the project developer/owner/operator and a range of other relevant stakeholders. Evidence is reviewed to form scores for each of the aspects addressed within the relevant Protocol section. For each aspect, the seven attributes each receive a score chosen from levels 1 to 5. Level 1 is understood to be the absence of or very poor practice. Level 3 is understood to be basic good practice, with a particular consciousness of what is achievable in countries with minimal resources or capacities, or with projects of smaller scales and complexities. Level 5 is understood to be proven best practice, but conscious of the global applicability of this tool, so that it is not attainable solely by projects with the most resources at their disposal.

Scores are assigned by the auditor based on observations, interviews with relevant stakeholders and a review of objective evidence. The term 'objective evidence' refers to evidence provided by an auditee and used by an assessor to verify whether and to what degree an attribute has been met. Evidence can be qualitative or quantitative information, records or statements of fact, either verbal or documented. It is retrievable or reproducible, is not influenced by emotion or prejudice and is based on facts obtained through observation, measurements, documentation, tests or other means.

Table 3. Process and performance attributes scored for each aspect.

| Process Attributes | Focal Area |
|-------------------------------------|--|
| Quality of the Assessment Process | Addresses assessment requirements for a particular aspect, including identification of the baseline condition; legal and other requirements; impact, risk and opportunity assessment. |
| Quality of the Management Process | Addresses management planning and implementation for a particular aspect, including objectives and targets, resource allocation, roles and responsibilities, implementation strategies, checking and evaluation, and continuous improvement. |
| Quality of the Consultation Process | Addresses the consultation process undertaken for a particular aspect, including stakeholder mapping, engagement processes, support for stakeholders in the consultation process, transparency, grievance and dispute mechanisms. |
| Performance Attributes | Focal Area |
| Level of Stakeholder Support | Addresses the level of stakeholder support for the process and performance for a particular aspect, with respect to those stakeholders identified in the consultation process. |
| Level of Compliance | Addresses the level of compliance with legal requirements and other public commitments that have been made for a particular aspect. |
| Level of Conformance with Plans | Addresses the level of conformance of implementation measures with most up-to-date project-related plans, with a particular emphasis on the quality of internal business systems and processes. |
| Level of Effectiveness | Addresses the effectiveness of implementation activities for that aspect, in terms of on-ground outcomes, desired outcomes and/or agreed performance measures |

The overall outcome of the project assessment can be presented in a summary table and as a standard figure presenting the high and low attribute scores for each aspect. The emphasis is not on an overall single score or a pass/fail for a project, but rather on systematically analysing and understanding the strengths, weaknesses and pathways towards improvement for a hydropower project.

CONSULTATION ON AND TRIALLING OF THE DRAFT PROTOCOL

There are two mechanisms for wider stakeholder input into the Hydropower Sustainability Assessment Forum process. The first is the Forum members' individual reference groups and networks, with whom they discuss the Forum's work on an ongoing basis.

As stated above, two open consultation periods are built into the Forum process. The first was initiated in January and February 2009 and focused on developing relationships with stakeholders, building understanding of the Forum process and getting initial feedback on the content of the Protocol through comments on the Hydropower Sustainability Assessment Protocol Key Components document.¹ Prior to this Phase 1 consultation, stakeholder awareness and interest in the process was mixed. There had been little publicity about HSAF and its work and general awareness was low amongst people not close to HSAF members. The following findings are from the independently written HSAF Phase 1 Consultation Outcomes Report (Arup, 2009).

The Phase 1 consultation elicited strong support for development of a practicable, objective and replicable assessment tool. However, there was some confusion and concern about the motivation behind the HSAF process and who was involved in it. Many stakeholders across different groups referred to it in the Phase 1 consultation as the IHA process, and there appeared to be little knowledge of the involvement of other organisations in the HSAF. At the same time, stakeholders across a number

¹ www.hydropower.org/sustainable_hydropower/HSAF-Phase_1_Consultation/hydropower_sustainability_assessment_protocol-key_components_document.pdf (accessed 29 November 2009)

of sectors, including financial institutions and some civil society members, emphasised the importance of the IHA having strong ownership of the output of the process, since this would help drive change through the industry.

