

Executive Summary



The global debate about large dams is at once overwhelmingly complex and fundamentally simple. It is complex because the issues are not confined to the design, construction and operation of dams themselves but embrace the range of social, environmental and political choices on which the human aspiration to development and improved well-being depend. Dams fundamentally alter rivers and the use of a natural resource, frequently entailing a reallocation of benefits from local riparian users to new groups of beneficiaries at a regional or national

level. At the heart of the dams debate are issues of equity, governance, justice and power – issues that underlie the many intractable problems faced by humanity.

The dams debate is simple because behind the array of facts and figures, of economic statistics and engineering calculations, lie a number of basic and easily understood principles. If adhered to and routinely applied, these principles would not only go a long way towards responding to the controversy surrounding dams, but would markedly improve decision-making on water and energy resources, achieving better outcomes. In identifying these principles, the World Commission on Dams (WCD) has not had to look far; they are the same principles that emerge from the global commitments to human rights, development and sustainability.

Our report tells a multifaceted story. But we draw from it some straightforward and practical advice to guide future decisions on water and energy resources development. The report sets out to distil more than two years of intense study, dialogue and reflection by the Commission, the WCD Secretariat, the WCD Stakeholders' Forum and literally hundreds of individual experts and affected people on every aspect of the dams debate. It contains all the significant findings that result from this work and expresses everything that the Commission believes is important to communicate to governments, the private sector, civil society actors and affected peoples – in short, to the entire spectrum of participants in the dams debate.

The evidence we present is compelling. We feel confident that the material collected and analysed by the Commission provides overwhelming support for the main messages in the report.

We believe there can no longer be any justifiable doubt about the following:

- Dams have made an important and significant contribution to human development, and the benefits derived from them have been considerable.

- In too many cases an unacceptable and often unnecessary price has been paid to secure those benefits, especially in social and environmental terms, by people displaced, by communities downstream, by taxpayers and by the natural environment.
- Lack of equity in the distribution of benefits has called into question the value of many dams in meeting water and energy development needs when compared with the alternatives.
- By bringing to the table all those whose rights are involved and who bear the risks associated with different options for water and energy resources development, the conditions for a positive resolution of competing interests and conflicts are created.
- Negotiating outcomes will greatly improve the development effectiveness of water and energy projects by eliminating unfavourable projects at an early stage, and by offering as a choice only those options that key stakeholders agree represent the best ones to meet the needs in question.

The direction we must take is clear. It is to break through the traditional boundaries of thinking and look at these issues from a different perspective. Our recommendations develop a rationale and framework that responds to this critical need and offers scope for progress that no single perspective can offer on its own. It will ensure that decision-making on water and energy development:

- reflects a comprehensive approach to integrating social, environmental and economic dimensions of development;
- creates greater levels of transparency and certainty for all involved; and
- increases levels of confidence in the ability of nations and communities to meet their future water and energy needs.

There are no shortcuts to equitable and sustainable development. The evidence of success and failure we present in this report provides the best rationale why the 'business

as usual' scenario is neither a feasible nor a desirable option.

Water and Development – The Changing Context

The key decisions are not about dams as such, but about options for water and energy development. They relate directly to one of the greatest challenges facing the world in this new century – the need to rethink the management of freshwater resources. A number of global initiatives and reports have documented the dramatic impact of human-induced water withdrawals from the world's lakes, rivers and ground aquifers. Total annual freshwater withdrawals today are estimated at 3 800 cubic kilometres – twice as much as just 50 years ago.

The unfolding scenario for water use in many parts of the world is one of increasing concern about access, equity and the response to growing needs. This affects relations:

- within and between nations;
- between rural and urban populations;
- between upstream and downstream interests;
- between agricultural, industrial and domestic sectors; and
- between human needs and the requirements of a healthy environment.

The challenge is not to mobilise so as to compete successfully, but to co-operate in reconciling competing needs. It is to find ways of sharing water resources equitably and sustainably – ways that meet the needs of all people as well as those of the environment and economic development. These needs are all intertwined, and our challenge is to resolve competing interests collectively. Achieving equitable and sustainable solutions will be to the ultimate benefit of all.

