

**WCD Thematic Reviews
Institutional Processes**

**Participation, Negotiation and Conflict
Management in Large Dams Projects**

Final Report

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This is a working paper of the World Commission on Dams – the report herein was prepared for the Commission as part of its information gathering activity. The views, conclusions, and recommendations are not intended to represent the views of the Commission. The Commission's views, conclusions, and recommendations will be set forth in the Commission's own report.

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Executive Summary

Objectives

This thematic review focuses on the siting, construction, and operation of large dam facilities (or their alternatives) as sources of significant conflict, and as opportunities to involve many interested parties and groups in addressing local, regional, and national issues. The review is intended to improve understanding about large dam conflicts, identify essential principles and decision-making approaches for public involvement and conflict resolution, and provide a set of best practices in these areas for large dams or their alternatives.

Methods

This review is the result of international co-operation between experts on public participation and conflict resolution from Southeast Asia, Africa, North and South America, and Eastern Europe. Co-ordinated by RESOLVE, the authors interviewed seventeen individuals significantly involved in dams, and conducted a review of the literature on dams, conflict resolution, public participation, and facility siting. As requested by the WCD, the review focuses on general principles and best practices; it is not a comprehensive study of the topic. For both public participation and conflict management, we place 'best practices' in a framework of principles for why best practices should be used, approaches to achieving the principles, and steps for developing high quality processes. The document lists, but does not replicate tools and skills detailed by other practitioners (although several 'tool boxes' are listed).

There is a Need for Greater Adherence to Good Practices

The need for improvement in public involvement and dispute resolution for large dams may be one of the few things on which everyone involved in the building of large dams agrees. For the most part, however, the need is for a greater adherence to known principles and for a much more expanded and better use of existing approaches, processes, and tools. The literature and conversations with those involved in dam processes yield many deficiencies with the current process including: failure to complete (or make timely) public consultation prior to decision; not ensuring that the broadest spectrum of sectors of society is involved pro-actively; failure to deal with and resolve mistrust between stakeholders and government; entrenchment of centralised decision making; lack of access to and dissemination of full and good quality information; and lack of involvement by affected people in design and implementation of project monitoring.

The need for more extensive use of existing approaches to public involvement and resolving conflicts stems primarily from the deficiencies in the process and several significant social trends about dam projects. Emerging international norms concerning public involvement in all types of development and facility siting greatly extend the formal requirements and the expectations of participants. Public scrutiny of large dam projects has grown in part due to increased understanding and interest by non-government organizations (NGOs). Rapid advances in communications technology also allow more stakeholders to interact. These trends and others mean that public participation programs will have to be more timely, greater in scope, better designed, and more diligent in identifying and involving the broadest possible cross-section of society. Most importantly, these improvements will have to produce programs that are more meaningful to all those who participate. If they are not, disputes and conflicts over dams will increase dramatically.

In addition, there are major concerns about the effects of dam development on the poor and indigenous peoples (and the differential impact on women), especially with regard to resettlement and the distribution of other costs and benefits. Public participation methods may need to be developed that involve poor and indigenous people in cultural, gender appropriate, and financially feasible ways. Both new and existing techniques need to be consistently implemented, to increase these stakeholders' participation.

Sources of Conflict

Conflicts are defined as interactions of interdependent people who see their goals as incompatible, and who believe the “other” people are interfering with their efforts to satisfy their interests or values. We emphasise that conflicts can be useful as a means of stimulating engagement and creativity. However, if conflict is handled ineffectively, it can become destructive. Conflicts around dams come from a number of sources; especially from the real and perceived distribution of costs and benefits, disparities in social and economic power, the roles of different institutions, and specifics of project location and design. In addition, the cultural and social differences of the participants in the processes, and general distrust of government make such conflicts more difficult to resolve.

Involvement and Conflict Dynamics

A significant issue for public involvement programs is the need to assist groups that have traditionally had little voice in society. With limited voice and experience, such groups may either refrain from participation, or conversely, escalate rapidly the tactics they use to be heard. Both situations are detrimental to meaningful public involvement and to peaceful resolution of conflict. Another difficulty is the (often negative) effect of local communities having ineffective internal leadership. Finally, the dynamics of conflict can be significantly affected by the reactions participants have to their degree of access to resources and information – based on their gender, culture, values, and history. All these factors need to be taken into account when designing a meaningful participation or conflict resolution process.

Decision-Making

We identify nine decision-making stages of the development process for large dams (or for many of their alternatives) for which there are opportunities and techniques for involving the public and for which conflict resolution approaches will be helpful: problem identification, alternatives proposal, site selection, project design, impact mitigation, construction, operations monitoring and evaluation, relicensing and decommissioning. At each stage, more extensive information dissemination and active involvement of essential stakeholders is necessary. For many of the stages, these activities are often not conducted early enough or adequately, especially after construction has begun. All participants need to be aware that disputes and conflicts are inevitable in such large projects, and that systems need to be pro-actively agreed upon and developed to manage these issues as they arise.

Stakeholders

Stakeholders in dam-related processes are numerous and largely self selected. They include those who stand to benefit by building the dam (developers and some other stakeholders); those who are responsible for making, reviewing, or implementing specific decisions concerning dam siting and operations; those who will be negatively affected and those who seek to represent the underrepresented; those who can contribute local knowledge; and knowledgeable critics of the process. The reasons why some stakeholders do not become involved are complicated, but often closely related to difficulties with the public involvement process: not knowing they are stakeholders, not being informed of the opportunity to participate, not having power in the society, or not having access to the process (for any number of reasons).

Problems with representation are not generally major, except with less well-organised stakeholders, such as local populations (and perhaps particularly the women among them). Participants in these processes usually represent clearly defined stakeholder groups, but sometimes dam promoters and governmental officials chafe at the involvement of national or international NGOs (a concern occasionally shared by local groups of stakeholders). For their part, these NGOs see their involvement as helping to address significant power imbalances between local groups and multi-national companies and national governments. It is not always clear who represents unorganised indigenous groups; this is a problem that needs attention to ensure meaningful public participation and conflict resolution.

Trust is low between many of the stakeholders concerned with the dams that we considered. Developers are seen by local groups as having low credibility, national and international NGOs as outsiders (sometimes), and government agencies as ineffective or biased. Two very common themes that cut across many sectors and views are: 1) concerns for effectively involving non-formal, poor, and indigenous groups, and 2) the importance of transparency in the process.

Institution Building

Both intentional and unintentional capacity improvements for local and regional groups can be beneficial in the context of regional river planning and dam siting and construction. While there are sometimes concerns about the source of the assistance, overall, groups that are better organised with more training are able to participate more effectively in public involvement processes and negotiations. National governments and international organisations have experienced an evolution of international norms concerning public involvement in the last twenty years with many countries and institutions now requiring significant programs. This trend is significant and, if strengthened, could continue to produce approaches and processes that are more widely acceptable and protective of minority or less organized interests. Currently, the approaches and processes for handling conflicts tend to be ad hoc and vary greatly between countries, regions, and levels. A more universally recognised and utilised set of principles, approaches, and process steps for involving stakeholders and handling conflicts would improve decision making and the quality of the outcomes.

Best Practices

The many approaches, process steps, and tools of public participation and conflict resolution are based on a set of principles which should be applied to all processes concerned with building dams or their alternatives. These practices stem from first principles that the public should have meaningful and continuous voice in decisions that affect their lives, and that their participation should have an impact on the decisions. For the resolution of conflicts decision-makers should take into account that differences and disputes are normal. Although every culture has its own ways of resolving disputes, better decisions emerge when diverse interests, knowledge, and expertise are brought to bear on complex problems such as watershed management and large dams or their alternatives. Public participation and conflict resolution processes should be evaluated regularly. Evaluation allows decision-makers to learn if both processes and outcomes are accomplishing the goals set out for them and to gather information to improve future projects.

These sections of the report discuss the 'best practices' of public participation and conflict resolution in a framework of principles for why best practices should be used, approaches to achieving the principles, and steps for developing high quality processes. The document lists, but does not replicate tools and skills detailed by other practitioners. These sections also list good representative practice elements for the stages of the dam building cycle. However, both public participation and conflict resolution processes must be sufficiently flexible to accommodate local needs, and appropriate to local circumstances, which are likely to differ from area to area and from project to project. There is no blueprint process. The challenge is to understand the local circumstances and to design a process that will enrich decision-making in each individual situation.

The Study Team

The following consultants contributed reports that were compiled into the final draft report written by the lead consultants:

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1. Background

The World Commission on Dams was established to address central issues of controversy with respect to large dams and their effectiveness in sustainable development. The Commission's overarching goals are to:

- review the development effectiveness of dams and assess alternatives for water resources and energy development, and
- develop internationally acceptable standards, guidelines, and criteria for decision making in the planning, design, construction, monitoring, operation, and decommissioning of dams.

To assist with accomplishing these goals, the WCD asked RESOLVE, a U.S.-based non-profit dispute resolution organisation to work with an international team of senior advisors to write a thematic review of "Participation, Negotiation, and Conflict Management" concerning large dams.

1.1 Objectives

This thematic review has four related objectives:

1. Improve the understanding of conflicts around large dam projects, their dynamics, and root causes.
2. Identify alternative decision-making procedures on dams that prevent conflicts and/or minimise their intensity; this requires the identification of critical decisions requiring conflict resolution/negotiation throughout the project cycle.
3. Propose essential principles and approaches for negotiating choices within society, preventing conflicts, and settling them if they occur.
4. Preview the potential contribution of, and current practices for, participatory approaches to decision-making on large dams.

We based this thematic review on a review of the literature, and interviews with stakeholders and WCD commission members. The themes are illustrated by specific examples, including those of successful dispute management and public involvement efforts as well as examples of projects that did not give stakeholders opportunities for involvement or which had major conflicts.

1.2 Methods

The thematic review team researched this topic as a co-operative international effort between experts (International Partners) in public participation and dispute resolution from Southeast Asia, Africa, North and South America, and Eastern Europe. RESOLVE served as the co-ordinator for the project and as the primary author of the draft report, with regional input by the International Partners. The International Partners also commented on drafts of the review written by RESOLVE mediators, and contributed examples and content to the drafts from their regions. We had insufficient resources to include partners from South Asia, the Middle East, or other regions. However, we believe the examples from the selected regions help give the review a basic understanding of the geographic and cultural variety of issues concerning participation and conflict for large dams.

To guide the interview process, RESOLVE wrote interview questions (Annex A) for use by the interviewers. Using the protocol as a guide to discussion, the International Partners and RESOLVE staff conducted interviews with a cross-section of participants, policy makers, and researchers from various dam-related sectors. We interviewed two to five experts on dams from each region and six others from international organizations (see Annex B). We had insufficient resources to conduct

extensive interviews with more than a handful of those involved in decision-making about large dams. In total, we interviewed 23 people who could represent the views of the essential stakeholder interests in these conflicts, including some with extensive knowledge of the views and concerns of those directly negatively affected by large dams. The interviewees included hydropower industry officials, environmental advocates, agriculture/irrigation users, indigenous rights activists, donor agencies, local or regional agencies, government officials, and Basin Authority Officials. We asked interviewees to discuss both general principles (especially those from international organizations), and the specifics of cases with which they have been deeply involved. The cross-section of interviews provides a range of views regarding the roles of public participation and conflict/dispute resolution in processes concerning large dams, and examples of where and how techniques have worked well and where they have not.

The issues and ideas contained in this Thematic Review are drawn not only from the interviewees, but also from the literature review (including materials from the Internet, especially from NGOs), and our professional expertise. We made an effort to find examples in the literature that were from large dam processes dating from the last decade and a half. However, dam development processes can be extremely long, so we describe examples in some cases that happened before the ‘best practices’ described for public participation and conflict resolution (sections 3.7 and 3.8) became commonly known. Nevertheless, as we noted above, many of these practices are still not commonly used, so the examples we cite remain relevant. For both public participation and conflict management, we discuss ‘best practices’ in a framework of principles for why best practices should be used, approaches to achieving the principles, and steps for developing high quality processes. The document lists, but does not replicate tools and skills detailed by other practitioners (although several ‘tool boxes’ are listed).

References for all the literature we consulted are given in Section 4, List of Sources. We found relatively little published information or analysis of the specifics of participation and conflict resolution for large dams, other than descriptions of the conflicts. Therefore most of our examples come from the interviews, descriptions on Internet sites, and (a few) from comments by reviewers of the first draft.

This Thematic Review focuses on general principles and develops general understanding from the materials and interviews. Where possible, it includes specific examples on best practices, successes, and failures from individual dams. We include additional information on principles, practices, and examples from the literature on dams, conflict resolution, public participation, and the siting of large facilities (e.g. transportation, energy, and waste management). The review is a consideration primarily of causes and best practices, not as a comprehensive study of the topic.

2. Introduction

2.1 Yacyretá: A Border of Contention.

Any brief consideration of dams, dam siting, and the social and environmental impacts of dams illustrates the high levels of contentiousness and conflict that are part of the development process for large dams, much as silt is carried by a river. Examples of recent highly contentious dams include China's Three Gorges project, the Itá dam in Brazil, the Lesotho Highlands Water Projectⁱ in Lesotho, The Great Whale dam in Canada, the Aquamilpa and the Zimapán hydroelectric projects of Mexico, and the Sardar Sarovar project in India. The conflicts around these dams range from location siting, to the need for the power and water the dams promise to provide, questions of who benefits, to the highly contentious resettlement issues – especially with respect to indigenous peoples. The Yacyretá project, located on the border between Argentina and Paraguay, illustrates these issues and highlights that the problems are exacerbated by a lack of meaningful public participation.

The Yacyretá hydroelectric project is located on the Río Paraná, joining Rincon de Santa María in Argentina and San Cosme in Paraguay. The dam is a joint venture between Argentina and Paraguay. Since its beginning in 1973 the dam project has been criticised by local, regional, and international groups. The sources of conflict and conflict dynamics around Yacyretá are typical of large dam projects around the world. The project has raised concerns of indigenous, environmental, and civil society organizations for human rights, environmental, and anti-corruption concerns, as well as for the perceived lack of meaningful response from World Bank officials. Although the structures and electricity are equally owned, most of the generation (2,700 megawatts at completion) is going to Argentina, whereas Paraguay – which hosts most of the physical plant – is receiving most of the negative impacts. Frequent floods, polluted water, water-borne diseases, and abandoned homes are among the impacts, which by some accounts were not fully analysed. Later attempts at public involvement have been described as being one-way information distribution efforts, and did not include the poor or negatively affected stakeholders.