Civil society organisations in the Phase 1 consultation very much viewed the HSAF process as an industry initiative, and felt that it was an attempt by the IHA to replace or undermine the outcomes of the World Commission on Dams. The general view from civil society organisations was that the WCD Guidelines reflected a clear consensus which emerged after a good, highly consultative process. Therefore, an assessment tool will only be credible if it is clearly positioned as implementing these guidelines. As the protocol was not positioned in this way and many civil society organisations were not represented on the HSAF or were not involved until this point in the process, their suspicion was that the industry was not serious about key environmental and social issues and did not value the views of civil society.

In contrast, some stakeholders, particularly those closely associated with the hydropower industry, saw the HSAF process as a positive alternative to the WCD, which they felt was a flawed process. They therefore felt that the approach initiated by the IHA was very necessary and may lead to the practical implementation of more sustainable practices, which so far had not followed from the WCD.

Other significant concerns raised in the HSAF Phase 1 Consultation (Jan-Feb 2009) included:

- The need for documentation on how the Protocol implemented specific elements of the WCD.
- How scoring would work needed to be clarified, and should not mask low performance in important areas.
- Minimum acceptable standards needed to be clear.
- Implementation and enforcement mechanisms needed to be addressed.
- There was a need to clarify how to apply the Protocol to individual country circumstances and to different scales and types of hydropower.
- There was insufficient emphasis or attention on key issues including human rights, resettlement, benefit sharing and climate change.

The Forum endeavoured to address many of these issues and concerns, and others of a more detailed nature found in Arup (2009), in the Draft Hydropower Sustainability Assessment Protocol released for a second phase of consultation, as well as a programme of trialling, in August 2009.

The HSAF Phase 2 Consultation focused on the detail and practical application of the Draft Hydropower Sustainability Assessment Protocol (IHA 2009), and took place over a 15-week period between September and December 2009. The Phase 2 Consultation was held alongside trialling of the Draft Hydropower Sustainability Assessment Protocol in a number of different locations. Both trialling and consultation on the Draft Protocol assessed a range of considerations including scope, comprehensiveness, ease of use, effectiveness, applicability to a range of scales and regions, adequacy of implementation guidance and methods for presentation of results. A particular focus in the Phase 2 Consultation was to get more regional engagement and to involve governments, civil society and directly affected stakeholders.

This paper describes the work of the Forum up to the release of the Draft Protocol in August 2009, as well as the format and structure of the Draft Protocol. This paper cannot give a full analysis and reflection on this process or product whilst it is in the development process. The structure of the HSAF Phase 2 Consultation and trialling, the issues raised and the response of the Forum in addressing these issues and working towards a Final Protocol is beyond the scope of this present paper, and will therefore need to be the subject of a future paper.

ALIGNMENT OF THE DRAFT PROTOCOL WITH WCD STRATEGIC PRIORITIES

As mentioned above, during the Phase 1 Consultation a number of stakeholders were very interested in understanding how the Hydropower Sustainability Assessment Protocol implemented elements of the World Commission on Dams outcomes. The Forum committed to provide an analysis of where elements of the World Commission on Dams (2000) report could be found within the content of the Draft Protocol, and made this available for the Sep-Nov 2009 Phase 2 Consultation.² The analysis shows that much WCD content was reflected in the Draft Protocol through specific aspects, attributes, guidance notes or the awarding of a high evaluation score. Notably:

WCD Strategic Priority 1: Gaining Public Acceptance

- Draft Protocol: The quality of the consultation process and the level of stakeholder support are assessed for each aspect throughout the Draft Protocol. The guidance note for the *Quality of the Consultation Process* outlines many of the WCD's considerations such as those relating to access to information, appropriate timing, cultural sensitivities and assistance with respect to gender, minorities, level of literacy and others who might require particular assistance. Consent is included in the highest score of stakeholder support under the *Indigenous Peoples* and the *Resettlement and Land Acquisition* aspects.

WCD Strategic Priority 2: Comprehensive Options Assessment

- Draft Protocol: The aspect *Demonstrated Need* in Section I considers development objectives, while *Options Assessment* in Section I looks at the assessment of options to meet demonstrated needs. The *Options Assessment* aspect evaluates the degree to which a diverse choice of technical and policy/management options (including demand-side) have been assessed using a methodology which considers technical, economic, financial, social and environmental areas, based on a consultative process. *Project Siting and Design* in Section II also specifies the optimisation of project siting and design options across this range of considerations, in an iterative process utilising updated information.