The imperative to supply growing populations and economies with water in a context of depleting groundwater resources, declin-

ing water quality and increasingly severe limits to surface water extraction has brought sustainable water resources management to the top of the global development agenda. Although increasing competition for water suggests an expanding scope for conflict, it also provides an incentive for new forms of co-operation and innovation. Dire scenarios for water demand must not overshadow the fact that development paths that meet and manage the demand exist and are available for us to choose. History demonstrates that the path of co-operation has more often been followed than the path of conflict. The same must be true for our future.

During the 20th century, large dams emerged as one of the most significant and visible tools for the management of water resources. The more than 45 000 large dams around the world have played an important role in helping communities and economies harness water resources for food production, energy generation, flood control and domestic use. Current estimates suggest that some 30–40% of irrigated land worldwide now relies on dams and that dams generate 19% of world electricity.

From the 1930s to the 1970s, the construction of large dams became – in the eyes of many – synonymous with development and economic progress. Viewed as symbols of modernisation and humanity's ability to harness nature, dam construction accelerated dramatically. This trend peaked in the 1970s, when on average two or three large dams were commissioned each day somewhere in the world.

While the immediate benefits were widely believed sufficient to justify the enormous investments made – total investment in large dams worldwide is estimated at more than \$2 trillion – secondary and tertiary benefits were also often cited. These included food security considerations, local employment and skills development, rural electrification and the expansion of physical and social infrastructure such as roads and

schools. The benefits were regarded as self-evident, while the construction and operational costs tended to be limited to economic and financial considerations that justified dams as a highly competitive option.

As experience accumulated and better information on the performance and consequences of dams became available, the full cost of large dams began to emerge as a serious public concern. Driven by information on the impacts of dams on people, river basins and ecosystems, as well as their economic performance, opposition began to grow. Debate and controversy initially focused on specific dams and their local impacts. Gradually these locally driven conflicts evolved into a global debate about the costs and benefits of dams. Global estimates of the magnitude of impacts include some 40-80 million people displaced by dams while 60% of the world's rivers have been affected by dams and diversions. The nature and magnitude of the impacts of dams on affected communities and on the environment have now become established as key issues in the debate.

The World Commission on Dams was born from this debate. Established in February 1998 through an unprecedented process of dialogue and negotiation involving representatives of the public, private and civil society sectors, it began work in May of that year under the Chairmanship of Professor Kader Asmal, then South Africa's Minister of Water Affairs and Forestry and later the Minister of Education. The Commission's 12 members were chosen to reflect regional diversity, expertise and stakeholder perspectives. The WCD was created as an independent body, with each member serving in an individual capacity and none representing an institution or a country.

The Commission's two objectives were:

- to review the development effectiveness of large dams and assess alternatives for water resources and energy development; and
- to develop internationally acceptable criteria, guidelines and standards, where

appropriate, for the planning, design, appraisal, construction, operation, monitoring and decommissioning of dams.

The decision to proceed with a large dam, the way the decision was made, the opinions and perspectives that were heard are at the heart of the current debate about dams. This same question of choice – of decision-making – also lay at the heart of the Commission's work. Our report is about improving the way such decisions are made.

The WCD Global Review of Large Dams

A large part of the Commission's work involved a broad and independent review of the experience with large dams. The resulting WCD Knowledge Base includes eight detailed case studies of large dams, country reviews for India and China, a briefing paper for Russia and the Newly Independent States, a Cross-Check Survey of 125 existing dams, 17 Thematic Review papers, as well as the results of public consultations and more than 900 submissions made available to the Commission. This provided the basis for the assessment of the technical, financial, economic, environmental and social performance of large dams, and the review of their alternatives. The review underlined the critical issues relating to governance and compliance that have come to be associated with large dams.

The evaluation was based on the targets set for large dams by their proponents – the criteria that provided the basis for government approval. In reviewing this experience the Commission has studied a broad spectrum of dams. Its analysis gave particular attention to understanding the reasons why, how and where dams did not achieve their intended outcome or indeed produced unanticipated outcomes that explain the issues underlying the dams debate. Presenting this analysis does not overlook the substantial benefits derived from dams but rather raises the question of why some dams achieve their goals while others fail.

Performance of large dams

The knowledge base indicates that shortfalls in technical, financial and economic performance have occurred and are compounded by significant social and environmental impacts, the costs of which are often disproportionately borne by poor people, indigenous peoples and other vulnerable groups. Given the large capital investment in large dams, the Commission was disturbed to find that substantive evaluations of completed projects are few in number, narrow in scope, poorly integrated across impact categories and scales, and inadequately linked to decisions on operations.

