

Appendix 1

The World Commission on Dams and its Origins: A Brief Chronology of Events

- June 1994 Anti-dam organisations sign the Manibeli Declaration, calling for a moratorium on World Bank funding of large dams
- September 1996 World Bank's Operations Evaluation Department (OED) Phase I review, *The World Bank's Experience With Large Dams: A Preliminary Review of Impacts*, released
- March 1997 First International Meeting of People Affected by Dams, Curitiba Declaration signed
- April 1997 International Rivers Network press release critiquing the OED review
- April 1997 Gland, Switzerland meeting of World Bank, IUCN, and dam-related stakeholders
- August 1997 Interim Working Group (IWG) meeting, Stockholm, Sweden
- September 1997 Professor Kader Asmal chosen as WCD Chairperson
- November 1997 WCD launch delayed
- January 1998 "Expanded IWG" meeting in Cape Town, South Africa
- April 1998 Achim Steiner chosen as WCD Secretary-General
- May 1998 WCD established
- May 1998 First meeting of the WCD in Washington, D.C.
- September 1998 Jan Veltrop replaces Wolfgang Pircher as Commission's ICOLD representative
- September 1998 India consultation cancelled
- March 1999 First Forum meeting in Prague, Czech Republic
- January 2000 Shen Guoyi formally resigns from the Commission
- April 2000 Second Forum meeting in Cape Town, South Africa
- November 2000 Release of *Dams and Development: A New Framework for Decision-Making*
- February 2001 Third Forum meeting in Cape Town, South Africa
- July 2001 WCD Secretariat officially closed, Dams and Development Unit established

Appendix 2

WCD Forum Members

Affected Peoples' Groups

Coordination for the Senegal River Basin (CODESEN), Senegal
 Cordillera People's Alliance (CPA), Philippines
 Federación de Indígenas del Estado Bolívar (COICA), Venezuela
 Grand Council of the Cree (GCCEI), Canada
 Movimento dos Antigos por Barragens (MAB), Brazil
 Narmada Bachao Andolan (NBA), India
 SUNGI Development Foundation, Pakistan

Bilateral Agencies / Export Credit Guarantee Agencies

Federal Ministry for Economic Cooperation and Development (BMZ), Germany
 Japan Bank for International Cooperation (JBIC), Japan
 Norwegian Agency for International Cooperation (NORAD), Norway
 Swedish International Development Agency (Sida), Sweden
 Swiss Agency for Development and Cooperation (SDC), Switzerland
 United States Export/Import Bank, United States

Government Agencies

Bureau of Reclamation, United States
 Lesotho Highlands Water Project (LHWP), Lesotho
 Ministry of Mahaweli Development, Sri Lanka
 Ministry of Water Resources, China
 Ministry of Water Resources, India
 National Water Commission, Mexico

International Associations

International Association for Impact Assessments (IAIA)
 International Commission for Irrigation and Drainage (ICID)
 International Commission on Large Dams (ICOLD)
 International Energy Agency (IEA)
 International Hydropower Association (IHA)

Multilateral Agencies

African Development Bank (AfDB), Abidjan
 Asian Development Bank (ADB), Manila
 Inter-American Development Bank (IDB), Washington
 United Nations Development Programme (UNDP), New York
 United Nations Environment Programme (UNEP), Nairobi
 United Nations Food and Agriculture Organization (FAO), Rome
 World Bank (WB), Washington

NGOs

Berne Declaration, Switzerland
 Development Alternatives with Women for a New Era (DAWN), Fiji
 Environmental Development Action (ENDA), Senegal
 Help the Volga River, Russia
 International Rivers Network (IRN), United States
 Intermediate Technology Development Group (ITDG), United Kingdom
 Sobrevivencia-Friends of the Earth, Paraguay
 Swedish Society for Nature Conservation (SSNC), Sweden
 The World Conservation Union (IUCN), Switzerland
 Transparency International (TI), Germany
 Wetlands International, Japan
 World Economy, Ecology & Development (WEED), Germany
 World Wide Fund for Nature (WWF), Switzerland