WCD Strategic Priority 3: Addressing Existing Dams

- Draft Protocol: Section IV of the Draft Protocol is used to inform the view that a respective project is operating on a sustainable basis, with active measures in place towards monitoring, compliance and continuous improvement. It can also be applied for refurbishments and upgrades, but, unlike the WCD, strategic priority does not refer specifically to the aspect of time-bound licensing. Section IV, like all sections, encompasses social and environmental considerations alongside those of a financial, technical and economic nature. Consideration of legacy issues as well as cumulative impacts is assessed for new projects in Section II, under the *Environmental Impact Assessment* and *Social Impact Assessment* aspects.

WCD Strategic Priority 4: Sustaining Rivers and Livelihoods

- Draft Protocol: All sections of the Draft Protocol examine environmental and social issues and risks, with Sections II, III and IV doing this in a greater level of detail by examining project impacts and opportunities. Aspects address a host of relevant issues including benefit sharing, public health, cultural heritage, water quality, sedimentation and erosion, biodiversity and pest species. They also include the assessment of high-value ecosystems and species, as sought by the WCD. All aspects emphasise the avoidance of impacts as the best option. The aspect *Environmental Flows and Downstream Sustainability* addresses a specific WCD consideration for the release of tailor-made environmental flows.

² www.hydropower.org/sustainable_hydropower/HSAF-Mapping_of_WCD_Strategic_Priorities_within_the_Draft_HSAP_Content_August_2009.pdf (accessed 29 November 2009)

WCD Strategic Priority 5: Recognising Entitlements and Sharing Benefits

- Draft Protocol: There are a number of aspects in Sections II, III and IV which address project-affected communities, indigenous peoples, resettlement and land acquisition and benefit sharing. Part of the *Benefit Sharing* aspect's intent is that project-affected communities should be amongst the first to benefit from a project, and the timely delivery of commitments to benefits is assessed as a measure of effectiveness for this aspect. Part of the intent for the *Resettlement and Land Acquisition* aspect is improved standards of living for displaced persons and host communities, and the level of improvement to livelihoods is assessed as a measure of effectiveness for this aspect.

WCD Strategic Priority 6: Ensuring Compliance

- Draft Protocol: Compliance is assessed for every aspect in the Draft Protocol. The performance attribute *Level of Compliance* assesses the level of compliance on an aspect-by-aspect basis, not only through compliance with legal requirements but also with public commitments made by the developer/owner/operator. *Regulatory Approvals* is a specific aspect in Section II. *Public Sector Governance* and *Corporate Governance* are important aspects which include compliance considerations, as well as measures to address corruption. A score of 5 for the aspects *Indigenous Peoples*, *Resettlement and Land Acquisition* and *Environmental Flows and Downstream Sustainability* requires legally binding commitments.

WCD Strategic Priority 7: Sharing Rivers for Peace, Development and Security

- Draft Protocol: An aspect entitled *River Basin and Transboundary Issues* addresses shared rivers and river basins. Other relevant aspects are *Political Risk* in Section I, and in Sections II, III and IV the aspects *Catchment Management*, and *Environmental Flows and Downstream Sustainability*.

This analysis does not necessarily show the level of emphasis given in the Draft Protocol versus in the WCD report. For example, the *Options Assessment* aspect does not assess whether social and environmental considerations were given *equal* consideration to technical and financial considerations. In some cases, the WCD content issues are found embedded in the intent of a particular Draft Protocol aspect (e.g. an intent of the *Benefit Sharing* aspect is that project-affected communities should be amongst the first to benefit from a project). In other cases, the WCD content is found with a score of 5 for a particular attribute within an aspect (e.g. free prior and informed consent can be found with a score of 5 for the *Indigenous Peoples* and the *Resettlement and Land Acquisition* aspects). In other cases, WCD content considerations are embedded within a guidance note (e.g. stakeholder identification and engagement based on the consideration of rights, risks and responsibilities is included in the guidance note for the *Quality of the Consultation Process* attribute).