In assessing the large dams reviewed by the Commission we found that:

- Large dams display a high degree of variability in delivering predicted water and electricity services – and related social benefits – with a considerable portion falling short of physical and economic targets, while others continue generating benefits after 30 to 40 years.
- Large dams have demonstrated a marked tendency towards schedule delays and significant cost overruns.
- Large dams designed to deliver irrigation services have typically fallen short of physical targets, did not recover their costs and have been less profitable in economic terms than expected.
- Large hydropower dams tend to perform closer to, but still below, targets for power generation, generally meet their financial targets but demonstrate variable economic performance relative to targets, with a number of notable under- and over-performers.
- Large dams generally have a range of extensive impacts on rivers, watersheds and aquatic ecosystems – these impacts are more negative than positive and, in many cases, have led to irreversible loss of species and ecosystems.
- Efforts to date to counter the ecosystem impacts of large dams have met with limited success owing to the lack of attention to anticipating and avoiding

impacts, the poor quality and uncertainty of predictions, the difficulty of coping with all impacts, and the only partial implementation and success of mitigation measures.

- Pervasive and systematic failure to assess the range of potential negative impacts and implement adequate mitigation, resettlement and development programmes for the displaced, and the failure to account for the consequences of large dams for downstream livelihoods have led to the impoverishment and suffering of millions, giving rise to growing opposition to dams by affected communities worldwide.
- Since the environmental and social costs of large dams have been poorly accounted for in economic terms, the true profitability of these schemes remains elusive.

Perhaps of most significance is the fact that social groups bearing the social and environmental costs and risks of large dams, especially the poor, vulnerable and future generations, are often not the same groups that receive the water and electricity services, nor the social and economic benefits from these. Applying a ‘balance-sheet’ approach to assess the costs and benefits of large dams, where large inequities exist in the distribution of these costs and benefits, is seen as unacceptable given existing commitments to human rights and sustainable development.

Options for water and electricity services

Today, a wide range of options for delivering water and electricity services exists, although in particular situations the cost and feasibility of these options will vary in the face of constraints such as natural resource endowments and site location. The Commission found that:

- Many of the non-dam options available today – including demand-side management, supply efficiency and new supply options – can improve or expand water

and energy services and meet evolving development needs in all segments of society.

- There is considerable scope for improving performance of both dam projects and other options.
- Demand management, reducing consumption, recycling and supply and end-use efficiency measures all have significant potential to reduce pressure on water resources in all countries and regions of the world.
- A number of supply-side options at all scales (ranging from small, distributed generation sources or localised water collection and water-recovery systems to regional-interconnection of power grids) have emerged that – on their own or collectively – can improve or expand the delivery of water and energy services in a timely, cost-effective and publicly acceptable manner.
- Decentralised, small-scale options (micro hydro, home-scale solar electric systems, wind and biomass systems) based on local renewable sources offer an important near-term, and possibly long-term, potential particularly in rural areas far away from centralised supply networks.
- Obstacles to the adoption of these options range from market barriers to institutional, intellectual and financial barriers. A range of incentives – some hidden – that favour conventional options limit the adoption rate of alternatives.

Decision-making, planning and institutional arrangements

The decision to build a dam is influenced by many variables beyond immediate technical considerations. As a development choice, the selection of large dams often served as a focal point for the interests and aspirations of politicians, centralised government agencies, international aid donors and the dam-building industry, and did not provide for a comprehensive evaluation of available alternatives. Involvement from civil society varied with the degree of debate and open-

ness to political discourse in a country. However, the WCD Global Review documents a frequent failure to recognise affected people and empower them to participate in the process. In some cases, the opportunity for corruption provided by dams as large-scale infrastructure projects further distorted decision-making.

Once a proposed dam project passed preliminary technical and economic feasibility tests and attracted interest from financing agencies and political interests, the momentum behind the project often prevailed over other considerations. Project planning and appraisal for large dams was confined primarily to technical parameters and the narrow application of economic cost-benefit analyses. Historically, social and environmental impacts were left outside the assessment framework and the role of impact assessments in project selection remained marginal, even into the 1990s.