In 1996, Sobrevivencia, a Paraguayan non-governmental organisation, filed a claim with the World Bank Inspection Panel. The inspection panel process allows directly affected peoples who have been harmed by a failure of the Bank to follow their own policies or procedures to request an independent review of a project. In its claim to the Inspection Panel, Sobrevivencia detailed the complaints, abuses, and policy violations that have occurred in the construction of the Yacyretá dam.

The list of conflicts surrounding Yacyretá is long and troubling to many observers, but future relationships and interactions may be more hopeful. The major features of this conflict are rooted in the design and the start of the dam's construction during dictatorships in both countries. This led to the violent suppression of public participation efforts, and – even after improved governmental conditions – a continued lack of sufficient and timely information or processes required for participation. While this extreme situation has not occurred with many other dam projects, further problems in this case stemmed from the unwillingness of the dam's governing commission to consider outside input, a recurring and common failure, even today. The governing commission rejected input from the public and concerned NGOs, even after recommendations for improved participation mechanisms were made by a World Bank inspection panel and an Inter-American Development Bank investigation. Changes were finally begun after twenty-five years of protests and a change in the government of Paraguay. Although the dam is incomplete, there are finally signs that the governing commission is taking steps in a new direction by instituting dialogs, setting up participation mechanisms, and attempting to reduce conflicts (Peña 1999). Although Yacyretá illustrates many of the worst practices, it is by no means the only one and helps document the need for more participation and conflict resolution efforts.

2.2 There is a Need for Greater Adherence to Good Practices for Public Participation.

The need for improvement in public involvement and dispute resolution for large dams may be one of the few things on which everyone involved in the process agrees. For the most part, however, the need is for a greater adherence to known principles and for a much more expanded and better use of existing techniques. The basics of meaningful and effective public involvement are well known; so are the techniques for non-violent, non-coercive dispute and conflict resolution (the techniques are discussed in detail in sections 3.7 and 3.8). The debate is largely about which of these principles and techniques should be utilised, when, and for what purposes.

Although dam building has slowed considerably in North America and Europe, in most parts of the world, the pace of dam proposals and construction is likely to continue for some time to come.ⁱⁱ In 1994, the World Bank estimated that about 300 dams would begin construction per year worldwide, displacing about 4 million people per year in the process (WB 1994a). Others (interviewed during this study) indicated that as little as 10% of the dam capacity has been harnessed outside of North America and Europe.

To our knowledge, no effort has been made to document whether large dams are generating more conflict now than they used to; nor is it necessary to do so before concluding that improvements to the process are critical. A simple timeline of the historical evolution of transparency and participation is sufficient to indicate there are more participants now representing more diverse viewpoints than there used to be. Up until the 1970s, only engineers and economists were commonly part of the design process. However, by the late 1970s environmental impact assessments and some public reviews were added. By the late 1980s environmentalists and sociologists began to have significant roles, and by the mid-1990s negatively affected peoples and NGOs began to become significantly involved (Goodland 1997). Given that there are an increasing number of groups involved, that many societies are becoming more open and democratic, and that the various groups have different interests and are affected differentially, there are likely to be more open disputes and conflicts than there used to be.ⁱⁱⁱ

Going beyond these simple trends, the need for much more extensive use of existing approaches to public involvement and resolving disputes stems primarily from several significant social trends about dam projects (Goodland 1997; Oud & Muir 1997; Scudder 1997):

- emerging international norms about public involvement (in all types of development and facility siting) that greatly extend the formal requirements, and the expectations of participants;
- increased public scrutiny of large dam projects;
- increased understanding of the complex tradeoffs between the many social, economic, and environmental impacts of large dams;
- increased understanding of the negative impacts that occur when the public is not provided adequate participation opportunities;
- increased understanding and interest in such projects due to NGO campaigns;
- rapid advances in communications which allow stakeholders to interact;
- increasing conflict over all aspects of water – supply, rights, distribution, cost, uses, and quality;
- increasing difficulties faced by the poor in paying for water; and
- weakening of customary participatory institutions due to reductions of local control and growing reliance on private land ownership.

These trends (and others) mean that public participation programs will have to be more timely, greater in scope, better designed, more diligent in identifying and involving the broadest possible cross-

section of sectors of society. Most importantly, the programs will have to be more meaningful to all those who participate. If they are not, disputes and conflicts over dams will increase dramatically. Disputes and conflicts will almost always occur in the process of watershed planning and power provision, and a much greater use of the ‘best practices’ described below will be needed to manage and resolve them.

In addition to dam-specific trends, there is also global demonstration of peoples’ hopes for democratic decision making. This hope is reflected in democracy movements in countries where dams are being proposed, increasing numbers of national laws requiring public consultation,^{iv} the requests and demands of those negatively affected (e.g. the 1997 “Declaration of Curitiba.” by the International Organisation of People Affected by Dams), and the rules of international funding organizations (e.g. World Bank Operational Directive 4.30 [WB 1990]). To cite one national example, in Thailand the 1997 constitution and several bills in the year 2000 – on public hearings, public information, and environmental protection – have created a strong demand in the country by many groups for the right to be involved in decision-making. In addition, people and groups have increased access to information, improved access to other interest groups, awareness of their rights, and the possibility of opportunities to question/challenge those in power. Finally, there is an increased internationalisation of civil society with greater expectations that companies and governments will be better “global citizens”, and some companies are actively embracing this responsibility (Schmidheiny 1992). Taken together, these trends suggest that large dam projects will need to 1) demonstrate social responsibility, 2) genuinely seek and incorporate public views in decision making, 3) encourage and facilitate greater public involvement, and 4) adhere to emerging international public involvement standards.

One final point is also important. In the literature and our interviews, many expressed deep concern about the effects of development projects – especially resettlement resulting from large dams and the downstream impacts of large dams – on the livelihoods and cultures of the poor and of indigenous peoples (e.g. McCully 1996). These groups are usually vulnerable and often have difficulty meaningfully engaging in processes developed without their input. This emphasis is driven (in part) by the large disparities of power between the poor and wealthy dam building companies/national governments (Roy 1999). The emphasis on these groups is also driven by numerous efforts of international groups on behalf of indigenous peoples.^v

Common Problems with the Process

During the interviews and from the literature, we gathered the following concerns and criticisms about how the public is involved in decisions about dams, many of which could be remedied by greater use of the best practices for public involvement discussed below. There are more, but these represent the repeated themes (expressed in the interviews and literature review we conducted), especially those that cut across the apparent positions of dam proponents and opponents:

- failure to complete public consultation prior to decision;
- not allowing enough time for consultation and studies;
- insufficient resources and commitment by the project proposer or contractor to conduct meaningful public involvement and prepare for conflict resolution;
- involvement begun much too late in the process;
- spectrum of participants is very narrow (only government and business);
- not ensuring that the broadest spectrum of sectors of society is involved pro-actively;
- failure to deal with and resolve appropriately current or previous mistrust between stakeholders and government;
- failure to involve disadvantaged or rural people and women, who may be affected both culturally and linguistically;
- entrenchment of centralized decision making;

- corruption;
- failure to follow even the most simplified legal requirements;
- lack of informed debate and consultation;
- lack of access to and dissemination of good quality information at the local level;
- hidden information, especially on investments;
- lack of full disclosure of EISs, or emphasis mostly on positive aspects;
- failure to involve affected people in the design and implementation of project monitoring; and
- public participation conducted without involving the decision-makers.

These problems with the process are often tied closely to the conflicts discussed below in Section 3.1.

3. Report

3.1 Sources of Conflict

In recent years, researchers and practitioners have paid increasing attention to the controversies, disputes, and violent confrontations around development infrastructure, in particular around large dams (Brion 1991; Groothuis & Miller 1994; Kasperson, *et al.* 1992; Magorian 1982; O'Hare, *et al.* 1983). Several reasons suggested by the literature could explain why large dams are so prone to conflicts. First, they are generally justified by national or regional macro-economic benefits while their physical impacts are locally concentrated, mostly affecting those within the confines of the dammed river valleys, both up-stream and down. The mismatch of benefits and costs at these different scales creates a structural challenge to dialogue and, thus, translates easily into confrontational attitudes. Second, large dams affect critical, life sustaining needs, such as the quality and allocation of freshwater, an increasingly scarce and coveted resource. Third, the lack of sufficient solutions to the social and environmental costs of large facilities in the eyes of those affected has resulted in increased social mobilisation around these emerging issues (see section 3.5, Institution Building).

A conflict is defined as ‘the interaction of interdependent people who perceive incompatible goals and interference from each other in achieving these goals.’ (Hocker & Wilmot 1995: 21) Conflict resolution scholars and practitioners distinguish between conflicts, which involve many parties and extend over time, and disputes, which involve specific and bounded issues that parties pursue. Disputes may be incidents in a larger conflict.

Scholars have argued for many years that conflicts and disputes can be useful (Coser 1956; Simmel 1955; Deutsch 1973). Societies, organizations, and nation states would become stagnant if there were no conflict. Conflict can promote interest and curiosity about an issue, provides a vehicle for learning about problems, and improve decisions and their implementation. Conflict provides the creative impetus to continually change relationships and social structures. By suppressing conflict, organizations and societies eliminate valuable response mechanisms. Encouraging the open expression of difference allows social structures to eliminate causes of alienation, disassociation and antagonism and to readjust structures to meet social norms or to develop new unifying norms (Coser 1956). As noted above, such norms concerning public involvement have evolved considerably during the past thirty years.^{vi}

However, much conflict becomes destructive because of the ineffective and inefficient ways it is handled. Healthy societies have a variety of strategies, processes, and fora for managing and resolving disputes.

Two ways of distinguishing the beginnings of conflict can be identified. First, some conflicts originate in differences or competing interests. Interests are “people’s feelings about what is basically desirable” (Raven & Rubin 1983). Interests are an individual’s or group’s articulations of their reasons for acting. Interests are shaped by social, gender, cultural, and historical factors. Examples of dam-related interests are acquiring electricity, creating jobs, making profits, not being flooded, retaining land ownership, changing political power, maintaining watershed forests, and many more.

Second, other conflicts originate in psychocultural dispositions and interpretations that are culturally shared ways of understanding and responding to others’ behaviours (Ross 1993). Individual and group dispositions are learned ways of feeling and knowing. These dispositions reflect the political, social, and cultural messages about our identities and roles, and our place in family and social hierarchies (Roy 1994). They also include “culturally learned and appropriate methods for dealing with others both within and outside one’s community” (Ross 1993). They provide individuals and groups with political and socially acceptable ways to interpret motives, behaviours, and events.^{vii}

These sources of conflict are linked. Different parties do not always see how the issues are connected, and they may not understand the perspectives of others with different cultural values and experiences. The conflicts involve stakeholders from different social systems and institutions: from environmental to social, organisational, technical, cultural, religious, and interpersonal relationships.

Research on conflict indicates that conflict is more likely to occur when:

- people perceive that a decision or event significantly affects them;
- there are questions whether the distribution of risks, benefits, and cost is fair; and
- people perceive that they can take some action, that it is a political decision rather than fate (Coleman 1957).

Conflicts about large dams begin from different values, interests, the history of relationships, social structures, lack of information, and interpretations of data. The way a public participation process is conducted is often a source of conflict per se. An issue experienced worldwide is that stakeholder groups, when the outcomes of the process do not correspond with their desired outcome, attack the public participation process itself. The process was either too long or too short, there was too little time to comment, or too much, the process provided too little or too much confusing information, the public participation practitioners were biased, the practitioners cannot claim to be independent because they are being paid for by the proponent, and so on. It is for these reasons that it is important to build checks and balances into the public participation process, and to assure that stakeholders have reasonable control over the structure and issues of the process.

Successful conflict resolution must address the sources of the conflict. Each party must also be able to thoughtfully analyse the importance of the issues, the interests of all the parties, and the alternatives that the parties have to negotiation (especially their own). Different conflict resolution processes will address interests and psychocultural differences more or less adequately. It is also important to fit the conflict resolution strategy to the history of the parties' relationships, and the existing social, cultural, and institutional context.

Major Conflicts from Large Dams

The major areas of conflict and dispute concerning large dams often stem from the common problems with the development process listed above (section 2.2). When these problems are basically poor communications, the disputes that occur may be relatively easily resolved, but the relationships between the stakeholder can remain strained or seriously damaged. When the problems are related to inadequate participation activities, then improvements can be made that often help keep parties from deep conflict. However, when the problems are the result of intentional efforts to exclude stakeholders from processes, to hide information, direct lying, or failure to implement promises, the resulting conflicts can spread to include issues not directly related to river valley management (e.g. legitimacy of a government) or escalate into situations that are very hard to resolve in the short or medium term (e.g. demonstrations, civil disobedience, or violence). For example, the Pak Moon Dam in Northeast Thailand has been the focus of long-term conflict which has involved several issues including decreases in fish populations and the destruction of a natural tourist attraction – rapids in the river – which developers originally assured villagers would not be destroyed, but which were nevertheless eliminated later in the process.