REFLECTIONS ON THE HSAF WITH RESPECT TO THE WORLD COMMISSION ON DAMS

Without the WCD process, which brought dam critics and proponents together in an unprecedented exchange of experiences and views on dam development and led to a framework for more sustainable dam projects, there might not be any HSAF today.

The HSAF is not an attempt to duplicate or rewrite the World Commission on Dams' (WCD) outcomes. There are, however, some striking similarities, in that both were a cross-sectoral process involving a group in the order of a dozen representatives (14 for the HSAF, 12 for the WCD), nominally designed as a two-year process. Both also have received considerable global attention.

Unlike the WCD, however, the HSAF does not act as a Commission reviewing the performance of the dam-building sector. The WCD offers a much needed and comprehensive look at the issues and possible responses to dam development. The HSAF follows this work, builds on it, and does not need to replicate it. The HSAF is focused on how to package much of the knowledge gained about sustainability issues in

the dams sector arising from WCD and other initiatives into a practical and objective assessment tool. Although the WCD and the HSAF have different points of departure and different end products (the WCD produced guidelines, while the HSAF is producing a measurement tool that sets out a graded spectrum of performance), much of the focus on sustainability considerations in the HSAF are, and will continue to be, informed by the WCD.

Significantly, the emerging Hydropower Sustainability Assessment Protocol will benefit from many developments beyond the WCD that have been happening in the area of project and corporate sustainability performance. These include, but are not limited to, the Equator Principles, International Finance Corporation Performance Standards, multinational development bank safeguards policies, the Global Reporting Initiative, socially responsible investment assessment tools (e.g. the Dow Jones Sustainability Index, FTSE4Good), best practice experiences in the hydropower sector and corporate experiences with annual sustainability assessment and reporting approaches. In addition, the Protocol incorporates the latest experience in addressing governance issues at the national, sectoral, institutional and project levels. Additionally, on an aspect-by-aspect level (with respect to individual sustainability issues such as corporate governance, environmental flows, benefit sharing, etc.), there have been many developments in the last 10 years that inform the present work on the hydropower sustainability assessment protocol.

There are some notable points of commonality and of departure between the WCD and the HSAF, some of which include:

- The origins of the two processes are quite different. The WCD process was born out of conflict, arising out of protests to the World Bank to stop its funding of large dam projects, which evolved into a major review of dams around the world (Fujikura and Nakatama, 2009). The HSAF was born out of an interest in collaboration, continuous improvement and getting more value out of an existing initiative from particular organisations. It began as a low-profile initiative without the major global scrutiny accompanying the WCD, and in fact awareness raising has taken considerable time for the Forum.
- The WCD had a substantial budget of just under USD 10m (WRI, 2001), whereas the HSAF currently has a much smaller budget (US\$0.83 million) and is highly reliant on in-kind contributions (estimated to be more than US\$1.5 million). The HSAF's funding was potentially significantly curtailed by the occurrence of the 2008 global financial crisis. The WCD had a secretariat of a Secretary General, 18 staff members, 19 research fellows, 13 temporary staff and 15 consultants and advisors (Fujikura and Nakatama, 2009). The HSAF has a Coordinator and part-time support from other IHA staff, and has commissioned some consultancy support for the consultation phases and several reports.
- The consultation approaches differed between the two with respect to timing within the overall work programme and what was able to be achieved with available budget. Consultation was core to the WCD work programme. The WCD did most of its consultation in the early stages of its work, and was able to engage stakeholders and solicit their input through a high level of personal contact – through seminars, workshops and official consultations (WRI, 2001). The draft version of the final WCD Report was not, however, publicly accessible or reviewed by the WCD Forum (Fujikura and Nakatama, 2009). The HSAF had limited consultation in the early stages, and fairly wide-reaching outreach and consultation on its Draft Protocol (IHA, 2009). Since the HSAF was able to build on the knowledge gained from the extensive WCD consultations and knowledge base, it already had a strong indication of the important issues it needed to address. The challenge for the HSAF was to convert this information into an assessment and scoring framework, which took time to develop; consultation was then emphasised once the HSAF could better communicate what it was proposing.