Private Sector Firms

Asea Brown Boveri (ABB), Switzerland
 Electric Power Development Corporation (EPDC), Japan
 Enron, United States
 Harza Engineering Firm, United States
 Hopewell Holdings, Hong Kong
 Saman Engineering Consultants, Korea
 Siemens, Germany

Research Institutes/Resource Persons

Centro EULA, Ciudad Universitaria Concepcion, Chile
 Focus on the Global South, Thailand
 Institute of Hydroelectric Studies and Design (ISPH), Romania
 International Water Management Institute (IWMI), Sri Lanka
 Tropical Environmental Consultants, Ltd., Senegal
 Water Research Institute (WRI), Israel Institute of Technology
 Winrock International, Nepal
 World Resources Institute (WRI), United States
 Worldwatch Institute, United States
 Wuppertal Institute, Germany

River Basin Authorities

Confederación Hidrográfica del Ebro (CHE), Spain
 Jordan Valley Authority (JVA), Jordan
 Mekong River Commission (MRC), Cambodia
 Volta River Authority (VRA), Ghana

Utilities

Electricité de France, France
 Electrobras, Brazil
 Hydro-Québec, Canada
 Mini Hydro Division (MHD), Philippines
 Nepal Electricity Authority (NEA), Nepal

Source: World Commission on Dams, *Dams and Development: A New Framework for Decision-Making* (London: Earthscan, 2000).

Appendix 3

Thematic Reviews

Social

- I.1 Social impacts of large dams equity and distributional issues
- I.2 Dams, indigenous people, and vulnerable ethnic minorities
- I.3 Displacement, resettlement, rehabilitation, reparation, and development

Environment

- II.1 Dams, ecosystem functions, and environmental restoration
- II.2 Dams and global change

Economic

- III.1 Economic, financial, and distributional analysis
- III.2 International trends in project financing

Options Assessment

- IV.1 Assessment of electricity supply and demand management options
- IV.2 Assessment of irrigation options
- IV.3 Assessment of water supply options
- IV.4 Assessment of flood control and management options
- IV.5 Operation, monitoring, and decommissioning of dams

Institutional Processes

- V.1 Planning approaches
- V.2 Environmental and social assessment for large dams
- V.3 River basins-institutional frameworks and management options
- V.4 Regulation, compliance, and implementation options
- V.5 Consultation and decision-making processes

Source: World Commission on Dams, *Dams and Development: A New Framework for Decision-Making* (London: Earthscan, 2000).

Appendix 4

Strategic Priorities of the Dams and Development Report

Strategic Priority 1 – Gaining Public Acceptance

- 1.1 Recognition of rights and assessment of risks are the basis for the identification and inclusion of stakeholders in decision-making on energy and water resources development.
- 1.2 Access to information, legal and other support is available to all stakeholders, particularly indigenous and tribal peoples, women and other vulnerable groups, to enable their informed participation in decision-making processes.
- 1.3 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.
- 1.4 Decisions on projects affecting indigenous and tribal peoples are guided by their free, prior and informed consent achieved through formal and informal representative bodies.

Strategic Priority 2 – Comprehensive Options Assessment

- 1.1 Development needs and objectives are clearly formulated through an open and participatory process before the identification and assessment of options for water and energy resource development.
- 1.2 Planning approaches that take into account the full range of development objectives are used to assess all policy, institutional, management, and technical options before the decision is made to proceed with any programme or project.
- 1.3 Social and environmental aspects are given the same significance as technical, economic and financial factors in assessing options.
- 1.4 Increasing the effectiveness and sustainability of existing water, irrigation, and energy systems are given priority in the options assessment process.
- 1.5 If a dam is selected through such a comprehensive options assessment process, social and environmental principles are applied in the review and selection of options throughout the detailed planning, design, construction, and operation phases.

Strategic Priority 3 – Addressing Existing Dams

- 1.1 A comprehensive post-project monitoring and evaluation process, and a system of longer-term periodic reviews of the performance, benefits, and impacts for all existing large dams are introduced.
- 1.2 Programmes to restore, improve and optimise benefits from existing large dams are identified and implemented. Options to consider include rehabilitate, modernise and upgrade equipment and facilities, optimise reservoir operations and introduce non-structural measures to improve the efficiency of delivery and use of services.
- 1.3 Outstanding social issues associated with existing large dams are identified and assessed; processes and mechanisms are developed with affected communities to remedy them.
- 1.4 The effectiveness of existing environmental mitigation measures is assessed and unanticipated impacts identified; opportunities for mitigation, restoration and enhancement are recognised, identified and acted on.
- 1.5 All large dams have formalised operating agreements with time-bound licence periods; where re-planning or relicensing processes indicate that major physical changes to facilities or decommissioning may be advantageous, a full feasibility study and environmental and social impact assessment is undertaken.