From the literature we reviewed and interviews we conducted, there are a number of specific major disputes and conflicts that appeared:

- ♦ Differences (sometimes profound) over the meaning of and purposes for “development” (This is a significant focus of dispute in many large dam projects and was raised in a many of our interviews, presentations to the WCD, and written accounts of individual dams);

- ◆ Conflict between the (usually) governmental representatives of those who will get benefits from the dam (electricity, jobs, flood protection, water, etc.) and those who will be affected by the costs (This is a significant feature of most facility siting – specifically large dams – circumstances, since they are not the same groups and the costs can be significant for those they affect);
- ◆ Disagreements over the legitimacy of resettled villagers having to sacrifice their land and occupations for the benefit of others who “require” electricity or irrigation;
- ◆ Local communities divided over issues such as whether to be involved with the projects or not, who would get benefits from the project, those highly dependant on land which would be flooded versus those who would be less directly affected (For example, Mexico’s resettlement planning for its Aguamilpa and Zimapan dams lagged far behind construction and was at first developed with almost no input from the people affected. Influenced by the company’s need for a World Bank loan, revised approaches involved the resettlers directly. One native group (the Zimapan) was so antagonistic to the first “boiler plate” resettlement plans excepted by the tribal leadership, that a new leaders were selected and a negotiating group was formed that developed protocols for all negotiations with the company; all arrangements had to be signed by the committee to be binding on the tribe.);
- ◆ Specifics of resettlement processes and projects, since they are known to be often unsuccessful (During the resettlement for the Akosombo dam in Ghana, there were instances of significant conflict between incoming settlers and the hosts among whom they were settled. Since various arrangements had been made to protect the incoming people, the hosts became jealous.)
- ◆ Differences over valuations of property for compensation (This is a very common issue in many facility siting disputes; see O’Hare *et al.* 1983.);
- ◆ Stakeholders who stand to benefit resent the length of the processes (e.g. impact assessment, public participation, resettlement studies, etc.; at public meetings for the Lao PDR’s Nam Theun II dam, leaders of local villages – which were to be resettled but which were also to received significant assistance they regarded as benefits (health clinic, school, etc.) – asked national officials and the dam consortium executives why the process was taking so long);
- ◆ Project sponsors, national governments, and financial institutions cannot agree on terms for the project (including financing, resettlement and environmental planning, project design, and other issues);
- ◆ Disagreements over water policies and current purposes and uses for dams (given that original purpose has disappeared or changed, or was fraudulent or never understood) (As Romania begins to review the history of its industrial development, dams such as the Ixvorul Muntelui Bicaz and Portile de Fier I are now being questioned by some groups and academics. There was almost no public involvement in the original decision making, and even now the decision-making process is still very centralized. In Slovakia, national energy and water management policies are now being implemented that were designed in the 1980s; people are questioning the real purpose of the dams being proposed.); and
- ◆ Resentment and questions (from either local or national governments or from NGOs) about the proper role of financial institutions (e.g. World Bank) in national or regional projects. (In 1996, Sobrevivencia, a Paraguayan non-governmental organisation, filed a claim with the World Bank Inspection Panel concerning the Yacyretá dam on the border between Paraguay and Argentina. The inspection panel process allows directly affected peoples who have been harmed by a failure of the Bank to follow their own policies or procedures to request an independent review of a project. In its claim to the Inspection Panel, Sobrevivencia detailed the complaints, abuses, and policy violations that occurred in the construction of the dam).

Large Dams As a Type of Facility Siting

A large dam is one of a group of industrial, commercial, and governmental facilities that are increasingly contentious and difficult to site and build (others include hazardous waste decontamination facilities, solid waste landfills, hospitals, conservation areas, shopping complexes,

highways, parking areas, and many more). Put very simply, if one of these types of facilities may be built in a particular place, and even if the residents of that place generally believe that the benefits of the facility are needed or valuable for the wider community as a whole, they are often very concerned that a disproportionate share of the problems and risks will be borne by them alone.

For the past 20 years, facility siting has been a major focus of work by scholars and practitioners in parallel with work on public participation, conflict resolution, and impact assessment. By combining ideas from these four fields, Susskind (1990) developed the following Credo for guiding facility siting processes:

- ◆ Seek consensus through a broad-based, participatory process.
- ◆ Work to develop trust.
- ◆ Get agreement that the status quo is unacceptable.
- ◆ Choose the facility design that best addresses the [agreed upon] problem.
- ◆ Seek acceptable sites through a volunteer process.
- ◆ Consider competitive siting process.
- ◆ Work for geographic fairness.
- ◆ Keep multiple options on the table at all times.
- ◆ Guarantee that stringent safety standards will be met.
- ◆ Fully compensate all negative impacts of a facility.
- ◆ Make the host community better off.
- ◆ Use contingent agreements.

These elements have been found to increase the likelihood that facility siting efforts of all kinds: 1) are conducted in a manner that is fair, 2) use available time and other resources efficiently, 3) yield decisions that are technically wise, and 4) are socially, financially, and politically feasible. The details of sections 3.7 and 3.8 describe the public participation and conflict resolution principles, approaches, steps, and tools that can help carry out the elements of the Credo.

For the most part large dam conflicts are similar to those found attending the siting of other large-scale industrial projects. One important exception is the set of issues surrounding resettlement: the geographic scale is usually much larger than for other projects, many more people may have to be relocated from their homes, and whole communities are often involved. Another exception is the availability of sites which are much more geographically constrained and specific than for most other types of industrial siting (and which therefore limit the Credo suggestions on using volunteer or competitive processes and geographic fairness for site selection).

3.2 Involvement and Conflict Dynamics (Power Relationships)

When individual or group interests and psychocultural dispositions are thwarted or unacknowledged, people look for ways to assert or achieve them. The types of issues and the relationships of the parties affect how the individual or group chooses to pursue their interests or values. Their options for satisfying their interests and values are also shaped by social and cultural factors, and the institutions and contexts in which they arise. Given the diversity of individuals, groups, and institutions involved in dam conflicts it is important to briefly address how social and cultural factors influence public involvement and conflict dynamics.

Gender, ethnicity, class, land tenure, religion are social institutions that influence the options stakeholders have for pursuing their interests and values in dam conflicts. Most societies, even those

committed to equal opportunities, are stratified. Women, religious and ethnic minorities, poor economic classes, and indigenous peoples face different social opportunities. This may affect conflict dynamics in several ways.

First, groups who have traditionally had little voice in society may be alienated, apathetic, and passive. Since they have had little experience with being heard or taken into account, when confronted with issues that affect their lives, they do not participate or voice their interests because they have no experience or expectation that it will be meaningful (Gaventa 1980). During resettlement efforts for Mexico's Aguamilpa and Zimapan hydroelectric projects, one of the native groups affected (the Huichol) had essentially no experience of group meetings with outsiders, and the first attempts to organise such meetings was a failure. Participation improved when the resettlement field teams relied on house-to-house visits to discuss the process.

Second, groups who have little voice and input into decisions may quickly escalate the tactics they use to seek a hearing or involvement. Since they have little experience of being heard or taken account of with traditional non-violent mechanisms, they may resort to extreme demands and/or violent tactics faster than would a group whose experience involves being included, heard, and taken into account.

Third, individuals and groups with little voice or input may be led (or influenced) by individuals and groups from outside their group. Since they have had little experience with normal democratic participation and conflict handling, they may lack internal spokespersons or leaders.

Different social institutions also affect involvement and conflict dynamics. Law and social regulation vary considerably across societies and countries. These variations will affect the availability of different ways of participating and handling conflict. Family and community norms, education, government regulations, and bureaucratic organisation all will affect the tactics and processes groups use to pursue their interests. Individuals and groups in conflict usually have disparate access to resources and different capacities. Resources may include money, time, and information; capacities may be organisational, linguistic, cultural, and informational. These differences in legal or cultural rights, abilities and capacities to voice, and resources to sustain activities affect involvement and conflict dynamics.

The above discussion indicates why the involvement of local and regional groups in designing public participation and dispute resolution processes is so important. Even people from the same country, but who work for the national government or a large company may not be able to fully appreciate and incorporate into the process the best approaches for involving local people.

3.3 Decision-Making

Public policy decisions, such as how to manage watersheds, how to control cyclical floods, and how to produce electrical power, progress through a typical course of decision-making steps. The basic elements of the policy process can be grouped by their relationship to what a government does to act on public problems (Pops & Stephenson 1987). For large dams or their alternatives, there are nine basic steps, which do not have hard beginnings and endings, but tend to intergrade one to the next and may be revisited during later stages of the process (e.g. reconsidering alternatives, based on the findings during site selection or project design) (See Figure 1 in Annex D):

- Problem identification and framing (ideally as part of integrated river basin planning)
- Alternatives proposal (with multi-attribute analysis and impact assessment)
- Single alternative selection and site selection
- Project design

- Impact mitigation (particularly displacement and resettlement processes)
- Construction
- Operations monitoring and evaluation
- Relicensing (and associated construction)
- Decommissioning

Although other WCD thematic reviews cover decision-making processes, a brief focus on decision making allows us to illustrate the types of decision-making models that promote and restrict public participation and dispute resolution processes. Understanding the process of decision-making will help stakeholders plan for (or possibly insist on) better public participation and conflict resolution activities throughout the process. More importantly, it will make sure that the information and ideas from the activities actually affect the decisions being made. Stakeholders should be involved at each stage of the decision-making process. Disputes can occur at each stage of the process; understanding this will prevent all participants from being caught off guard and should yield more meaningful and useful processes. Specific tools for public involvement and dispute resolution are described in Sections 3.7 and 3.8 for the steps outlined above.

Access to these decision making steps is very constrained (or non-existent) in authoritarian, corrupt, or highly centralized settings. Although change is underway, most of political economic decision making processes for the dams built in eastern and central Europe in the 1960s, 70s, and 80s (e.g. Kama-Volga in Tatarstan and Yumaguzinskay in Bashkortostan (both in Russia), Slatinka in Slovakia, and the Portile de Fier I in Romania) had little or no genuine public participation. Eastern Europe is still saddled with overdimensioned facilities built during this period with authority-based decision-making processes. Besides the central government, other stakeholders and the general public could usually not (and often still cannot) express their concerns or represent their interests in legal ways.

Problem Identification and Framing

In this early first stage, a wide range of stakeholders with different interests and viewpoints must be involved at the very beginning. Concerns and issues manifest themselves specifically at early stages in legitimately different perceptions about the issues and problems that need to be addressed for the watershed or river valley as a whole. Incomplete or ill-defined problems can create enormous difficulties in later steps. A solution to a problem that does not exist or that does not address the whole problem can lead to unnecessary disputes and conflict. The way a problem is identified and framed often includes implicit cultural, gender, disciplinary, political, and economic assumptions. When these assumptions are not fully revealed, understood, and debated by all parties, disputes and conflict can result.

Conducting a variety of multi-stakeholder dialogue processes about what problems exist and which ones need to be solved allows decision-makers to incorporate more knowledge and perspectives into problem definition.^{viii} These processes can also afford other stakeholders opportunities to genuinely affect the early decisions that can dictate whether a large dam – or some alternative – is the solution of the needs faced by a river valley, region, or country. Too often, however, important stakeholders are not included in early negotiations or even discussions about the future of an area. For example, when the premiers of Newfoundland and Quebec met to announce an agreement to build a new hydroelectric venture in central Labrador, they were met by indigenous Innu people from all over the region who were “bitterly disappointed that they had been excluded from pre-announcement talks,” and who protested so vigorously that the premiers were forced to make their announcement at another site. More importantly, the announcement included “belated assurances to the Innu that they would be consulted as partners” from then on (Clugston 1998, pp 58, 60). We want to emphasize that the most fundamental mistake to avoid is that of making decisions (at any of the stages) before the problems and solution options are fully developed and explored in a public process.

Public participation programs should start with information transfer with regard to water resource development, and the financial and technical considerations of a large dam (or some alternative) in (what is now called) integrated water resources planning. Why are large dams necessary? Is it possible to achieve the same water resource development objectives in the absence of a large dam? Will one or a series of smaller dams be sufficient? Could an alternative have fewer impacts? These are complex, technical issues. Stakeholders must share a common understanding of these considerations, and a mechanism must be in place that will give stakeholders some influence on the decisions being made before the public participation process moves ahead.

Alternatives Proposal, Single Alternative Selection, Site Selection

The stage when alternatives are being considered or a specific project proposed – at the regional planning stage, or for a more specific site-based project – is the point in the process when a full public participation process is especially needed and valuable. Such processes are needed to inform the general public and the possible affected stakeholders as to what is being considered. They are particularly valuable to provide information, ideas, and concerns to the multi-attribute analysis for reviewing feasibility and the attending environmental, social, and economic impact assessments. In many cases the outcomes of these assessments depend largely on how the problems in the assessments are framed, which alternatives are considered which research methods are used, and which assumptions about the future are accepted.

Once a solution is proposed and chosen (especially when building a large dam), new stakeholders will become involved and the context of the issues will change from a broad to a more focused context. The adding of new people may mean that the process must revisit discussions about initial problem definition. This may pose frustrations for project planners. However, patience in being open to new perspectives pays rewards in gaining the understanding and engagement of new participants in discussions about solutions. This is particularly important because solutions for these issues will have significant social and environmental impacts. The public should be honestly and completely informed about any possible environmental or social impacts of the proposed solutions. The diverse issues, concerns about impacts, and suggestions for enhanced benefits raised by the public should be used to assist the development of the terms of reference for the specialist studies as part of the EIA/SIA. Failure to involve stakeholders in study design, particularly in the scoping of questions for impact assessment, is a major reason why so many conflicts arise even though an apparently good-practice public participation process took place – questions and issues of concern to members of the public were not considered (or reconsidered as new stakeholders become involved) in the evaluations and decisions.

Project Design and Impact Mitigation

Through collaborative problem solving processes, the many different stakeholders can also work together to suggest modifications to proposed solutions that reduce impacts and incorporate more of their needs and values. Conflicts will also arise at this point, as the impacts of the solutions are understood. Proactive conflict resolution processes at this point can help stakeholders' values and interests to be taken into consideration and addressed. Dialogue specifically about the criteria for a sound project can provide opportunities for stakeholders to understand one another's needs and concerns more completely, and can provide a common basis for discussion throughout the rest of the construction, and post-construction steps in the cycle. This may even prevent some disputes and conflicts from escalating and becoming intractable. In situations where public involvement and conflict resolution processes are initiated after extensive planning has already been done, or opposition has already emerged, the process should acknowledge any mistrust or barriers that already have taken root and start by allowing people to express previous hardships, anger, and other emotions.

Construction

As decision-makers choose the facility site, undertake construction, mitigate, and compensate social and environmental impacts, there are additional opportunities to involve the public and resolve

conflicts. Explicitly articulating as many assumptions as possible regarding the solutions chosen, and creating opportunities for dialogue if those assumptions change can also create a framework that helps avoid or minimise conflicts throughout the process.

Operations Monitoring and Evaluation

Even the most well planned facility will have unexpected delays and problems. As they happen, these need to be communicated to the public. Availability of funding may change, affecting previously proposed mitigation measures. New conflicts will arise over consequences, as the impact of the site becomes manifest. In particular, stakeholders who are directly experiencing significant impacts, such as relocation, need to be involved in determining and then reviewing compensation, mitigation and relocation. As the facility begins operation and becomes routine, there will be more opportunities to involve the public in problem solving and conflict resolution.

Relicensing (and Associated Construction)

Many stakeholders will have changed during the life of the project's first license and additional associated development has likely taken place (such as new towns, roads, affiliated flood control structures, etc. Individuals may have moved, interests may have shifted, and power, political and personal relationships may be very different than before the project. Indeed, a whole generation may have gone by, and the current generation will have direct experience with the costs and benefits of the project, its management successes and failures. Relicensing is an opportunity to assess the successes and limitations of a project's mitigation planning and implementation, over sight of operations, new issues, and the affects of unforeseen events. It is also a time to re-evaluate the need for the dam and whether it is serving its original purposes. Since decommissioning is a possible alternative, relicensing procedures will require many of the same steps and will need much the same public involvement and conflict resolution structures as did the original project (albeit usually in a much reduced time-frame).