- The WCD process was very successful in engaging civil society and most particularly dam-affected organisations and communities, but perhaps less so with governments, the financial sector and industry. In the case of the HSAF, the Forum had four representatives of civil society that reached out to their networks, but was not as successful as the WCD in the engagement of dam-affected communities and representatives. In addition, the engagement of the WCD with the World Bank was not consistent throughout the WCD process (Fujikura and Nakatama, 2009), although this changed for the HSAF; it was represented among the Forum's members as an active observer, and in its publication *Directions in Hydropower* (World Bank, 2009) the work of the Forum and the World Bank's involvement in this was mentioned explicitly. Engagement with the Chinese government, where considerable dam building is taking place, was also inconsistent for the WCD inasmuch that the Chinese government was not an active participant in the WCD process and did not accept the WCD's recommendations (Fujikura and Nakatama, 2009). There are currently two Chinese representatives on the HSAF, who have been well engaged in the Forum process. A Forum meeting was held in China, and the Chinese Forum members opened up many opportunities for engagement including opening a Centre for Sustainable Hydropower. The Forum is also finding some success engaging other major dam-building countries, such as India and Brazil, and regions such as the Mekong basin, through its consultation and trialling activities on the Draft Protocol.
- Testing the practicality of the WCD recommendations in a systematic manner on a diversity of dam projects could not be undertaken within the WCD programme's timeframe (Fujikura and Nakatama, 2009). Learning from the WCD experience, the HSAF has a practicality test as part of its work programme, and will rely greatly on the findings of the trialling to help guide the final Hydropower Sustainability Assessment Protocol. The trialling programme consists of more than 30 trials around the world, all undertaken voluntarily.
- The WCD recommendations strongly emphasise transparency, but at the time of drafting the WCD Report, no deliberations of the Commission were publicly available, and even the WCD Forum was not consulted in the drafting of the WCD Report (Fujikura and Nakatama, 2009). The HSAF tries to build on these lessons by increasing efforts during the consultation on the Draft Protocol and placing strong emphasis on transparency; although the Forum meetings were not considered to be 'public', all proceedings of the HSAF are available on the internet (www.hydropower.org/sustainable_hydropower/hsaf.html). During the WCD consultation phases, all submissions to the WCD were public and accessible on the WCD Knowledge Base. During the HSAF's consultation phases, all submissions are submitted and consolidated by an independent consultant, who then provides a Consultation Outcomes Report. Individual submissions are not publicly available on the Forum website to avoid individuals or organisations feeling they need to adhere to a sectoral position, but rather that they can express their own views in a confidential manner. Organisations are free to post their submissions to the HSAF on their own websites.
- For both the WCD and HSAF, there has been confusion about their outputs becoming guidelines for development, as well as their relationship to regulatory processes. Kader Asmal, Chairman of the WCD, stated at the launch of the Commission's final report that "Our guidelines offer guidance – not a regulatory framework. They are not laws to be obeyed rigidly. They are guidelines, with a small 'g' that illustrate best practice and show all nations how they can move forward. But guide us they should, as they will reduce the risks and costs for all parties involved".³ Similarly, the Draft Protocol resulting from the HSAF process provides a framework that can assist decision-making, but is not a formal regulatory framework.

³ www.unep.org/dams/documents/Default.asp?DocumentId=605 (accessed 29 November 2009)

CHALLENGES FOR THE HYDROPOWER SUSTAINABILITY ASSESSMENT FORUM

Section I on Strategic Assessments has been conceptually challenging for the Forum. There is no question amongst the stakeholders that this section addresses critical issues, and if issues such as demonstrated need and options assessment are well addressed at the outset, then any resultant hydropower project has a better chance of a smooth development pathway. It is less clear, however, who or what is being assessed at this point in time, whereas for the other three sections it is clearly the hydropower project that is being assessed.

There is an ongoing challenge in finding the right balance between the level of 'specificity' in the Draft Protocol to guide scoring, versus more flexibly worded text that might enable judgements to be made relevant to a particular project context. Those most experienced in sustainability assessments, auditing and the hydropower industry favour a greater level of flexibility and allowance for judgement; greater specification of detail is helpful for stakeholders with little or no auditing experience, or direct experience within the hydropower industry, to apply the Protocol. It therefore comes down to the question of who will use the assessment tool. The long-term vision is of application by suitably trained, qualified and experienced auditors, as well as an application database to help inform scoring decisions, but these will take some time to develop.