Conflicts over dams have heightened in the last two decades due largely to the social and environmental impacts of dams that were either disregarded in the planning process or unanticipated. However, it also stems from the failure by dam proponents and financing agencies to fulfil commitments made, observe statutory regulations and abide by internal guidelines. Whereas far-reaching improvements in policies, legal requirements and assessment procedures have occurred in particular countries and institutions, in the 1990s it appears that business-as-usual too often prevailed. Further, past shortcomings and inequities remain unresolved, and experience with appeals, dispute resolution and recourse mechanisms has been poor.

Core Values for Decision-Making

As the Global Review of dams makes clear, improving development outcomes in the future requires a substantially expanded basis for deciding on proposed water and energy development projects – a basis that reflects a full knowledge and understanding

of the benefits, impacts and risks of large dam projects to all parties. It also requires introducing new voices, perspectives and criteria into decision-making, as well as processes that will build consensus around the decisions reached. This will fundamentally alter the way in which decisions are made and, we are convinced, improve the development effectiveness of future decisions.

The Commission grouped the core values that informed its understanding of these issues under five principal headings:

- equity,
- efficiency,
- participatory decision-making,
- sustainability, and
- accountability.

These five are more than simply issues – they are the values that run through the entire report. They provide the essential tests that must be applied to decisions relating to water and energy development. If the report advances these values significantly we will emerge at our destination – improved decision-making processes that deliver improved outcomes for all stakeholders.

The debate about dams is a debate about the very meaning, purpose and pathways for achieving development. This suggests that decision-making on water and energy management will align itself with the emerging global commitment to sustainable human development and on the equitable distribution of costs and benefits. The emergence of a globally accepted framework of norms rests on the adoption of the Universal Declaration of Human Rights in 1948 and related covenants and conventions thereafter. These later resolutions include the Declaration on the Right to Development adopted by the UN General Assembly in 1986, and the Rio Principles agreed to at the UN Conference on Environment and Development in 1992. The core values that inform the Commission's shared understanding are aligned with this consensus and rest on the fundamental

human rights accorded to all people by virtue of their humanity.

Rights, risks and negotiated outcomes

Reconciling competing needs and entitlements is the single most important factor in understanding the conflicts associated with development projects and programmes – particularly large-scale interventions such as dams. The approach developed by the Commission of recognising rights and assessing risks (particularly rights at risk) in the planning and project cycles offers a means to apply these core values to decision-making about water and energy resource management. Clarifying the rights context for a proposed project is an essential step in identifying those legitimate claims and entitlements that may be affected by the project or its alternatives. It is also a pre-condition for effective identification of legitimate stakeholder groups that are entitled to a formal role in the consultative process, and eventually in negotiating project-specific agreements relating, for example, to benefit sharing, resettlement and compensation.

The assessment of risk adds an important dimension to understanding how, and to what extent, a project may impact on people's rights. In the past, many groups have not had an opportunity to participate in decisions that imply major risks for their lives and livelihoods, thus denying them a stake in the development decision-making process commensurate with their exposure to risk. Indeed, many have had risks imposed on them involuntarily. Risks must be identified and addressed explicitly. This will require the notion of risk to be extended beyond governments or developers to include both those affected by a project and the environment as a public good. Involuntary risk bearers must be engaged by risk takers in a transparent process to negotiate equitable outcomes.

An approach based on the recognition of rights and assessment of risks can lay the basis for greatly improved and significantly

more legitimate decision-making on water and energy resource development. It offers an effective way to determine who has a legitimate place at the negotiation table and what issues need to be included on the agenda. Only decision-making processes based on the pursuit of negotiated outcomes, conducted in an open and transparent manner and inclusive of all legitimate actors involved in the issue are likely to resolve the complex issues surrounding water, dams and development.

Recommendations for a New Policy Framework

Researching and analysing the history of water resources management, the emergence of large dams, their impacts and performance, and the resultant dams debate led the Commission to view the controversy surrounding dams within a broader normative framework. This framework, within which the dams debate clearly resides, builds upon international recognition of human rights, the right to development and the right to a healthy environment.

Within this framework the Commission has developed seven strategic priorities and related policy principles. It has translated these priorities and principles into a set of corresponding criteria and guidelines for key decision points in the planning and project cycles.

Together, they provide guidance on translating this framework into practice. They help us move from a traditional, top-down, technology-focused approach to advocate significant innovations in assessing options, managing existing dams – including processes for assessing reparations and environmental restoration, gaining public acceptance and negotiating and sharing benefits.