Decommissioning

As with relicensing, decommissioning will certainly require much the same process as did the original dam (or an alternative project). There have been very few decommissionings and dam removal to date, but it is clear that such efforts will be major construction projects in their own right, with significant social, environmental, and economic impacts. The stakeholders, their social and economic circumstances, and their interests may be very different, however, than during the early stages of the project. As an example of possible difficulties to come, the Teton dam in eastern Idaho, USA failed in the 1970s and since then, those who were benefiting from it have been urging government agencies to rebuild the dam, while others want to see the site left alone.

Appropriate participants in and processes for decisions about watershed planning, irrigation and energy production, dam facility siting, and construction are not necessarily obvious or transparent. The decisions often involve many actors from the international arena, many levels of government, numerous business sectors, and a wide geographic area. Although we recognise this complexity, as well as the complexity that develops from different social, political and cultural contexts, this overview of decision-making stages identifies points at which stakeholders can be involved and conflicts resolved.^{ix}

3.4 Stakeholders (or Parties)

How the distribution of benefits and costs from dam projects is understood and, as a result, how well these issues are included and addressed within the decision making process is directly related to who is perceived as a legitimate stakeholder, who is not, and why it is sometimes hard to tell. In concept, the stakeholders who most need to be involved in public participation processes and especially in negotiations over disputed issues are these: those directly affected by the decision (especially

negatively), those proposing to build and operate the project, those able to implement or block the decision, and those who are legally or administratively required to participate. This potentially can be a large group. For dispute resolution processes, this set of “core” stakeholders is necessary to ensure that the negotiations that take place are effective, i.e. that they result in implementable agreements. However, for public involvement processes even a long list of “core” stakeholder may be too restrictive. In some cases, interest should be created among a wide range of potential participants to ensure that diversity of opinion is generated. Additional stakeholders who also should be involved may include those indirectly affected, other interested sectors of society (e.g. construction associations, energy purchasers), others who may contribute local knowledge, or those who want to be involved (e.g. groups concerned about or highly knowledgeable about the issues – environmentalists or advocates for farmers).

Most stakeholders in large dam development proceedings are self-selected. They either have proposed the project, stand to benefit directly, stand to be affected negatively, work for non-governmental organizations whose missions indicate that they should be involved in the process, or work for governmental agencies that must be involved in the process. But, in some cases, those agencies and companies trying to build dams express concern (or even objection) that some of the groups participating in public participation programs are not “legitimate”, by which they seem to mean that these groups are not from the set of “core” stakeholders listed above. This is mistaken. Excluding groups who are motivated by their own concerns or interests to participate in the process only increases their efforts to mobilise opposition, since not only do their interests remain unmet but their sense of fairness also is violated. Also, integrative solutions or creative ideas they might bring to the process will not be included.

In addition, groups are left out because they do not know they are stakeholders or because they have not been notified about the process. When this occurred in Phase 1A of the Lesotho Highlands Water it was to the detriment of those left out and to the quality of the decision making. In other cases, stakeholders know about the process but do not prioritise their involvement in the process as highly as other activities and events that compete for their time and attention. Still other stakeholders may not participate in the process because as individuals they face insurmountable obstacles when they are not represented by an organized group. Poor, disenfranchised, and/or indigenous people (particularly women, in some cases) also face the added problem of processes to which they have very limited access – because the process is too far away, expensive to attend, or technically difficult to understand. The process is also likely to be conducted in cultural setting very foreign to their own. On the other hand, when an effort is made to both visit local villages, and bring representatives to meetings in larger cities the ability of local groups to represent themselves is greatly improved. According to some observers and the literature, efforts to bring the public involvement process directly to local villages (and even individual homes) which were made for the Nam Theun II dam in Lao PDR, Phase 1B of the Lesotho Highlands Water Project, and the Manantali Dam in Senegal greatly improved the access of local people affected by the project and the quality of the decisions made.

For some stakeholders there can be even deeper difficulties that prevent their involvement in even the most carefully designed process. Individuals and groups may fear political repercussions if they participate, or there may be historical disadvantages or disempowerment that prevent their participation (commonly described for non-national stakeholders in eastern European countries, because the history and current reality is that decisions will be made without taking into account their views). Economic class, culture and sub-culture, caste, religion, race, and gender may all affect whether specific people participate and whether they can be adequately represented by groups outside their own (i.e. the government agencies, advocate groups, or even their peers). Extensive efforts must be made by process designers to probe for, understand, and try to solve these difficulties.

Launching a Project from a “Need” or Problem Identified and Framed

Dam projects usually are initiated as the result of interactions between government agencies, financing entities, and construction companies and in most cases, the final decision is a decree by government. Thus, these entities can be considered to be a constant for the process (McCully 1996, UN 1988). The agencies may be assigned the responsibility for obtaining a societal identified commodity (e.g. energy), solving a problem (e.g. flood control), or stimulating the economy (e.g. by providing jobs). Financing entities are either looking for investment opportunities or they have a mandate to assist with some aspect of a nation’s economy (e.g. poverty reduction by the World Bank). Construction companies are in the business of making profits by building what the other entities decide.

For some observers and participants in the creation of large dams, the scale and national importance of these projects means that governments are the decision-makers. Whether this is good is a significant point of departure for many different observers and participants. Whether someone sees this as good in any given country depends on their view of the quality of governance, the extent of democracy, and their position in economic and political life. For some, governments have become primarily vehicles for global companies that need to build large-scale infrastructure. Others see governments as increasingly reduced in their capacity to build dams (or other large projects) to provide benefits to their citizens by the increasing effectiveness of organized opposition. For their part, the organized opposition sees hundreds of dams under construction and limited public involvement as evidence that they have little genuine influence.

Small countries in particular have a difficult time participating in the large dam building process. They can be overwhelmed by the scale of the project, the knowledge and expertise of the companies (and some NGOs) involved, and the complexity of the technologies. Often if a participatory process is to be conducted it needs to happen in a relatively short amount of time, and on behalf of stakeholders who may not have access to modern technologies for decision making (e.g. email, computers, etc.), and requiring scarce resources. Smaller countries must often struggle to be respected and not taken advantage of by their neighbours or large financial interests. Sometimes the national governments of small states are not even consulted before and during the project design steps.

Representation

Proponents of dams raise different concerns about representation than those raised by stakeholders who are negatively affected by them. For government agencies and others involved in developing the public participation programs required of them, the issue is usually framed in terms of who is a “legitimate” representative of the groups of stakeholders and other interested parties who are not formally organized. Some express the concern that “outside” groups, especially, are trying to speak for local interests and issues, and that this is not regarded as “legitimate.” The issues and impacts are seen as being mischaracterised and over-stated, or (sometimes) the outside groups are seen as “instigators,” using the local groups to raise or advance larger socio-political-economic agendas.

Others see the situation very differently. To them, the internationalisation of large dams (as an issue and as a fact, via financing) means environmental or trade groups who are knowledgeable and able to participate on behalf of local and regional interests should step in. They believe they should help to provide representation especially when a local group does not have its own expertise or resources. To these groups, their knowledge and access to the decision-makers is somewhat of a counter-balance to the even greater access by dam builders, thus conferring its own legitimacy. For some of these groups, there is the belief that they have the “right” or even the moral obligation to engage in public participation processes “on the side” of local interests, in order to offset the large power discrepancies between local stakeholders and dam proponents.

For local groups, governments, and residents, support by other “outside” agencies and NGOs can mean the difference between participating in the process or not. On the other hand, sometimes local stakeholder groups express concerns about the adequacy of the representation that is conducted at

public forums on their behalf. For example, they may complain that local governments are too often beholden to large construction projects, and later to the administrative entity charged with managing the dam; they may also say that outside NGOs do not adequately understand their issues and concerns (a view that some NGOs acknowledge). Depending on the type and quality of support or assistance they get from NGOs, local groups may also feel that they are being misrepresented by other groups who seek to help them – local governments, dam promoters, and NGOs alike. In one view, the problem with outside stakeholders is that they “have an all too common tendency to insist on being the ones telling those holding the stakes [of local and directly negative effects] where the stakes should be placed: and they are rarely obliged to live with the fences created once the stakes have been driven in.” (Footnote iv from Hildyard, *et al.* no date.) A different view holds that since large dams are “global” (in the sense that the companies who build them and the organizations that finance them are “global”), then “global” stakeholders such as international NGOs are legitimate.

Since the number of directly affected people can be extremely large – and augmented by those indirectly affected and by those interested – those who design public participation programs or assist with negotiations face a daunting task in ensuring that most (if not all) of the relevant stakeholders are well represented.

Non-formal and Underrepresented Groups

Perhaps the most pervasive theme of our literature review and interviews was about the destructive aspects of dam building on indigenous and other land-dependent peoples. As Richard Falk described it: “The state system is also often at odds internally and trans-nationally with deeply rooted cultural ecosystems, including with the wellbeing and life world of indigenous peoples. It is not only protecting such peoples from development that can pose threats to their cultural and even physical survival. It is also a matter of learning from and appreciating indigenous peoples, realising that they provide modern societies with an invaluable body of wisdom about how to carry on a project of ‘sustainable development’ over a period of centuries.” (Falk 1999: 5)

Several sources also emphasize that many changes brought by dams (both good and bad) last a long time and affect future generations. Other groups often affected but insufficiently included are women, downstream residents, those living far from the dam but close to the roads leading to the site, and those who get access to the generated electricity or water (or do not). In a particularly serious example of a reason to include downstream stakeholders in operations planning, from the beginning of its operations the Manantali Dam only served to capture water to provide for irrigation; not until 1994 did it begin releasing water for downstream use. The four years during which no water was released brought tremendous hardship for downstream communities.

People negatively affected by dams most likely do not see themselves as stakeholders in a problem solving process. Rather, as the “Declaration of Curitiba” indicates, they see themselves as victims of a system that powerful, unrelenting, and multifaceted. They also see themselves as largely excluded from decision-making. What they seek is “genuine democracy which includes public participation and transparency in the development and implementation of energy and waster policies. They also seek decentralisation of political power and the empowerment of local communities,” including the right to approve or disapprove any dam (Curitiba 1997).^x

Relationships, Interdependence, and Trust

A significant and obvious theme that emerges from any reading of the literature and conversations with those involved in dam processes is that people negatively affected by dams and some (if not many) of their NGO supporters have very little trust in large dam promoters, developers, and related government agencies. The issues about this lack of trust are not generally about the quality of information provided. Instead the major issues are seen as the withholding of information, broken promises, minimal attempts to involve the public, and attempts to get around the requirements or down play the negative impacts.

Despite the overall lack of trust, there are also examples of local people working well with dam projects, on the dam itself, and on specific issues such as road construction, resettlement, and others. For the Salto Grande dam in Uruguay, for example, the local communities saw it as a real opportunity for development, and therefore welcomed opportunities to engage in participation efforts. In another case, Phase 1B of the Lesotho Highlands Water Project was seen (by at least some sectors of stakeholders) as a major improvement over Phase 1A. The Lesotho Highlands Development Authority implemented a significantly more extensive public involvement program during the planning for Phase 1B, assigned staff and financial resources to this far in excess of what was done for Phase 1A. Authority staff report that these measures have led to a greater understanding and acceptance of Phase 1B of the project. Nevertheless, there are still concerns from some stakeholders that the process was not transparent and that more should have been done. This illustrates again the complexity of these processes, particularly those where previous actions have led to mistrust.

It is important to note, however, that those who are either building dams or who are conducting public participation programs are almost always professional people who take great committed pride in their work. In many cases, they are usually in favour of the dam on which they are working.^{xi} They often do not see why the perceived benefits of the project should be “held hostage” to the complaints of either a few local residents, or to “outside” participants. They see the dam as providing benefits and their preferred approach is to determine whether those benefits will outweigh the costs. Occasionally, even some people who must endure resettlement want the benefits and wonder why outside organizations are demanding that the extensive evaluation and participation requirements be met (e.g. before a loan can be given).

Transparency

An additional important and common theme found in the literature and heard in interviews is the concern of many (both those in favour of and those opposed to the dam) groups for a transparent process.^{xii} The withholding of information is intrinsically detrimental to good decision making because it deprives all parties of the information they need for meaningful debate of the issues. In addition, critics of a dam may seek to have access to information that they believe will demonstrate the problems they see with the proposed facility. For their part, the proponents often believe that with sufficient and accurate information the general public (and even the critics perhaps) will help arrive at a good decision and will have confidence in the decision once made. In both cases, all parties believe that the information will demonstrate that they are correct. However, they also believe this cannot be shown unless the process is transparent. Since, in many cases and countries, the EIA process is the focal point of public involvement processes, “EIA should be an interactive, participatory process, including the perception of the environment from local communities, especially affected peoples . . . Decisions should be made through meaningful discussion and information sharing” (Dorcey 1997: 123). Greater use and strengthening of existing EIA processes would contribute positively to the objective of increased transparency.^{xiii}

3.5 Institution Building

A major concern of both this thematic review and of the associated reviews on resettlement and ethnic minorities is institutional capacity building as an answer (or response) to problems associated with resource disparities. As noted above, such resource disparities can often cause conflicts or impede effective involvement in decision-making and conflict resolution. We are concerned here with two different types and scales of institution building situations. The first relates to the needs and capacities of unorganised constituent stakeholders, local government agencies, and non-governmental organizations. The second considers the recent transformations of national governments and international organizations, and the ability of these larger entities (including the WCD itself) to greatly affect the dam-building process by providing education, convening, mediation, and neutral observer services.

Increasing Capacity in Local Groups and People

One of the benefits of contentious development projects is that they sometimes create opportunities, conditions, and incentives for the strengthening (or possibly creation) of local and regional organizations. This strengthening process can have importance to civil society on issues that go beyond the original development that helped create them.

It is clear from our interviews and literature review that the intentional building of a group's organisational capacity to participate in dialogue and negotiation efforts can theoretically be a benefit of dam projects. Equally clearly, some participants connected to the building of dams are also concerned that such efforts are likely to be overly expensive, ineffective, politically destabilising, or tantamount to selling out (depending on the participants' interests and points of view).