Strategic Priority 4 – Sustaining Rivers and Livelihoods

- 1.1 A basin-wide understanding of the ecosystem's functions, values and requirements, and how community livelihoods depend on and influence them, is required before decisions on development options are made.
- 1.2 Decisions value ecosystems, social and health issues as an integral part of project and river basin development and prioritise avoidance of impacts in accordance with a precautionary approach.
- 1.3 A national policy is developed for maintaining selected rivers with high ecosystem functions and values in their natural state. When reviewing

- alternative locations for dams on undeveloped rivers, priority is given to locations on tributaries.
- 1.4 Project options are selected that avoid significant impacts on threatened and endangered species. When impacts cannot be avoided viable compensation measures are put in place that will result in a net gain for the species within the region.
 - 1.5 Large dams provide for releasing environmental flows to help maintain downstream ecosystem integrity and community livelihoods and are designed, modified and operated accordingly.

Strategic Priority 5 – Recognising Entitlements and Sharing Benefits

- 1.1 Recognition of rights and assessment of risks is the basis for identification and inclusion of adversely affected stakeholders in joint negotiations on mitigation, resettlement and development related decision-making.
- 1.2 Impact assessment includes all people in the reservoir, upstream, downstream and in catchment areas whose properties, livelihoods and non-material resources are affected. It also includes those affected by dam related infrastructure such as canals, transmission lines and resettlement developments.
- 1.3 All recognised adversely affected people negotiate mutually agreed, formal and legally enforceable mitigation, resettlement and development entitlements.
- 1.4 Adversely affected people are recognised as first among the beneficiaries of the project. Mutually agreed and legally protected benefit sharing mechanisms are negotiated to ensure implementation.

Strategic Priority 6 – Ensuring Compliance

- 1.1 A clear, consistent and common set of criteria and guidelines to ensure compliance is adopted by sponsoring, contracting and financing institutions and compliance is subject to independent and transparent review.
- 1.2 A Compliance Plan is prepared for each project prior to commencement, spelling out how compliance will be achieved with relevant criteria and guidelines and specifying binding arrangements for project-specific technical, social and environmental commitments.

- 1.3 Costs for establishing compliance mechanisms and related institutional capacity, and their effective application, are built into the project budget.
- 1.4 Corrupt practices are avoided through enforcement of legislation, voluntary integrity pacts, debarment and other instruments.
- 1.5 Incentives that reward project proponents for abiding by criteria and guidelines are developed by public and private financial institutions.

Strategic Priority 7 – Sharing Rivers for Peace, Development and Security

- 1.1 National water policies make specific provision for basin agreements in shared river basins. Agreements are negotiated on the basis of good faith among riparian States. They are based on principles of equitable and reasonable utilisation, no significant harm, prior information and the Commission's strategic priorities.
- 1.2 Riparian States go beyond looking at water as a finite commodity to be divided and embrace an approach that equitably allocates not the water, but the benefits that can be derived from it. Where appropriate, negotiations include benefits outside the river basin and other sectors of mutual interest.
- 1.3 Dams on shared rivers are not built in cases where riparian States raise an objection that is upheld by an independent panel. Intractable disputes between countries are resolved through various means of dispute resolution including, in the last instance, the International Court of Justice.
- 1.4 For the development of projects on rivers shared between political units within countries, the necessary legislative provision is made at national and sub-national levels to embody the Commission's strategic priorities of 'gaining public acceptance', 'recognising entitlements' and 'sustaining rivers and livelihoods'.
- 1.5 Where a government agency plans or facilitates the construction of a dam on a shared river in contravention of the principle of good faith negotiations between riparians, external financing bodies withdraw their support for projects and programmes promoted by that agency.