The seven strategic priorities each supported by a set of policy principles, provide a principled and practical way forward for decision-making. Presented here as expressions of an achieved outcome, they summarise

key principles and actions that the Commission proposes all actors should adopt and implement.

1. Gaining Public Acceptance

Public acceptance of key decisions is essential for equitable and sustainable water and energy resources development. Acceptance emerges from recognising rights, addressing risks, and safeguarding the entitlements of all groups of affected people, particularly indigenous and tribal peoples, women and other vulnerable groups. Decision making processes and mechanisms are used that enable informed participation by all groups of people, and result in the demonstrable acceptance of key decisions. Where projects affect indigenous and tribal peoples, such processes are guided by their free, prior and informed consent.

2. Comprehensive Options Assessment

Alternatives to dams do often exist. To explore these alternatives, needs for water, food and energy are assessed and objectives clearly defined. The appropriate development response is identified from a range of possible options. The selection is based on a comprehensive and participatory assessment of the full range of policy, institutional and technical options. In the assessment process social and environmental aspects have the same significance as economic and financial factors. The options assessment process continues through all stages of planning, project development and operations.

3. Addressing Existing Dams

Opportunities exist to optimise benefits from many existing dams, address outstanding social issues and strengthen environmental mitigation and restoration measures. Dams and the context in which they operate are not seen as static over time. Benefits and impacts may be transformed by changes in water use priorities, physical and land use changes in the river basin, technological developments, and changes in public policy expressed in environment, safety, economic and technical regulations. Management and operation practices must adapt continuously to

changing circumstances over the project's life and must address outstanding social issues.

4. Sustaining Rivers and Livelihoods

Rivers, watersheds and aquatic ecosystems are the biological engines of the planet. They are the basis for life and the livelihoods of local communities. Dams transform landscapes and create risks of irreversible impacts. Understanding, protecting and restoring ecosystems at river basin level is essential to foster equitable human development and the welfare of all species. Options assessment and decision-making around river development prioritises the avoidance of impacts, followed by the minimisation and mitigation of harm to the health and integrity of the river system. Avoiding impacts through good site selection and project design is a priority. Releasing tailor-made environmental flows can help maintain downstream ecosystems and the communities that depend on them.

5. Recognising Entitlements and Sharing Benefits

Joint negotiations with adversely affected people result in mutually agreed and legally enforceable mitigation and development provisions. These recognise entitlements that improve livelihoods and quality of life, and affected people are beneficiaries of the project. Successful mitigation, resettlement and development are fundamental commitments and responsibilities of the State and the developer. They bear the onus to satisfy all affected people that moving from their current context and resources will improve their livelihoods. Accountability of responsible parties to agreed mitigation, resettlement and development provisions is ensured through legal means, such as contracts, and through accessible legal recourse at the national and international level.

6. Ensuring Compliance

Ensuring public trust and confidence requires that the governments, developers, regulators and operators meet all commitments made for the planning, implementation and operation of dams. Compliance with applicable regulations, criteria and

guidelines, and project-specific negotiated agreements is secured at all critical stages in project planning and implementation. A set of mutually reinforcing incentives and mechanisms is required for social, environmental and technical measures. These should involve an appropriate mix of regulatory and non-regulatory measures, incorporating incentives and sanctions. Regulatory and compliance frameworks use incentives and sanctions to ensure effectiveness where flexibility is needed to accommodate changing circumstances.

7. Sharing Rivers for Peace, Development and Security

Storage and diversion of water on trans-boundary rivers has been a source of considerable tension between countries and within countries. As specific interventions for diverting water, dams require constructive co-operation. Consequently, the use and management of resources increasingly becomes the subject of agreement between States to promote mutual self-interest for regional co-operation and peaceful collaboration. This leads to a shift in focus from the narrow approach of allocating a finite resource to the sharing of rivers and their associated benefits in which States are innovative in defining the scope of issues for discussion. External financing agencies support the principles of good faith negotiations between riparian States.

If we are to achieve equitable and sustainable outcomes, free of the divisive conflicts of the past, future decision-making about water and energy resource projects will need to reflect and integrate these strategic priorities and their associated policy principles in the planning and project cycles.