How a group sees such capacity building depends a great deal on the source of the training, funding, and other support. Assistance can often come from the dam builder or national government since they have the resources, which could in principle be applauded as the "right thing to do," but fail to achieve its goals. As an example to demonstrate the complications, in the Lesotho Highlands Water Project process, specific training programs for the acquisition of new skills were introduced as a part of the compensation for resettlement. However, the applicability and sustainability of measures to address social needs and poverty alleviation must be considered up front. For example, a training centre where rural people can get free training has been established as part of the Project. However, some observers report that the training provided does not necessarily assist community members to earn an independent livelihood. Training in welding is given, but there may be no electricity in the villages to which they return. A concern has been expressed that very few of those that receive training have been able to use their training to support themselves to become self-sufficient. Therefore, people are returning to maize growing in steep, hilly areas with resultant effects of erosion and environmental degradation. If the assistance comes with conditions attached, or an implicit understanding that the receiving group should "support the dam," then the capacity building assistance is likely to be seen in a less favourable light.

Despite the difficulties, building the capacity of groups of local, poor, or minority stakeholders is a legitimate and potentially valuable step for governments or project managers to include in their public consultation processes. Such intentional institutional strengthening can help ensure that the participation of groups is meaningful to all concerned, and of value to the project. Information known to local residents is likely to be better communicated to the project if these groups are effective as organizations. Groups that are well organized will be better able to take direct part in public involvement activities. Effective groups with significant community support are more likely to be able to represent their communities during negotiations and be accepted as legitimate representatives by other stakeholders.

Unintended capacity building may also occur, simply by groups perceiving the necessity of organizing, demonstrating, participating in dam sponsored events, or deciding to negotiate with other parties over issues. For example, women from villages affected by the Zimapan dam in Mexico were at first too shy to speak at public meetings, but because there were sufficient numbers of sessions and settings that helped them feel comfortable, over time they became more experienced and assertive about specific of the resettlement plans that had not considered their needs. In another example, out of necessity, people displaced by the Bisalpur Dam in Rajasthan, India organized to secure implementation of resettlement plans and compensation that were many years behind the promised schedule. Over time the organization's enhanced capacities allowed it to assist people affected by other aspects of the project – those living next to the canal, those downstream from the dam, and those whose grazing land was converted to resettlement farms (Hemadri 1998).

Groups may start as relatively unorganised, less knowledgeable, lacking clear goals and objectives, understaffed, and/or under-funded. If so, they may seek assistance from (especially) non-governmental organizations more experienced than they, local governments, or even sympathetic national

government programs (perhaps not related to dam building). This assistance (or even partnerships) can help disadvantaged groups increase their organisational effectiveness or political power. This may, in turn, allow them to engage in future decision-making processes more effectively, or to more effectively resist dams or other projects that do not provide them with benefits sufficient to outweigh whatever costs are expected. In a U.S. example, environmental groups that organized in opposition to the Foothills dam in Colorado were sought out for consultation earlier in the process on the next proposed dam in the region (Two Forks).^{xiv}

Government Agency Capacity

There can also be a need to strengthen the local, provincial, or national public institutions responsible for watershed planning, project decision-making, public involvement programming, monitoring of mitigations, and other important functions. Without strong governmental structures, the chances of effective public participation and conflict resolution mechanisms are much reduced. In the context of the Nam Theun 2 dam, funding was provided by several international organizations to provide the Lao PDR environment ministry (STENO) with a full-time advisor and trainer to enhance and expand the agency's capabilities to carry out public involvement programs for a number of national development initiatives. Strong governmental structures will be especially important to smaller countries as they attempt to negotiate effectively with much larger and more powerful neighbours and with global construction and financial organizations.

Transformation at the National and International Scale

For many national and international organizations, pressures from stakeholders, advice from scholars and practitioners, and the evolution of international norms have all resulted in significant improvements in public participation and conflict resolution process over the last two decades. Gone are the days when governments, companies, and financing organizations can make decisions without some measure of public involvement. Essentially all of the interviews and literature that stemmed from a "pro-dam" perspective embraced the general concepts of good public participation practice and process transparency. Even critical NGOs acknowledge the value of – for example – the World Bank public participation and environmental impact assessment rules in opening up processes for greater involvement and opportunities for negotiating outcomes (WB 1991).

3.6 Overview of Best Practices for Public Participation and Conflict Resolution

Earlier sections of this report focused on why administrators and other officials involved with dams and dam siting decisions should involve stakeholders and the public in the decision-making process. This section discusses specific principles, approaches, processes, and success factors in a hierarchical framework that assists the reader to see how they might be best applied to each of the stages of the process outlined in Section 3.3:

- ◆ beginning with national and regional planning for energy and watersheds,
- ◆ during project planning for a large dam or an alternative project,
- ◆ particularly for decisions about displacement, resettlement, and compensation,
- ◆ carried on through construction, operations, monitoring, evaluation, and
- ◆ finally for relicensing and eventual decommissioning.

The idea of "best practices" is still under development in the literature and in practice for utilities, industry, and other facilities – in these fields some uses of the term refer primarily to specific techniques or references to examples achieved by the best agencies, organisations, or companies (sometimes called "benchmarks"). For the fields of public participation and conflict resolution, "best practices" means a hierarchy of principles, approaches, processes, and tools which have proven to be

effective in a variety of circumstances and different types of projects, and which have been useful in the context of recurring difficulties and challenges for a major area of activity like large dams and their alternatives. Generally, best practices for public involvement and conflict resolution can be usefully understood using the following framework:

- ◆ Principles (why the best practices should be used),
- ◆ Approaches (strategies that achieve the Principles)
- ◆ Process Steps (for developing a high quality and meaningful processes)
- ◆ Tools and Skills (for implementing each of the steps) (NOTE: in this document we do not replicate tools and skills detailed by other practitioners, although several ‘tool boxes’ are listed for reference).

This framework is intended to provide the reader with a context for considering needs, objectives, and design issues for public involvement and conflict resolution activities. Best practices do not provide a blueprint, rather a set of principles to guide the process, and approaches and tools to use as needed and desired by the participants. Public involvement and conflict resolution processes must be sufficiently flexible to accommodate local needs, and appropriate to local circumstances. The appropriate procedures are likely to differ from area to area and from project to project. The challenge is to understand the local circumstances and to design a process that will enrich decision-making.

3.7 Best Practices for Public Participation

Public participation can be seen by various practitioners and participants very differently. Consider these three different definitions (as quoted in UNDP 1998):

With regard to rural development . . . participation includes people’s involvement in decision-making processes, in implementing programmes, their sharing in the benefits of development programmes and their involvement in efforts to evaluate such programmes.

Participation can be seen as a process of empowerment of the deprived and the excluded. This view is based on the recognition of differences in political and economic power among different social groups and classes. Participation in this sense necessitates the creation of organisations of the poor, which are democratic, independent, and self-reliant!

Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources that affect them.

Even for this set of diverse perspectives, participation is central to development and for all of them and (to varying degrees) involves fundamental engagement in decision making. Unfortunately, public participation is too often viewed by some dam developers, technical specialists, and governmental authorities as an irritating regulatory “add-on.” It is not always accepted that public participation is a process that can benefit everyone through capitalising on the collective wisdom of a range of people representing various perspectives of society. Thus, the foundation of any effective public involvement process is a genuine and positive interest in dialogue by project sponsors and others in decision-making positions, and critics as well.

A discussion of the principles behind public participation is a good way to start for several reasons. Among them is the realisation those public participation processes can be used for a number of reasons, not all of them beneficial. For instance, participation processes may be undertaken only to meet the requirements of donor agencies, without the project proponents actually intending to implement public suggestions. Additionally, participation can be used as a form of ‘propaganda’ wherein project proponents use the educational and informational aspects of participation processes to garner support for their proposals (or even previously made decisions) rather than to elicit ideas and

solutions to problems. Processes based on the principles outlined below (from International Association for Public Participation (IAP2) – a world-wide group dedicated to increasing the use of participation in public decision-making processes) are more likely to be genuine efforts to engage in information and problems solving.

Principles for Involving the Public in Decisions

The two principles on which all public involvement should be based are these:

- 1) the public should have meaningful and continuous voice in decisions that affect their lives, and**
- 2) their participation must influence or have an impact on those decisions.**

These principles are rooted in the reality of governmental legitimacy and the ideals of democratic societies, which hold out the prospect that everyone can have input into the meanings and material conditions that affect their lives. The level of participation enjoyed by the public may vary from case to case, and some forms of consensus-based decision-making may be the best way to proceed. It is imperative that the public's participation has an effect, or else they will come to believe that they are little more than window dressing or lubricant for decisions already made. Such 'non-effectual' participation, delegitimizes the process, sours relations, and makes future interactions even more difficult. Ineffective public participation also means that decision making processes can lose possible enrichments – important data, creative ideas, integrative solutions, and more.

Dam developers and government regulators need and will benefit from information and involvement from all affected stakeholders – especially local people – in order to design wise and sustainable policies and projects. Local people in particular need information from governmental, non-governmental, and other actors in order to make meaningful agricultural, domestic, and local economic and social/cultural plans.

Approaches to High Quality Public Participation

From the central principles above flow four subsidiary approaches on which to design good public participation processes:

- **The public must speak for itself.** Although there are representation mechanisms in many governance structures and many experts believe they know what the public interest is or what the public wants, the public must be involved in articulating for itself and in its own ways what its interests are.
- **The public participation process must seek out and facilitate the involvement of those potentially affected.** It is not enough to have a public participation process, if participation is difficult for diverse people who are unorganised and/or uneducated on technical issues. The process must proactively reach out to discover who might be affected by the decision and involve them in ways that are meaningful to them.
- **The public participation process must address the process needs of all participants.** Participatory processes must be designed to address the important issues of all individuals and groups substantially affected by the decision. People understand issues, communicate, and make decisions in many different ways. Gender, class, race, culture, religion, and education shape these differences. The process must be designed to include issues that may not be important or equally important to all parties. The process must involve the participants in defining and designing how they will participate. This is particularly important when working across cultural or organisational differences. The process must be flexible, inclusive, and designed to elicit information and increase participants' comfort with the process. An example of such a process is the one used between Hydro Quebec and native peoples of Canada. In this process Hydro Quebec and the affected tribes 1) negotiate the specifics of how the public will be involved, 2) directly involve First Nation and local officials, 3) have extensive discussions with the local populations, and 4) codify procedures on land claims.

- **The public participation process must provide participants with the information they need to participate in a meaningful way.** Meaningful public participation requires timely and full access to information about proposals, problems, impacts, and alternatives. Good faith in a participatory process requires those with resources to produce this information to share it with those who do not have such resources.

These four approaches point the way to help decision-makers, process planners, and participants ensure that the public has a meaningful and continuous voice in decisions that affect their lives and how that participation can have an impact on those decisions.

The Participation Steps (A Process Continuum)

High quality public participation processes often go through a number of common steps, although individual projects will differ from place to place in terms of the effort and time required (based on Kaner, *et al.* 1996). Note that many public participation processes will not necessarily lead to consensus building, nor must they to provide genuine public involvement. The process can legitimately be aimed at generating a broad range of issues for technical evaluation, or providing the authorities and project proponents with the views and needs of stakeholders.

In a different view of the public involvement process, Roberts (1999) distinguishes between involvement, consultation, and full participation as the three progressively more inclusive levels of participation. In these three levels, a range of activities takes place, from education and information sharing, to consultation and citizens advisory groups, to the final level of public participation in consensus-based decision-making plans. These levels of participation are included in the steps below.

Step 1. Stakeholder and Process Analysis. Process managers need to determine who the stakeholders are and engage them in discussions about how they can be, should be, and will be involved in the overall participation process. Conducting the assessment itself can be a valuable way to involve stakeholders and educate them about what forms of participation are possible. The analysis is also important for beginning to collect information on which aspects of peoples' lives might be affected, and to identify any groups that might be affected, but who had not been identified previously. Sufficient resources must be found to support the efforts indicated by the assessment step.

Step 2. Education and Awareness Creation (One-way Information Transfer). Stakeholders cannot participate meaningfully in the absence of information. Information transfer, education, and capacity building are ongoing activities that underpin the entire process of public participation and consensus building. Roberts notes that providing information is by itself not a form of public participation, but rather an initialising step that begins to involve people, and should underpin any kind of further involvement, consultation, and process. Included information sharing is the premise that the project's proponents will undertake a continuous effort to provide information to the public throughout the project cycle (see Section 3.3).

Step 3. Consultation and Information Sharing (Gathering Diverse Opinions and Contributions). Hundreds or even thousands of stakeholders may initially participate in one way or another in a watershed management or large dam process. They are likely to raise a wide diversity of perspectives e.g. different concerns, different suggestions, different local expectations and needs, and different priorities. In many cases this step includes mechanisms to integrate these perspectives, supported by technical evaluation.

This consultative and participatory step often requires the development and support of semi-permanent structures within which public representatives (or stakeholder representatives) are consulted at various stages of the project process – such as scoping or reviewing of impact assessments. It is through these organized and supported structures that stakeholders can be afforded genuine interaction with and influence on the decision making for a large project. As part of the Lesotho Highlands Water Project,

“community liaison structures” were set up to look at all community issues emanating from the project implementation, and to co-ordinate with project authorities to ensure minimal disturbance on affected people. Though the Lesotho Highlands Development Authority set up these community-based structures to increase public participation, perception of the community liaison structures is not uniform. Some groups feel that the structures do not improve public outreach and instead distance the Lesotho Highlands Development Authority from direct public input. As important as structure can be, the integration of this step into the decision making process is usually the most challenging in terms of time, effort, costs, energy, and endurance by all concerned.

Advisory groups, blue ribbon commissions, and oversight panels are characterised by several important features. The first is their access to more information than is usually made available by an educational or large-scale public participation process. The second is the nature of their official or semi-official status; while advisory groups often work in collaboration with existing decision-making structures, they usually do not supplant them. Their main power is to advise decision-makers rather than to take a part in the decision-making process itself.

Step 4. Option Creation, (Possible) Convergence in Opinions, and a Decision. Eventually, convergence in opinions and perspectives should start to emerge, and fewer stakeholders may be directly involved, until a decision is reached. Whether this decision developed as a consensus of all the participants or more simply as a formal decision utilising the stakeholders depends on the nature of the process, the willingness of the more powerful stakeholders to share decision-making authority, etc.

Step 5. Consensus-Building for the Long Term (During Project Implementation). Focussed consensus building can start to take place once a semi-permanent group or institution is established, and its members from different sectors of society can work with each other across a table. For Roberts, this highest level of public participation is collaborative decision-making, which involves consensus building procedures (see Section 3.8). In most cases, such collaborative decision-making includes members – either wholly or representative – from all of the stakeholders groups that are either represented by advisory groups or have been targeted by educational campaigns.