Appendix 5

Events Attended by the Assessment Team

WCD Events

Latin America consultation, Brazil

WCD presentation to World Bank, Washington

Africa and Middle East consultation, Egypt

USA stakeholder meeting

European NGO meeting, Slovakia

Pakistan stakeholder meeting

Turkey stakeholder meeting

Norway stakeholder meeting

Zambia stakeholder meeting

India stakeholder meeting

East and Southeast Asia consultation, Vietnam

WCD second Forum meeting, South Africa

WCD third Forum meeting, South Africa

Date & Attendee(s)

12-13 August 1999

Manuel Pulgar-Vidal,^a WRI

28 September 1999

Mairi Dupar, WRI

8-9 December 1999

Mairi Dupar, WRI

13 January 2000

Tundu Lissu, LEAT

17-18 January 2000

Elena Petkova, WRI

17-18 January 2000

Gopal Siwakoti “Chintan,”^b Lokayan

20-21 January 2000

Elena Petkova, WRI

14 February 2000

Smitu Kothari, Lokayan

21-22 February 2000

Melchesideck Lutema , LEAT

21, 23 February 2000

Smitu Kothari, Lokayan

Anil Bhattarai , Lokayan

26-27 February 2000

Mairi Dupar, WRI

Anil Bhattarai , Lokayan

Melchesideck Lutema , LEAT

6-8 April 2000

Mairi Dupar, WRI

Navroz Dubash, WRI

Smitu Kothari, Lokayan

Anil Bhattarai, Lokayan

Gopal Siwakoti “Chintan,”^b Lokayan

Tundu Lissu, LEAT

25-27 February 2001

Mairi Dupar, WRI

Navroz Dubash, WRI

Events Related to Dams (not part of official WCD process)	Date & Attendee(s)
Discussions with stakeholders, Thailand	January 2000 Gopal Siwakoti “Chintan,” ^b Lokayan
World Water Forum, Netherlands	March 2000 Gopal Siwakoti “Chintan,” ^b Lokayan
Meeting of dam-related stakeholders, Nepal	June 2000 Anil Bhattarai, Lokayan Gopal Siwakoti “Chintan,” ^b Lokayan
Conference on Mekong regional environmental governance, Laos	April 2001 Mairi Dupar, WRI
Meeting of dam-related stakeholders, India	May 2001 Smitu Kothari, Lokayan Ramananda Wangkheirakpam, ^c Lokayan Lakshmi Rao, ^d Lokayan

^a Representing WRI, primary affiliation with the Peruvian Society of Environmental Law

^b Representing Lokayan, primary affiliation with INHURED International

^c Representing Lokayan, primary affiliation with Jawaharlal Nehru University

^d Representing Lokayan, primary affiliation with Jawaharlal Nehru University

Who We Are

World Resources Institute

World Resources Institute provides—and helps other institutions provide—information and practical proposals for policy and institutional change that will foster environmentally sound, socially equitable development. WRI researches and publicises policy options, encourages adoption of innovative approaches, and provides strong technical support to governments, corporations, international institutions, and environmental non-governmental organisations (NGOs). WRI's Institutions and Governance Program, a program that focuses on the social and political dimensions of environmental policymaking, houses the WCD assessment team.

World Resources Institute, 10 G Street, NE; Suite 800; Washington, DC 20002, USA

Lokayan

Lokayan, a 20-year-old action-research centre in India, works with social movements, research institutes, policy-makers and citizens at large to foster the widening of justice, democracy, and ecological sustainability. It does this through participatory research, campaigns, advocacy, political mobilisation, dialogues, and publications. Lokayan won the Right Livelihood Award (“Alternative Nobel Prize”) in 1986.

Lokayan, 13 Alipur Road, Exchange Building, Civil Lines, Delhi 110 054, India

The Lawyers' Environmental Action Team

The Lawyers' Environmental Action Team (LEAT) is a public interest lawyers' organisation based in Dar es Salaam, Tanzania. Founded in 1994, LEAT specialises in public policy research and advocacy in the field of environment and natural resource management. It has undertaken applied policy research work on institutional and governance issues for government departments and donor agencies. It also carries out public interest litigation on selected cases on behalf of rural communities.

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