

World Commission on Dams Report: What South Africa is Doing About It



Large dams have figured in national economic development programmes throughout the world for the best part of a century, but it was only in 1998 that the first comprehensive global and independent review was conducted into their performance and impacts and the range of alternative options available for water and energy development. The final report of the

World Commission on Dams (WCD), which undertook the study, was published in November 2000. The objective of the WCD was to review the effectiveness of large dams and develop internationally acceptable principles, strategic priorities, criteria and guidelines for their application. The WCD then passed the baton to the nations of the world. “We have told our story,”

it said. “*What happens next is up to you.*”

The purpose of this article is to look at what South Africa has done and is doing, within its own environment, to further the debate about dams – a debate which the WCD described in its report as relating to “the very meaning, purpose and pathways for achieving development.”

PHYSICAL BACKGROUND

The subject of large dams is highly relevant to this country, in that its rainfall patterns are among the most variable in the world. Some 60% of South Africa's river flows are generated from only 20% of the land. The need for water management is further illustrated by the fact that, in the summer rainfall region of the country, more than 80% of the rain falls within the six summer months.

South Africa has more than 500 large dams, of which 50 have a storage capacity exceeding 100 million m³. The country's reservoirs store about 746 m³ of water per person – an order of magnitude higher than that for the rest of Africa. Indeed, 60% of the large dams in Africa are situated in South Africa and Zimbabwe. The main purpose of dams in South Africa is irrigation and urban/ industrial water supply – less than 2% of the country's electricity is generated by hydropower.

Dam development is markedly different in the 21st century than when South Africa's first large dams were built in the late 19th century. A significant portion of the country's water resources has been developed, and very few new large dams are to be initiated in the coming two decades. The population of the country has increased and spread out over the various catchments, and the natural environment is under threat.

Many negative technological, economic, social and environmental impacts of large dams have been identified. It is now accepted that dam development requires joint decision-making to take the interests of various stakeholders into account, and that dam construction

is just one of many options to be considered in water and energy planning processes. The range of options includes water and energy demand management, alternative energy sources and integrated catchment management.

THE SOUTH AFRICAN INITIATIVE

It was against this background that South Africa took up the challenge of the World Commission on Dams – namely that “*what happens next is up to you*”. Representatives of the country's stakeholders (in respect of water management) gathered together in a symposium in July 2001 to consider the WCD report. They declared themselves to be broadly supportive of the strategic priorities outlined in the WCD report but believed that the guidelines needed to be contextualised in the South African situation. A Steering Committee was accordingly elected under the title “*The South African Multi-Stakeholder Initiative on the World Commission on Dams*” with a mandate to carry the local contextualisation process forward. The composition of the Steering Committee included representatives of government, the private sector, NGOs, affected parties, research and finance, and utilities.

The declared objectives of the Multi-Stakeholder Initiative were to:

- ◆ Contextualise the WCD report in the South African situation;
- ◆ Identify elements in the report that could be beneficially implemented or reinforced in South African large dam practice;
- ◆ Make recommendations to all stakeholders on the implementation of such elements in their work;
- ◆ Make recommendations on policy, regulation and legislation;
- ◆ Identify constraints to the im-

plementation of the recommendations; and

- ◆ Propose institutional structures for multi-stakeholder participation in follow-up and monitoring.

The Multi-Stakeholder Initiative appointed a Co-ordinating Committee to guide the preparation of a **Scoping Report** to be laid before the multi-stakeholder forum, in which relevant issues should be broadly analysed, contentious issues identified, avenues of research identified, and recommendations made on the way forward. The resulting document – which is not to be regarded as a blueprint for physical action – has been released for consideration by the multi-stakeholder forum.

THE SCOPING REPORT

The purpose of the Scoping Report, according to the Co-ordinating Committee which compiled it, is to develop a tool for decision-making that reflects the potentially disparate views of the range of stakeholders. In this regard, the Co-ordinating Committee noted the WCD's observation that decisions on dams and their alternatives, like all development choices, had to respond to a wide range of needs, expectations, objectives and constraints, and the further observation that while consensus could be found on many issues, intractable fault lines still separated critics and proponents on a number of financial, economic, social and environmental issues.

The Scoping Report noted the presence of such fault lines in South Africa, e.g. the belief amongst Labour and NGO sectors that marginalisation of the majority by means of “unjust technologies” like large dams was leading the country along the path of unsustainability,

and the contrasting belief that increasing the amount of water stored in Africa could and should play a role in the eradication of poverty. Between these and other opposing viewpoints, the Co-ordinating Committee observed that adoption of the rights-and-risks approach advocated by the WCD required acknowledgement of associated obligations between diverse stakeholders during the consensus-building and decision-making processes.

The Co-ordinating Committee accepted the five Core Values to which all could subscribe, raised during the WCD's Global Review – namely Equity, Efficiency, Participatory Decision-making, Sustainability and Accountability. The Scoping Report noted that these values accorded with the international norms articulated in the UN Declaration of Human Rights.