The main difference with this level of participation is that the groups involved are a part of the decision-making process rather than just learning from it or advising the decision-makers of their needs and concerns. At the most integrated level, consensus-building processes add the requirement that any decisions made be based on satisfying all of the participants rather than some or most of them. Four forms of consensus building implementation are also possible (quoted from UNDP 1998):

- **Decision Making:** when consensus is acted upon through collective decisions, this marks the initiation of shared responsibilities for outcomes that may result. Negotiations at this stage reflect different degrees of leverage exercised by individuals and groups.
- **Risk-sharing:** this level builds upon the preceding one but expands beyond decisions to encompass the effects of their results. . . accountability is fundamental at this level, specially when those with the greatest leverage may be the ones with the least at risk.
- **Partnership:** this relationship entails exchange among equals (in terms of respect) working towards a mutual goal. . . [and] assumes mutual responsibility and risk sharing.
- **Self-management:** . . . where stakeholders interact in learning processes which optimise the well-being of all concerned.

We want to emphasise that not every stakeholder can or should be involved in every single step and process for decision-making. All of the consensus building steps (collective decision making, risk sharing, partnerships, and self-management) are arrangements worth pursuing, but they also require extensive funding, stamina and commitment by participants, relatively advanced levels of skill, and a genuine willingness by all parties to work co-operatively.

Tools and Skills for Public Participation

There are many tools available to create, implement, or enhance a public participation program. These involve everything from town hall meetings to joint fact-finding commissions, to consensus-based decision-making models. Figure 3 (Annex F) is an abbreviated list of tools for public participation, including options for information sharing, advisory groups, and full participation. Designers of public participation processes will want to refer to existing “tool-kit” documents for specifics about individuals tools and their use.^{xv}

The selection of tools should reflect the goals of the public participation program, as developed in response to the level of desired participation and guided by the principles for meaningful public participation outlined above. Each participatory process is a unique combination of the issue needing resolution, the stakeholders involved, the geographic location, the cultural dimension, and the historical context. This uniqueness argues for a multilevel approach to give the sponsors of the process and the affected stakeholders the flexibility to choose the best tools to achieve the desired level of participation based upon sound principles.

Each dam proposal or project is a unique endeavour, and most will require professional public participation practitioners to design (with the affected stakeholders) the appropriate approach, depending the needs of the stakeholders involved and the stage of the decision cycle (see Section 3.3 and Figure 1 in Annex D).

Measuring Success (with Good Process Elements)

While there is substantial value added to including public participation processes in watershed planning and decision making for a large dam (or an alternative), documenting these values will help all stakeholders improve these processes and plan better for their implementation. A number of evaluation projects have assessed the values, costs and benefits of these processes. Below we list some of the common indicators of project success. Incorporating the good process elements listed below will go a long way to achieving the following attributes:

- The decision-making process allows full and active stakeholder representation.
- The decision-making process is accepted as legitimate by stakeholders.
- The decision-makers and stakeholders understand each other’s concerns.
- The public has trust and confidence in the decision-makers and the facility.
- Key decisions are improved by public participation.
- Key decisions are accepted as legitimate by stakeholders.

These attributes reflect the values of the public participation process. The U.S. Department of Energy’s Office of Environmental Management (and others) have developed performance indicators and evaluation techniques for each of these attributes. Some of the indicators and evaluation techniques require the collection of new data, most of them just require analysis of data that most projects would already have on hand. For example, to assess whether the decision making process involved full and active stakeholders, they recommend identifying all the relevant stakeholders, determining which ones have been involved in any public participation efforts and dividing the latter by the former. Other indicators require surveys, for example to assess whether the decision making process is seen as legitimate, a survey could be conducted asking stakeholders to rank the fairness and legitimacy of the process.

In order to conduct an efficient and useful evaluation of the public participation process, we recommend that the public be involved early in helping to determine what should be counted as success and how to measure it. If the information is available early on to the decision-makers they can improve the program simultaneously.

As noted above, public participation processes can and should be undertaken at all stages of the project cycle for large dams or their alternatives. To help both process designers and the participants determine whether there is appropriate public participation taking place at each stage, we have listed examples of significant criteria and markers (milestones) that could help identify achievement. We must emphasise again however, that each process is going to be singular in its circumstances and its needs, the issues and conflicts, and the people and institutions involved. These examples are given for illustrative purposes only, and not to suggest that they should be used in every case.

Throughout the Entire Project

Good Process Elements:

- ◆ *Extensive communications on all aspects of the project with all stakeholders* (bearing in mind the ability of stakeholders to interpret information).
- ◆ *Widely announced opportunities for comment* (written invitations, media messages, etc.) on all documents.
- ◆ *Stakeholders receive all documents well in advance* of meetings.
- ◆ *Direct involvement in meetings*, site visits, and other events by leadership of all stakeholder groups (especially the project proponent, contractor, and major government agency, so that other stakeholders will have direct access to decision makers).

Problem Identification and Framing (ideally as part of integrated river basin planning)

Good Process Element:

- ◆ *Genuine citizen positions (seats)* on planning commission, advisory panel, research team, or other mechanisms used to provide government agencies with input and decision making about water resources.

Alternatives Proposal (with multi-attribute analysis and impact assessment)

Good Process Elements:

- ◆ Institutions involved work with stakeholders to write *public involvement plan* for entire process.
- ◆ *Public meeting held before final decisions* are made on scoping for impact assessment (to discuss/debate the proposed alternatives to be studied and methods to be used).
- ◆ *Wide distribution of analyses* and assessment Discussion Document for comment.
- ◆ *Series of small multi-sectoral workshops/focus groups* to obtain in-depth comment.
- ◆ *Draft impact assessment indicates how public input was used* (or not) in a “response” document.
- ◆ *Present draft Scoping Report at a public meeting* for stakeholders to verify that all issues of concern and suggestions for enhanced benefits have been considered.
- ◆ Provide *ongoing progress feedback* to stakeholders while technical assessments are under way.
- ◆ *Widely announced public meeting to comment* on draft findings of impact assessment.
- ◆ Widely distributed *comprehensive summary* with full assessment to key stakeholders and in public places.

Alternative and Site Selection

Good Process Elements:

- ◆ *Open house* to visually display materials on proposed location and general design.
- ◆ *Public meeting(s)* (including one in the affected area) to *announce selection*, detail decision rationale and mitigations budgeted, gain additional comments.

Project Design

Good Process Elements:

- ◆ *Stakeholders have dedicated seat on design team* or advisory committee to design team.
- ◆ *Public meeting* to describe design approach and mitigations, and obtain comments.

Impact Mitigation (particularly displacement and resettlement processes)

Good Process Elements:

- ◆ Technical analysis teams and *processes designed to learn* from those being resettled.
- ◆ *Public meeting to detail mitigations*; public meeting to plan resettlement process.
- ◆ *Resettlers' advisory panel* to monitor and report on mitigation implementation, resettlement implementation, and compensation.

Construction

Good Process Elements:

- ◆ *Citizen's advisory panel* to monitor and report on construction, especially in context of mitigations.

Operations Monitoring and Evaluation

Good Process Elements:

- ◆ *Citizen's advisory panel* to monitor and report on operations, especially mitigations (for the Don Pedro hydroelectric project in the U.S., interim reviews were conducted by a stakeholder panel with assistance from a mediator to help parties agree to appropriate instream flow protection for salmon).
- ◆ *Citizen seat on evaluation panel* to make recommendations on operations or mitigations modifications (Mexico's Aquamilpa and Zimapan dams included independent monitors to whom the construction company was required to report on its resettlement processes).

Relicensing and Associated Construction

Good Process Elements:

- ◆ *Consultation with stakeholders before design of the relicensing process* (for the relicensing of two dams on the Clark Fork river in the U.S., the license holder engaged in a facilitated process that first explored the use of a collaborative process, and then developed a process with the parties to reach a "settlement agreement" in which the license holder would submit the new license application consistent with the agreement).
- ◆ *Public meeting to review* and comment on relicensing application.
- ◆ Relicensing and new associated constructions projects are *given the same attention to public involvement as the original dam* (scaled to their size and effects; on the American River in the U.S., a 41-member Task Force on flood control issues work with facilitators to develop principles, priority projects, mitigation plans, site review protocols, and construction approaches in an accelerated process that ended one year sooner than normal agency review. This allowed construction to be completed before a "storm of record" passed safely down the river).

Decommissioning

Good Process Elements:

- ◆ *membership on decommissioning advisory panel*;
- ◆ *public meeting* to review and discuss plan for decommissioning

Benefits of Good Processes

Good public participation processes can assist dam proposals and siting processes in a number of ways.

1. High quality public participation processes increase communication, both in extent as well as in accuracy. While misperceptions and miscommunications may still occur, good public participation processes should allow for rapid clarifications and a lessening of conflict based upon communication errors.
2. As a device for ‘hearing all sides’ public participation has the advantages of lessening acrimony and reducing the chances for escalation of conflicts by providing agreed-upon forums for discontent. As long as participation is real – and not just window dressing – there is a greater chance that those who have ‘lost’ in the decision-making process will see the process as fair and that their views were heard and their interests seriously considered. This will not occur in all cases, and in large scale facility siting circumstances, such as the building and siting of large dams, it may happen that participants who suffer significant costs will still feel angry and (possibly) continue to oppose the decision made.
3. In a ‘wide-open’ public participation process, that is one in which there is no pre-determined outcome, input from various stakeholders can assist in making sure that any decision taken is as fully informed as possible. This is particularly true when consensus-building processes are used, as these require that all parties at the table agree before a decision can be made and implemented.
4. A successful public participation program can increase the level of “buy in” those individual stakeholders share in the project. This is beneficial both in the sense of making the project a success, but also in terms of securing additional funding should the project require it or run into technical difficulties. Caution must also be exercised by all parties concerning “buy-in” as a goal. Some parties may be willing to “live with” an agreement or decision, even though they do not fully agree with it. Overly ambitious efforts to achieve full “buy-in” may have the unintended consequence of alienating these participants, even to the extent of outright opposition. On the other hand, buy-in is possible, as demonstrated by Lesotho Highlands Water Project. At a recent Treaty Review National Dialogue meeting of the Project, all representatives pledged their support for the project, subject to the project meeting certain obligations toward the affected people. However, some observers did not view the Treaty Review process as having extensive involvement by all parties.
5. Public participation is a requirement by large international funders and donors, such as the World Bank. Although the extent to which these requirements are adhered to is highly variable, their use can sometimes make the difference between a successful – and funded – project and a failed one.
6. By involving the public, possible future issues and conflicts can be brought into the open and discussed, thereby increasing information for decision-makers and decreasing the chances of miscommunication.

Both public involvement and conflict resolution activities should be developed and implemented throughout watershed and power planning, decision-making about facility capacity, siting and other choices, and construction, operations and deconstruction of the facility.

3.8 Best Practices for Resolving Conflict

Conflict resolution is more than a set of tools or tactics. A society, organisation, or industrial sector that has healthy conflict resolution processes has a conflict resolution system. A conflict resolution system includes psychological and cultural expectations, rules and regulations, processes, fora and administrative and governance structures. A conflict resolution system has a series of linked steps to respond to current grievances, needs and conditions as well as learning from participants to create new

approaches and values. Not all conflicts can be resolved, but in a healthy system there are comprehensive and coherent ways for people to express differences, resolve disputes and manage conflictual relationships.

There is significant overlap between the principles and tools for conducting public participation and conflict resolution. Extensive use of the methods described above for involving stakeholders will help create a working structure and the trust needed to effectively and fairly resolve disputes as they arise and may reduce sources of potential conflict.

Principles of Conflict Resolution

The following principles of conflict resolution are derived from our interviews and our review of conflict resolution theory, research, and reflective practice. The field of conflict resolution – while new as an academic inquiry – benefits from a rich vein of research from all the social and life sciences. Research from biology, psychology, and social psychology helps us understand the ways that individuals perceive their interests, differences, and trouble and construct those perceptions into grievances. Research from anthropology and sociology illuminate how individual grievances are shaped by the cultural and societal ways of understanding self and group. Social norms and cultural ways shape the terrain upon which individuals formulate grievances, align with others with similar grievances, and pursue their interests. Finally, research from economics, law, labour studies, international relations provides a descriptive and normative framework for understanding social processes for handling difference and conflict.

There are three fundamental principles that should guide conflict resolution efforts:

- 1. Decision-makers should take into account that differences and disputes are normal and inevitable in all human relationships. Conflicts are caused by the differences in the ways that diverse people understand the world, each other, and their interests and goals for themselves and others.**

Conflict resolution takes as a fact that conflict is inevitable but still can be a positive force in all human interactions. People have different interests and values. These differences can often provide the creative impetus for individual, relationship, and social changes. To deal productively with these differences and conflicts, we must develop and use the appropriate individual and group skills, processes, and fora.

- 2. Decision-makers should make use of the many ways that sustainable relationships and societies understand, respond to, and handle these normal and predictable differences.**

Every society has a rich array of mechanisms and fora in which to deal with differences and disputes. It is important for decision-makers to use those mechanisms and work with the culturally appropriate individuals to develop ways of handling disputes about the construction and management of the facility. While conflicts over dams may be handled using the typical societal ways of handling conflicts, it is likely that a new facility will overload the dispute handling systems and create new and unforeseen problems. Proactive attention to designing ways of handling the conflicts will ameliorate some of the intractable and violent conflicts that often occur.

- 3. Better decisions emerge when diverse interests, knowledge, and expertise are brought to bear on framing, analysing, generating, and implementing solutions for complex problems like large dams.**

Disputes, particularly over complex technical, social and environmental issues, can only be solved when all the important information is available. Much of this information comes from project planners and various technical experts. However, significant information about the land, watershed, climate patterns, comes from local people. Since the issues are so complex, it requires the input of many experts scientific, technical, economic, and local in analysing and problem solving.