Following on from the point about flexibility, there is a considerable challenge in developing a tool with applicability to a range of types, scales and national/geographic contexts. The Draft Protocol is highly comprehensive, and may consequently seem overwhelming. It has, though, attempted to provide guidance on when aspects are not relevant or can be scaled back, and also on applicability to single versus multipurpose projects, public versus private, single versus cascade projects, run-of-river versus reservoir, etc. The utility of this guidance will be tested during the trialling phase.

The engagement of dam-affected communities as well as governments in the Forum process has been a challenge, as there was little response from these sectors in the Phase 1 Consultation. In the HSAF's Phase 1 Consultation (Arup, 2009), some civil society representatives informed the Forum that they had invested considerable effort into the WCD process and did not want to engage again in a process that was not seen to be building clearly on the work of the WCD. In the HSAF's Phase 2 Consultation, engagement with civil society, dam-affected communities and governments was a particular point of focus.

During both consultation phases and in the trialling of the Draft Protocol, feedback and inputs have been actively sought. The processing of all the submissions and contributions from various stakeholder groups posed a challenge to the WCD (Fujikura and Nakatama, 2009) and will also need to be faced by HSAF.

The HSAF's aim of a 'broadly endorsed' sustainability assessment tool has created some confusion inasmuch that some quarters believe it is referring to a tool with global consensus. The HSAF has become increasingly aware that it needs to communicate clearly on the scope of its ambition and to define what is meant by endorsement. Remembering that this has built on an industry-owned product, broad endorsement has been with reference to Forum member organisations. It is hoped that beyond these organisations there will be support for the end product, but as a minimum requirement it is important to get the consensus and support of those working most closely on the new Protocol.

FUTURE DIRECTIONS

The Forum's two-year work plan is seen by the Forum as a first phase, developing a broadly endorsed sustainability assessment tool for which there will be many possible future pathways, including the development of a sector standard. The Forum has been seeking feedback on the assessment tool in its two phases of consultation, but a good deal of feedback makes it clear that stakeholders want to know what happens next, what minimum requirements for acceptability will be built into a standard and how

will it be used, implemented and enforced. The Forum is conscious that it will need to communicate more clearly on these important questions.

There are many opportunities for following up on the initial step of design of a sustainable hydropower assessment tool, including various implementation and capacity building pathways and a sector standard. The Forum recognises that its work could be considered a pre-standard setting phase, but that if a future pathway is for the development of a standard, then the process for this would have to be defined. The Forum aims to be consistent with the *ISEAL Code of Good Practice for Setting Social and Environmental Standards* as far as practicable, so that its work will provide a good foundation stage for any future standard-setting process.

For both the HSAF and WCD, the follow up to these processes was undefined during the programmes themselves, but for both the need for follow up was fully recognised. In the case of the WCD, the follow up was defined following release of the Commission's final report at the final WCD Forum meeting. "General consensus emerged following the launch of the report that the WCD recommendations needed to be disseminated at the country and institutional level, taking the debate further through local multi-stakeholder processes. Accordingly, the DDP's mandate was established building on such consensus".⁴ The UNEP Dams and Development Project (DDP) took up the dialogue established by the WCD's final report, considered how to take forward the WCD's recommendations into local contexts, promoted inclusive multi-stakeholder dialogue and promoted wide dissemination of the WCD materials. The Forum further recognises that dissemination, regional and national dialogues, training and awareness raising will be critical to the success of the Forum process following finalisation of the Protocol.

CLOSING

The WCD was a pivotal point in the history of dam development. The intense concentration of scrutiny, dialogue, knowledge development and analysis during the two years of the WCD process changed the playing field for dam development in far-reaching ways, including the DDP dialogues and the sustainability commitments of many major hydropower companies through the IHA and company-specific initiatives. The HSAF and the Hydropower Sustainability Assessment Protocol should not be seen to be in conflict with the WCD or its recommendations. The HSAF process takes many of the WCD recommendations on board and – by focusing on the operational implications – provides an opportunity to resume and advance the discussions around sustainable hydropower among the supporters and critics of the WCD recommendations. The HSAF also has the potential to provide a significant step forward in advancing sustainability in the hydropower sector, and its members are fully committed to making the most of this potential.

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