From Policy to Practice – The Planning and Project Cycle

The Commission's recommendations can best be implemented by focusing on the key stages in decision-making on projects that influence the final outcome and where

compliance with regulatory requirements can be verified. Among the multitude of decisions to be taken, the Commission has identified five key decision points. The first two relate to water and energy planning, leading to decisions on a preferred development plan:

- Needs assessment: validating the needs for water and energy services; and
- Selecting alternatives: identifying the preferred development plan from among the full range of options.

Where a dam emerges from this process as a preferred development alternative, three further critical decision points occur:

- Project preparation: verifying that agreements are in place before tender of the construction contract;
- Project implementation: confirming compliance before commissioning; and
- Project operation: adapting to changing contexts.

Social, environmental, governance and compliance aspects have been undervalued in decision-making in the past. It is here that the Commission has developed criteria and guidelines to innovate and improve on the body of knowledge on good practices and add value to guidelines already in common use. Seen in conjunction with existing decision-support instruments, the Commission's criteria and guidelines provide a new direction for appropriate and sustainable development.

Bringing about this change will require:

- planners to identify stakeholders through a process that recognises rights and assesses risks;
- States to invest more at an earlier stage to screen out inappropriate projects and facilitate integration across sectors within the context of the river basin;
- consultants and agencies to ensure outcomes from feasibility studies are socially and environmentally acceptable;

- the promotion of open and meaningful participation at all stages of planning and implementation, leading to negotiated outcomes;
- developers to accept accountability through contractual commitments for effectively mitigating social and environmental impacts;
- improving compliance through independent review; and
- dam owners to apply lessons learned from past experiences through regular monitoring and adapting to changing needs and contexts.

The Commission offers its criteria and guidelines to help governments, developers and owners meet emerging societal expectations when faced with the complex issues associated with dam projects. Adopting this framework will allow states to take informed and appropriate decisions, thereby raising the level of public acceptance and improving development outcomes.

Beyond the Commission – An Agenda for Change

The Commission's report identifies the key elements of the debate on water and energy resources management and the role of dams in this debate. It summarises the lessons learned from our Global Review of experience with large dams. It elaborates the development framework within which the controversies and underlying issues can be understood and addressed and proposes a decision-making process anchored in a rights-and-risks approach and based on negotiated outcomes. It offers a set of strategic priorities, principles, criteria and guidelines to address the issues around existing dams and to use in exploring new water and energy development options.

The report is not intended as a blueprint. We recommend that it be used as the starting point for discussions, debates, internal reviews and reassessments of what

may be established procedures and for an assessment of how these can evolve to address a changed reality. In looking at the future, the Commission proposes a number of entry points to help organisations identify immediate actions they might take in response to the Commission's report.

Specific proposals are included for:

- national governments and line ministries;
- civil society organisations;
- the private sector;
- bilateral aid agencies and multilateral development banks;
- export credit agencies;
- inter-governmental organisations;
- professional associations; and
- academic and research bodies.

Engaging through these entry points will initiate permanent changes to advance the principles, criteria and guidelines we set out.

The trust required to enable the different actors to work together must still be consolidated. Early and resolute action to address issues arising from the past will go a long way towards building that trust in the future. So, too, will an assurance to countries still at an early stage of economic development that the dams option will not be foreclosed before they have had a chance to examine their water and energy development choices within the context of their development process.

The experience of the Commission demonstrates that common ground can be found without compromising individual values or losing a sense of purpose. But it also demonstrates that all concerned parties must stay

together if the issues surrounding water and energy resources development are to be resolved. It is a process with multiple heirs and no clear arbiter. We must move forward together or we will fail. The Commission was given an exceptional opportunity and it has delivered a result reflecting our collective learning process and understanding. If our report does not win widespread support among participants in the dams debate, it is unlikely that there will be another such opportunity for a long time.

We believe that our report is a milestone in the evolution of dams as a development option. We have:

- conducted the first comprehensive global and independent review of the performance of essential aspects of dams and their contribution to development. We have done this through an inclusive process that has brought all significant players into the debate;
- shifted the centre of gravity in the dams debate to one focused on investing in options assessment, evaluating opportunities to improve performance and address legacies of existing dams, and achieving an equitable sharing of benefits in sustainable water resources development; and
- demonstrated that the future for water and energy resources development lies with participatory decision-making, using a rights-and-risks approach that will raise the importance of the social and environmental dimensions of dams to a level once reserved for the economic dimension.

We have told our story. What happens next is up to you.