Approaches to High Quality Conflict Resolution

From the three central principles outlined above flow four subsidiary approaches to good conflict resolution practice:

- **Involve all stakeholders in some way in each stage of problem solving.** Those stakeholders who are directly affected, can block an agreement, or will be involved in implementation must be included in any conflict resolution efforts. Other interested stakeholders can be included who have relevant information, are indirectly affected, or represent groups with secondary interests. The public needs to be kept informed about the progress of resolving the dispute.
- **Focus on the substance of the problem separately from difficulties between the individuals.** Conflicts are best resolved by recognising that both the substance of the issues and the difficulties between individuals require attention. Disputes about values or stemming from personality differences must not be allowed to deflect attention from solving the substance of the problem. Joint fact-finding efforts on scientific and technical issues can help parties develop a common understanding of the “facts” that should make efforts to resolve differences more productive.
- **Completely identify and analyse the problem before trying to solve it; generate evaluation criteria before developing options to resolve the conflict; assess and chose an option with all parties’ input and by using the jointly derived criteria.** The collaborative effort of all parties to define the problem, develop evaluation criteria, and agree on a solution is central to the success of a conflict resolution process. These steps build trust among the parties, establish a “problem solving” mode of interacting, and create a setting in which the parties can share their values, interests, and concerns. When the parties understand each other in this full way, resolution options and final agreements are more likely to emerge that are better for each participant than the option of having no agreement.
- **Pay as much attention to implementing the agreement as to developing the agreement.** Successful conflict resolution depends on what happens after the agreement is signed. Mechanisms must be included as part of the agreement that ensure that issues can be renegotiated if parties do not implement their part of the agreement fully, or if elements of the agreement are affected by unforeseen events. Contingent agreements can also take into account uncertainties that can only be resolved with experience or additional information.

Negotiation

In practice, the dispute resolution approaches and processes described below are often applied to negotiations, which remains the central mode of communication between parties in disputes, and around which the varied procedures are structured. Parties may seek to negotiate under conditions in which they are (quoted from Moore 1986, p.11):

- ♦ interdependent and must rely on the co-operation of one another in order to meet their goals or satisfy their interests;
- ♦ able to influence one another and can undertake or prevent actions that can either harm or reward;
- ♦ pressured by deadlines and time constraints and share an impetus for early settlement;
- ♦ aware that alternative procedures and outcomes to a negotiated settlement do not appear as viable or desirable as [an agreement] they reach themselves;
- ♦ able to identify the critical primary parties and involve them in the problem-solving process;
- ♦ able to identify and agree on the issues in dispute;
- ♦ in a situation in which the interests of the parties are not entirely incompatible; and
- ♦ influenced by external constraints, such as unpredictability of a judicial decision, potentially angry constituencies, high business costs, and other factors encourage them to reach a negotiated settlement.

When many or even some of these conditions are present, parties involved in dam processes may seek to negotiate issues over which they disagree and to use the approaches below in doing so.

Agenda Setting

An agenda is a skeletal outline for a meeting, program, or process that serves as a guide for participants. Agreement on the agenda by all parties symbolizes consent and knowledge of the topics, issues, and events that will be covered. It also sets out an order and allows participants to fully comprehend and agree to the nature, purpose, and goals of the gathering or process. There can be a variety of agenda formats – from town hall meetings to separate house to house visits in rural communities. If an outside facilitator is managing the process, s/he can have a “draft” agenda circulated to perspective attendees and seek input to finalize the agenda prior to the meetings, or pre-meeting planning sessions can also be held with stakeholders to plan the agenda. During the assessment or “conflict analysis” stage, the facilitator or mediator will commonly ask participants what issues should be included on the process agenda (and for individual meetings). An agenda may include agreement on the rules for the process or meetings (ground rules), who will be accepted members of the meeting group, nonmember participation, and outside observers. The agenda setting process frequently helps diverse participants more fully engage in (what may be) an unfamiliar process. It may also allow participants to air initial individual or group concerns at the outset of the process.

Processes for Handling Conflicts

Conflict resolution processes include agenda setting, collaborative problem solving, joint fact-finding, mediated negotiations, partnering, use of an ombudsperson, and arbitration. These processes need to be linked into a system of dispute resolution options moving from the least formal, collaborative problems solving groups, throughout negotiation to the most formal, arbitration.

Collaborative Problem Solving. A wide array of stakeholders should be involved in collaborative problem solving to define, discuss and propose solutions to societal problems around watershed planning, electric power generation, and agriculture and community water use. For the Lesotho Highlands Water Project, a National Dialogue on the design of a Treaty Review Process was held with involvement of local stakeholders. Some interviewees felt that the Treaty Review Process was successful in extensively increasing the level of involvement of affected parties, yet others felt that the Treaty Review Process did not have extensive involvement of affected people, even though the Authority reports the participation of all principal chiefs in the review. Again, this illustrates the scope and depth of consultation that is required in order for all parties to be satisfied that due process was followed. Collaborative problem solving processes involve participants who have a stake in the outcome or a planning or decision-making process. Through series of facilitated meetings, participants can work to find ways to meet the needs of all the parties affected by the decision or who are able to block its implementation.

Fact-finding. Joint fact-finding sessions involve face-to-face discussions and consensus building between technical experts, decision-makers, and other essential stakeholders in an effort to translate technical information into formats and language understandable by all parties. It is an effort to identify areas of scientific and technical agreement and disagreement for use as a baseline for further negotiation or consensus building efforts. Joint fact-finding dialogues or negotiations are an excellent way (and sometimes the only way) to begin discussions between parties who have a history of antagonism or mistrust. In addition, fact-finding may be essential when the parties do not really have an agreed-upon set of facts or data for analysis or policy-recommendation. Such a baseline is likely to be needed for the parties to effectively discuss or negotiate policy questions, siting decisions, management approaches, or implementation options.

Mediation. Once a solution is chosen a new set of actors may be involved. If the decision impacts them directly then mediation can be conducted to resolve disputes. Mediation is the intervention into a

negotiation by an acceptable impartial third party that has no authority to make or enforce a decision to assist parties in reaching their own mutually acceptable reconciliation, settlement of issues, or agreement. The mediator actively assists parties in identifying and clarifying issues, prioritising areas of concern, developing solutions and structuring implementation of agreements. Mediators have been used for a number of international cross-boundary water disputes (e.g. for the Yarmuk River) and in North America for many types of facility siting, but relatively rarely in other parts of the world (Bingham 1997, Bingham *et al.* 1994).

Partnering. Partnering is a process developed by and widely used by the United States Army Corps of Engineers and other agencies. Partnering involves a collaborative team approach to construction and management of large facilities. Instead of the normal adversarial contractual relationship, the co-operative management team works together to design, choose common objectives, and implement a co-operative partnership for evaluating progress and solving problems (Edelman, et al. 199X). During the Lesotho Highlands Water Project, Lesotho Highlands Development Authority in conjunction with local authorities set up a Conflict Resolution Mechanism at the community level to handle disputes. The Authority reports that chiefs were empowered to deal with administrative and dispute issues at the village level on a day-to-day basis. At the engineering/dam construction level, Dispute Review Boards have been utilised. The Authority felt that in most community-related disputes, agreements have been reached. Nevertheless, concerns are expressed by other groups that chiefs may not be resolving the disputes in an open and fair manner, and that in some cases the Authority coerced the chiefs. This illustrates that any dispute resolution mechanism should be as transparent as possible to increase confidence in the process, promote trust in the individuals and agencies involved, and build support and legitimacy of the decisions made through the process.

Ombudsman. The purpose of an ombuds office is to serve as a project facilitator/mediator to work with project managers and stakeholders in solving problems as they arise. More importantly, the ombudsperson is entrusted with designing and repairing systems to help prevent problems from occurring or reoccurring in the future. It is essential that the ombudsperson/office be selected by criteria developed with the direct involvement of the various stakeholders to ensure that the person/office has sufficient credibility to be effective. In addition, the ombuds process must be designed in such a way that everyone who seeks to use it will feel comfortable and safe doing so.

Arbitration. This is a valuable step to include in a dispute resolution system. Arbitration is widely used and accepted in international commercial settings. In arbitration an impartial third party hears evidence and arguments from all the parties and then renders a determination. For the Salto Grande dam, Uruguay and Argentina established an International Arbitrage Tribunal to resolve disputes between the two countries over management of the dam. In one Lesotho Highlands Water Project dispute, which arose due to construction of an access road to the construction site, an independent assessor was used to settle the dispute. In addition, after a labour dispute resulted in violence, the Government of Lesotho set up a judicial Commission of Enquiry that produced a report and a set of recommendations that are currently being used.

Incentives for Adhering Parties to an Agreement

Once an acceptable outcome is negotiated, a written version (sometimes publicly announced) begins to help parties adhere to the agreement, which may include specific tasks for each party, deadlines for progress, funding mechanisms to assist some parties, specific penalties for noncompliance, and mechanisms for expedient re-negotiation if a break down should occur. Confidence in the agreement reached (and methods of enforcement, if necessary) should bring respect for the process. The participants will have greater confidence that the final settlement will be maintained among all participants, and those who have significant involvement in devising a solution will be much more likely to abide by it than to a solution imposed on the parties. For self-enforcing agreements, parties may agree to have money held by a third party that will be dispersed at certain times and based on certain conditions or events. To forestall (or deal with) break downs in the agreement, parties may

agree (in advance) to enter a mediated renegotiation, or as a last resort yield to a binding arbitration that expedites the process of solving the problem. Sometimes this enforcement tool is enough to keep the agreement bound together; the parties would rather live with the settlement they helped create than allow an outsider to mandate a solution. Another option is for the parties to include the agreement in a judicial court order or into a legally enforceable contract. Unorthodox and creative solutions are always possibilities based on mutual consent of the parties.

Tools and Skills for Conflict Resolution

Designers of conflict resolution processes will want to refer to existing “tool-kit” documents for specifics about individuals tools and their use.^{xvi}

Measuring Success (with Good Process Elements)

Some strides have been made recently in the areas of environmental conflict resolution and community mediation to ensure that the needs of the participants are being met as well as the requirements of donor agencies that their funds are being well spent. While there has been considerable research evaluating individual conflict resolution cases, there has been less research on how to evaluate conflict resolution systems or programs. Several recent projects have begun to pull together comprehensive evaluation frameworks.

One way of looking for success (for both public participation and conflict resolution efforts) is to consider closely those outcomes, processes, and relationships which the participants identify as indicating success (Bingham 1997):

Outcomes

- ◆ reaching agreements
- ◆ reaching agreements that satisfy participants’ interests and / or solve real problems
- ◆ reaching agreements that are better than otherwise could have been achieved
- ◆ reaching agreements that are implemented

Processes

- ◆ processes are seen as fair by the participants
- ◆ all affected parties are represented
- ◆ there is not undue delay
- ◆ encourages the exchange of accurate and complete information
- ◆ there is adequate time for parties to consult with their constituencies
- ◆ not overly costly in time or money
- ◆ consistent with applicable procedures and laws
- ◆ does not set precedents for other parties not at the table

Relationships

- ◆ civil behaviour is the norm
- ◆ participants provide each other mutual recognition and respect
- ◆ results in improved capacity for parties to solve problems together in the future

There are six primary criteria that should be used to assess any conflict resolution program.^{xvii}

- Outcome Reached
- Process Quality

- Outcome Quality
- Relationship of Parties to Outcome
- Relationship between Parties
- Social Capital

Outcome Reached. The first of these is whether an outcome is reached. Conflict resolution processes are often agreement focused, therefore whether an outcome is reached, is an important element to assess. Participants may measure whether there was a unanimous or consensus decision. The outcome can be assessed to see if the terms are verifiable. The public needs to accept the outcome and ratify the terms.

Process Quality. It is very important to look at how participants perceive the process. There has been substantial research on how to assess procedural justice, that is how participants in a process perceive the fairness, inclusively and accessibility of the process.

Outcome Quality. Along with assessing the quality of the process, participants and sponsors need to assess the quality of the outcome. There is a range of issues here to measure: what are the costs of implementing the outcome, is it sustainable environmentally, culturally and financially, and is it clear and realistic.

Relationship of Parties to Outcome, Relationship between Parties, Social Capital. The last three measures look at whether conflict resolution processes change the relationships of the parties and groups capacities to work collaboratively together in the future. An assessment could measure whether there is a reduction in overt conflict or expressed hostility or improved relationships. These are just some of the things that can be developed with the collaboration of the stakeholders to assess the effectiveness of individual conflict resolution strategies or conflict resolution systems.

As with public participation processes, conflict resolution procedures can and should be in place for all stages of the project cycle for large dams or their alternatives. To help both process designers and the participants determine whether there are appropriate conflict resolution structures for different stages, we have listed examples of significant criteria and markers (milestones) that could help identify achievement. We must emphasise again however, that each process is going to be different in its circumstances and its needs, the issues and conflicts, and the people and institutions involved. These examples are given for illustrative purposes only, and not to suggest that they should be used in every case.

Throughout the Entire Project

Good Process Elements:

- ◆ *Full participation of government regulatory agencies, demonstrating their willingness to use consensus building and to provide greater incentive to other stakeholders.*
- ◆ *Publicly stated government assurance of implementation of agreements (and a longer-term track record of following through with the assurances).*
- ◆ *All riparian parties are included, even those without political standing (during negotiations between over allocation of the Yarmuk and Jordan Rivers in the Middle East, NGOs, public interest groups, environmental groups, and Palestinians were not included; as a possible result, the entire river is allocated, and could be taken with no water at all for instream uses).*
- ◆ *Sufficient financial resources are afforded to parties in need of assistance to ensure their meaningful involvement in each of the stages of the cycle.*

- ♦ *Willingness of parties to find individual representatives who are informed, experienced, have a reputation for honesty, forthcoming, committed to consensus building, and respectful of other parties*
- ♦ *Willingness of parties to replace representatives who do not have the above features.*
- ♦ *Negotiation and consensus building groups are afforded opportunities to consider both social and technical issues.*

Problem Identification and Framing (ideally as part of integrated river basin planning) (*see also Throughout the Entire Project, above*)

Good Process Elements:

- ♦ *Significant efforts to build consensus among all the major parties at this stage (during negotiations over water allocation, storage, management, and conservation for the U.S. Truckee-Carson River Basin, a subset of parties reached agreement on a key issue which allowed other issues to then be negotiated by the full set of stakeholders).*
- ♦ *Negotiations to develop agreements in principle on the process (Relations between Hydro Quebec and Quebec's "First Nations" include agreements on such issues as participation, how studies will be carried out, integration of studies into the decision-making process, revenue sharing, compensation, and remedial measures.)*
- ♦ *Efforts to build consensus are started well before there are hardened ideas about what solutions are "best."*
- ♦ *Parties engage in fact-finding and data collection in advance of any construction projects.*
- ♦ *Specific negotiation that the status quo is unacceptable.*

Alternatives Proposal (with multi-attribute analysis and impact assessment) (*see also Throughout the Entire Project, above*)

Good Process Elements:

- ♦ *Clearly different alternatives are discussed, including creative technical options, and the "no-action" alternative.*
- ♦ *Joint efforts among stakeholders for study and analysis (Hydro Quebec and Quebec's "First Nations" have formed joint technical and environmental committees to conduct project studies, including joint environmental impact assessments.)*

Alternative and Site Selection (*see Throughout the Entire Project, above*)

Project Design (*see Throughout the Entire Project, above*)

Impact Mitigation (particularly displacement and resettlement processes) (*see also Throughout the Entire Project, above*)

Good Process Elements:

- ♦ *Negotiations held on compensation and locations for resettlement. (About 2200 people were resettled for the Driekoppies Dam in South Africa. Individuals and households were consulted as to their preferred resettlement land, and no decisions were made until the local Chief gave consent.)*
- ♦ *Negotiations include protocol for decision making (full disclosure of information, joint financial audits, no individual deals, etc.)*
- ♦ *Intensive counselling by teams of social scientists and use of mediation to resolve individual claims (this approach was used to settle conflicts between resettlees from the Akosombo dam in*

Ghana and their “hosts.” The counsellors explained the legal positions to people, and also explained the mechanisms that newcomers had to use to gain permission from traditional leaders to use the land. Because the area in question is vast, the Volta River Authority had to rely on goodwill and continuous, ongoing, and personalized information transfer to settle and reduce conflicts.)