The Scoping Report also noted synergies between the WCD's principles and existing South African policy principles post-1994, characterised by the notion of democracy through participatory, co-operative and developmental governance. South Africa's Constitution – one of the most progressive in the world – provided a strong anchor for the rights-and-risks approach proposed by the WCD. Participation of all interested and affected parties had become a widespread fundamental principle of numerous pieces of legislation, including two Acts of particular relevance for dams and development. These are the National Water Act and the National Environmental Management Act, both of which provide for equitable and inclusive decision-making.

The National Water Act ensures that water is viewed in law as a national asset (rather than that of the landowner on whose property it occurs as groundwater or

through whose property it passes as a river). The Act gives priority to water for ecological needs and for basic human needs; no other water entitlements are guaranteed. The National Environmental Management Act, in turn, includes a people-centred approach to environmental management, combined with a risk-averse and cautious approach. Taken together with numerous other pieces of policy and legislation, these two Acts provide an indisputable basis for the core values of the WCD in the new South African governance framework.

SEVEN STRATEGIC PRIORITIES

Building on the five Core Values and the rights-and-risks approach, the WCD identified seven strategic priorities to guide water and energy planning and decision-making. These are sketched – necessarily very briefly in this article – as follows, together with the key issues for South Africa identified by the Multi-Stakeholder Co-ordinating Committee:

Gaining public acceptance

The message of the WCD is that, to be socially legitimate and produce positive and lasting outcomes, it is essential to gain public acceptance for key decisions on equitable and sustainable water and energy resources development. Demonstrable public acceptance of all key decisions is achieved through agreements negotiated in an open and transparent process, conducted in good faith and with the informed participation of all stakeholders.

The Co-ordinating Committee observed that in the South African context participation might occur in name only, unless there is real capacity-building, information sharing, economic empowerment and skills

transfer to local people. A range of institutional mechanisms for participation in decision-making for water resources development is evolving. The primary mechanism is the Catchment Management Agency, currently being established in the first of 19 water management areas in South Africa. A further example is the Gauteng Water Cycle Management Committee.

Key issues for this country include the timing of participation (to be meaningful, it must commence at an early stage of planning), the extent to which policy principles on participation are translated into action, and the question of whether informed participation is taking place (i.e. the awareness of stakeholders and their capacity to participate). Key debating points include the question of rights-and-risks identification, and the question: "When can it be said that public acceptance has been demonstrated?" Amongst many other issues, the Co-ordinating Committee raised the notion that free, prior and informed consent by indigenous and tribal peoples requires clarification in the South African context.

The Committee identified a number of studies required to guide the implementation of public participation in South Africa.

Comprehensive options assessment

The key message from the WCD is that alternatives to dams do exist. To explore these alternatives, it is necessary to assess water, food and energy needs and clearly define objectives. It is critical that the assessment process be participatory and that social and environmental aspects have the same significance as technical, economic and financial factors. The Co-ordinating Committee noted that in South Africa, as globally, the environmental and

social impact of dams has been far greater than initially envisaged.

A trend in South Africa is that the thrust for building dams has diminished in the Department of Water Affairs and Forestry (DWAF), with the focus now on a range of other options such as water demand management, conservation and the protection of water resources.

Addressing existing dams

Dams and the context in which they exist should not be seen as static over time. Changes in water use priorities, and physical and land use changes in the river basin, could transform benefits and impacts. The key message from the WCD was that opportunities exist to optimise the benefits of many existing dams, address outstanding issues and strengthen environmental mitigation and restoration measures. The WCD had also stated that outstanding social issues associated with existing large dams should be identified and assessed, and processes developed with the affected communities to remedy them.

The Co-ordinating Committee noted the consensus amongst South African stakeholders that social issues required priority – in particular compensation for loss of property and livelihoods and, of even greater importance to some communities, remedies for the inundation of land on which their ancestors had been interred. There were also environmental and operational concerns around existing dams, primarily related to deteriorating water quality.

A key debating point, the Committee noted, was that of how to define the parameters for auditing existing dams. A further key debating point: “Should a moratorium be placed on dam construction? Until what conditions are met? Or

should we ensure that committed steps be adhered to?”

Sustaining rivers and livelihoods

The key message from the WCD is that rivers, watersheds and aquatic ecosystems are the biological engines of the planet and the basis of life and the livelihoods of local communities. Dams transform landscapes and create the risk of irreversible impacts. Understanding, protecting and restoring ecosystems at river basin level is thus essential to foster equitable human development and the welfare of all species. This involves basin-wide understanding of the ecosystem’s functions, values and requirements, a national policy for maintaining rivers with high ecosystem values in their natural state, policy options that avoid significant impacts on threatened species, and the modification and operation of large dams to release environmental flows to help maintain downstream ecosystem integrity and community livelihoods.

The Co-ordinating Committee noted that the Reserve requirements in South Africa’s National Water Act provide a statutory basis for the WCD principle requiring basin-wide understanding of ecosystem functioning. Generic protocols for determining the Reserve are being developed. Answers are required to numerous questions related to the fine-tuning of the Reserve, not least the question of who pays for the ecological Reserve. For example, should the owners of a forestry plantation on the top of a hill be made to pay?

Research is also required on releases from dams, needed to maintain ecosystems and cater for downstream users. One perspective holds that the large dams contribute to flood control, whilst the

opposing view suggests that large dams control small floods, thereby giving a false sense of security leading to resettlement of the floodplain, with devastating effects when really large floods occur.

Recognising entitlements and sharing benefits

The key message from the WCD is that joint negotiations with adversely affected people result in mutually agreed and legally enforceable mitigation and development. These provisions should recognise entitlements and improve livelihoods, with affected people as the beneficiaries.

There is consensus in South Africa on this aspect, the Co-ordinating Committee reported, but a number of basic and procedural questions and some unrealistic expectations need to be addressed. A key debating point relates to the matter of how widely the benefits of a dam development should be shared. Also, will an approach that is acceptable for one dam be feasible for every dam?

Ensuring compliance

The key message from the WCD is that ensuring public trust and confidence requires that governments, developers, regulators and operators meet all commitments made in the planning, implementation and operation of dams. This requires a compliance plan with clear and consistent criteria and guidelines, including for costs, incentives and anti-corruption measures.

Many participants felt that in the South African context the water sector needed an independent regulator to ensure compliance with all commitments and obligations. The Co-ordinating Committee quoted numerous aspects needing resolution between diverse stakeholders, including the composi-

tion of a multi-stakeholder structure to ensure compliance, determination of the indicators required in the compliance process, and the institution of processes to eradicate corruption.

Sharing rivers for peace, development and security

The storage and diversion of water in the case of trans-boundary rivers has been a source of tension between countries and within countries. The key message of the WCD is thus that constructive co-operation is required between countries on such issues. "States need to be innovative in defining the issues for discussion." The principles enunciated by the WCD extend to shared river basins, and call for negotiation on the basis of good faith between riparian states, and between political units within countries.

South Africa has a number of formal water agreements with its neighbour states. The SADC Protocol on Shared Watercourses, adopted in 1995, is indeed more extensive than the relevant WCD guideline. The Co-ordinating Committee noted however that dam development in South Africa had had negative ecological and social impacts, and it had been proposed that this be included in an audit proposed as a first step to addressing the situation relating to existing dams.

A further key issue in the South African context is that of the way in which WCD strategic priorities and principles should be carried forward into the New Partnership for Africa's Development (NEPAD).

PRIORITIES FOR ACTION

Participants in the Multi-Stakeholder Forum in July 2002 were polled on the weight which they attached to the wide range of debating points identified in the

Scoping Report. Four clear priorities emerged from this exercise as deserving of further exploration and action, namely:

- ◆ The question of reparations/compensation for outstanding problems from existing dams;
- ◆ Whether social and environmental issues are accorded equal weight with economic, financial and technical issues when assessing water development options, and how this should be improved;
- ◆ The meaning of stakeholder involvement in South Africa, and how the rights-and-risks method of identifying stakeholders should be used;
- ◆ How to determine the point at which it can be said that public acceptance has been demonstrated.

The Co-ordinating Committee observed that, while the Scoping Report was not required to be analytical, but rather to reflect the range of different perspectives concerning the further implementation of the WCD in the South African context, it was nevertheless clear that for each of the seven strategic priorities, institutional issues were emerging as a clear cross-cutting issue for the further implementation of the WCD proposals.

Two main institutional issues arose here, which were merely noted for further discussion by the Co-ordinating Committee. The first related to institutional capacity at local level. The overriding challenge in South Africa was to achieve effective local government that enhanced the quality of life – which was clearly important for the management of water resources at local level. The second issue concerned the nature of the multi-stakeholder institutional mechanisms which would be needed at different levels to take

both the WCD and South African policy principles forward.

THE WAY FORWARD

The way forward indicated by the Multi-Stakeholder Workshop is for the above priority areas to be addressed over the following 24 months. Further discussion by the Co-ordinating Committee will result in some decisions to implement action steps. One of the actions already agreed is to establish a Working Group on Reparations, which will explore mechanisms, timeframes and procedures for addressing the issue of outstanding reparations relating to existing dams.

The Multi-Stakeholder Forum was also unanimous that the South African Initiative to contextualise the WCD report should continue. Stakeholders should be divided into six sectors, each with two representatives.

"The ongoing process needs to ensure that there is commitment from all stakeholders to adhere to certain milestones in this Initiative. The Co-ordinating Committee will identify the specific studies or actions that need to be undertaken."

The Scoping Report noted that the end product would not be the result of the studies undertaken, but rather implementation of the recommendations of the studies.

The outcomes of the studies and activities undertaken by the Co-ordinating Committee will be discussed at a Multi-Stakeholder Forum.

Persons wishing to be kept informed of the progress made by the Initiative are invited to contact Cathy Sepeng of the Secretariat at tel (011) 313 3615, fax (011) 313 3086 or e-mail catherines@dbsa.org. 