Construction (see also *Throughout the Entire Project, above*)

Operations Monitoring and Evaluation (see also *Throughout the Entire Project, above*)

Good Process Elements:

- ◆ *Scoping sessions* for changing operations of dam and other structures (for examples, the U.S. Tennessee Valley Authority conducted extensive small group planning sessions during its scoping for changing flood control rules; at the sessions participants jointly selected measures to evaluate future system performance and identified trends that might later affect river planning).
- ◆ Jointly designed and conducted programs (Hydro Quebec and Quebec’s “First Nations” have developed several joint processes for the construction phases of projects, including revenue sharing, wildlife conservation efforts, jointly managed environmental monitoring, remediation work efforts, and an implementation committee to oversee the project.)

Relicensing and Associated Construction

Good Process Elements:

- ◆ Relicensing and new associated constructions *projects utilise facilitation or mediation to make decisions* (for example, on the American River in the U.S., a 41-member Task Force on flood control issues work with facilitators to develop principles, priority projects, mitigation plans, site review protocols, and construction approaches in an accelerated process that ended one year sooner than normal agency review. This allowed construction to be completed before a “storm of record” passed safely down the river).

Decommissioning (see *Throughout the Entire Project, above*)

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Annex A. Interview Questions

Interviews conducted by RESOLVE, Inc. and its international partners – Tisha Greyling, Dr. Anne Randmer, Isabel Viana, and Prof. Vanchai Vatanasapt

Background.

The World Commission on Dams was established to address central issues of controversy with respect to large dams and their effectiveness in sustainable development. The Commission's overarching goals are to:

- review the development effectiveness of dams and assess alternatives for water resources and energy development, and
- develop internationally acceptable standards, guidelines, and criteria for decision making in the planning, design, construction, monitoring, operation, and decommissioning of dams.

To assist with accomplishing these goals, the WCD has asked RESOLVE, a U.S.-based non-profit dispute resolution organisation to work with an international team of senior advisors to write a thematic review of "Participation, Negotiation, and Conflict Management" concerning large dams. I am one of the senior advisors to the study (one each from Africa, Eastern Europe, Southeast Asia and South America).

More information on the WCD can be found on its web site: www.dams.org and about RESOLVE in its site: www.resolve.org

Objectives

This thematic review has four interrelated objectives:

1. Improve the understanding of conflicts around large dam projects, their typical patterns and their root causes.
2. Identify alternative decision-making procedures on dams that prevent conflicts and/ or minimise their intensity; this requires the identification of critical decisions requiring conflict resolution/negotiation throughout the project cycle.
3. Propose key principles and approaches for negotiating choices within society, preventing conflicts, and settling them if they occur.
4. Preview the potential contribution of, and current practices for, participatory approaches to decision-making on large dams.

This thematic review will be built on and illustrated by a series of specific cases, including examples of successful dispute management and public involvement efforts as well as examples of projects that did not give stakeholders opportunities for involvement or which had major conflicts

Questions and Issues for Discussion.

For each example of a large dam project we discuss, it will be most helpful to the study to consider the issues of conflict management, participation, and negotiations from several aspects, which we will discuss in detail in a moment:

- Who were the stakeholders and what were their interests?
- How were the stakeholders represented, and how were the representatives determined?

- How were decisions made concerning the dam and how were the stakeholders involved in the process (before, during, and after construction)?
- What were the roles of science, power, and politics in the decision making?
- How did conflicts and disputes get resolved?
- Over recent years, the controversies, disputes, and violent confrontations seem to have amplified around development infrastructure, in particular around large dams. During our discussion, we would like to know, in general and from your experience, what are the reasons that could explain why large dams are so prone to conflicts?
- To get started, please tell me about 1 or 2 specific dam projects with which you are knowledgeable (so that we can refer to them as the interview progresses).
- Here, we need a brief description of the project(s): (name of the dam, size in megawatts, location, name of the river, length of the project, was it public or private).

Stakeholders and Their Interests.

- For the projects you described, please tell me about the types of stakeholder groups that were affected (local communities, national businesses, regional governments, downstream river-side dwellers, prospective power users, displaced populations, affected ecosystems, etc.)
- What were the specific interests and concerns of each of these groups?
- Were the interests and concerns of any stakeholder groups neglected?

Stakeholder Representation.

- How was (or was not) the legitimacy of these stakeholders as parties to decision-making established?
- Were any groups left out of the decision-making process and (if so) why?
- To what extent were majority and minority rights and concerns balanced?

Stakeholder Participation and Decision - Making.

- What forms of public participation were used during the project?
- Were the stakeholders fully able to express their concerns?
- Did the process facilitate the consideration of the multiple and often contradictory societal needs and priorities?
- Did the process contribute to build public awareness and ownership of the option finally selected?
- Did the process foster transparency and accountability?
- Was there a stated understanding that the decisions being made would affect a broad range of interests, including those of future generations? If not, why not?
- In your projects, was there an attempt to get “local consent”, and what was meant by this?
- Did the participation of the public help to lower project costs?
- Were negatively affected groups compensated and (if so) how was fair compensation determined?
- Were there critical phases where systematic consultation led to (or might have led to) improved short-term and long-term technical performance in dam construction or use?
- Did the public participation procedures ensure a more effective role of advocacy and technical support to NGOs?
- Were there specific participatory approaches that empower disadvantaged groups (women, indigenous communities, and others)?
- Did the public involvement process in any way serve to gain public acceptance for an inadequate, ill conceived, or poorly implemented project? or an unfair sharing of impacts or inadequate compensations?
- What was the relationship between civil society and the dam promoters?

- To what extent did the consultation and participation prevent disputes around the project?

Resolving Conflicts and Disputes.

- Please describe the specific conflicts or disputes that emerged during the project(s).
- What kind of decisions did the negotiations support? (e.g.: to identify development needs, to choose among dam and non-dam options, to build or not the dam, to improve the project design, to set better deals for resettles, to buy out local communities, etc.)
- What was the scope and limits to negotiations?
- Did the process attempt to deal with the asymmetry of power among the various interest groups in the negotiations around dam projects and their alternatives?
- Was mediation (or some other form of dispute resolution) and used in case of non-agreement?
- If a consensus was not attained in your project, how did the parties reconcile the rights of potential beneficiaries with the rights of affected populations?
- How did the stakeholders seek to ensure compliance and commitment of the parties with the negotiated results?
- Describe any incentives or control frameworks for enforcement that were developed?
- Were resources and capacities (human, financial, managerial, etc.) mobilised to ensure enforcement of agreements reached?
- Is it realistic to expect that dam projects – or other development projects, for that matter - should only be built if they constitute win-win (or mutual gains) outcomes (for all the parties)?
- Is there anyone else you think we should contact to talk about these issues?
- Is there written literature about the projects you described (especially materials that are not in English)?

Thank you again for your time and thought.

Annex B. List of Interviews

NOTE: the views reflected in the review, and the examples cited, do not come solely from these interviewees. The authors have also relied extensively on the literature about dams, their expertise, and documents from the Internet in forming the ideas of the Thematic Review.

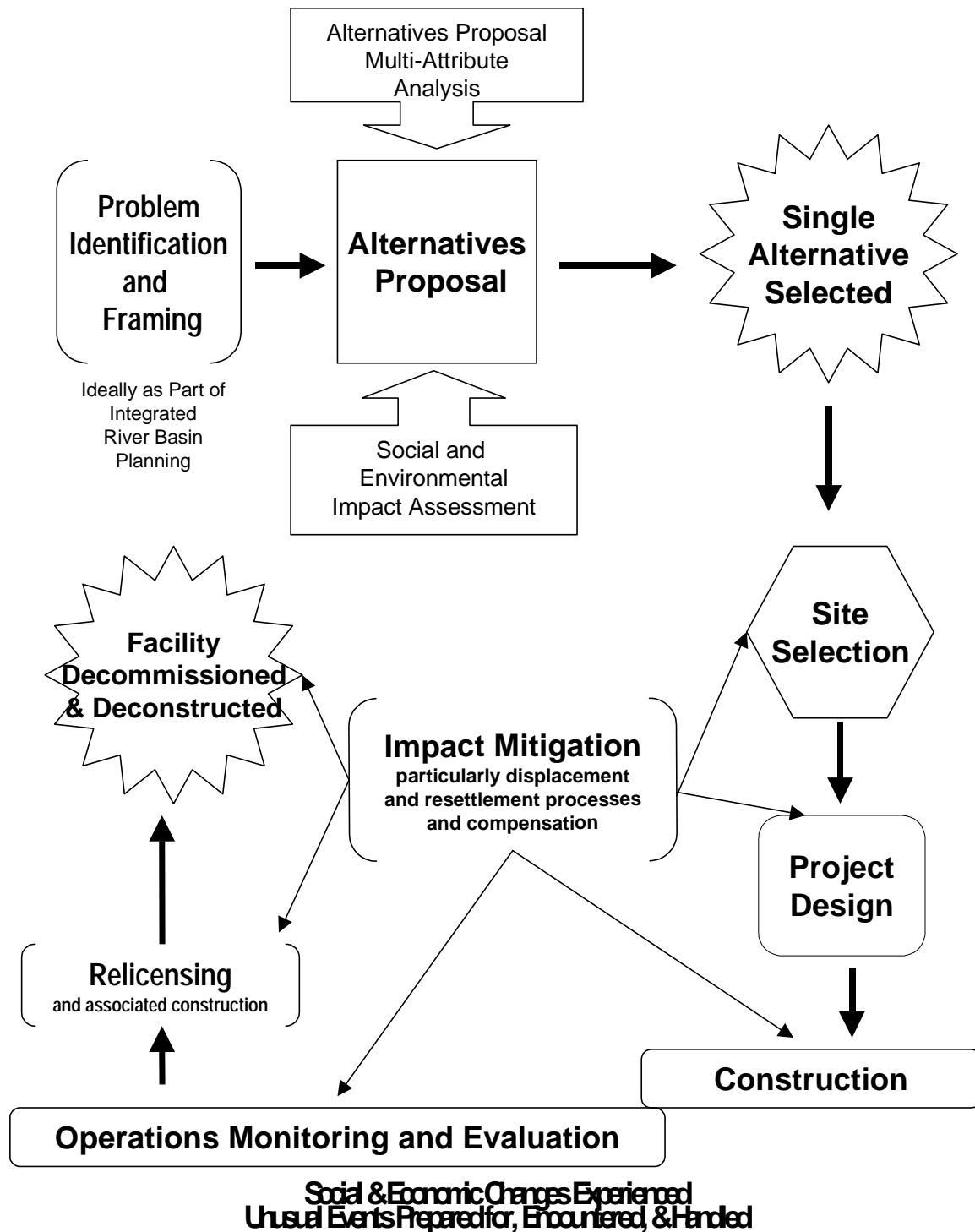
REGION	NAME/TITLE/ ORGANISATION	CITY/COUNTRY
Africa	Mr. Rob Clanahan CEO, Komati Basin Water Authority	Nelspruit, South Africa
	Dr. Mbarack Diop, Director Tropica Environmental Consultants, Ltd.	Dakar, Senegal
	Dr. EAK Kalitsi Chairman of the Board, Volta River Authority	Accra, Ghana
	Mr. Reatile Mochebele, Chief Delegate Lesotho Highlands Water Project	Maseru, Lesotho
	Ms. Mahlepe Mothepu Lesotho Highlands Development Authority	Maseru, Lesotho
	Mr. George van der Merwe Trans Caledon Tunnel Authority	Pretoria, South Africa
	Obed Lets'ela Lesotho Highlands Water Commission	Maseru, Lesotho
Eastern Europe/ Russia	Mr. Dan Dobrescu, Technical Director, Institute of Hydroelectric Studies & Design	Bucharest, Romania
	Ms. Elena Kolpakova, Co-ordinator NGO "Help Volga River"	Nizhni Novgorod, Russia
	Mr. Juraj Zamkovsky Center for Environmental Public Advocacy	Poniky, Slovakia
Southeast Asia	Mr. Shlamali Guttal, Senior Associate Focus on the Global South, Chulalongkorn University	Bangkok, Thailand
	Mr. Mohar Singh Monga Mekong River Association	Phom Penh, Cambodia
	Mr. Khamleung Sayarath Environment Ministry	Vientiane, Lao PDR

South America	Dr. Jose Pedro Isasa, Secretary General Comisian Tecnica Mista de Salto Grande	Montevideo, Uruguay
	Mr. Miguel Reynal, President Ecos Fund	Montevideo, Uruguay
North America	Mr. Jean-Etienne Klimpt, Representative Hydro Quebec	Montreal, Canada
	Mr. Neil Stessman, Director Reclamation Service Center, US Bureau of Reclamation	Denver, CO, USA
International	Mr. Walter Ahrensberg, Chief Environment Division, Inter-American Development Bank	Washington, DC, USA
	Mr. John Briscoe, Senior Water Advisor The World Bank	Washington, DC, USA
	Mr. Jerry Delli Priscoli US Army Corps of Engineers	Washington, DC, USA
	Mr. James Mahoney, Vice President, Engineering & Environment Export Import Bank	Washington, DC, USA
	Mr. Patrick McCulley International Rivers Network	Berkeley, CA, USA
	Mr. Aly Shady International Commission for Irrigation and Drainage	Hull, Quebec, Canada

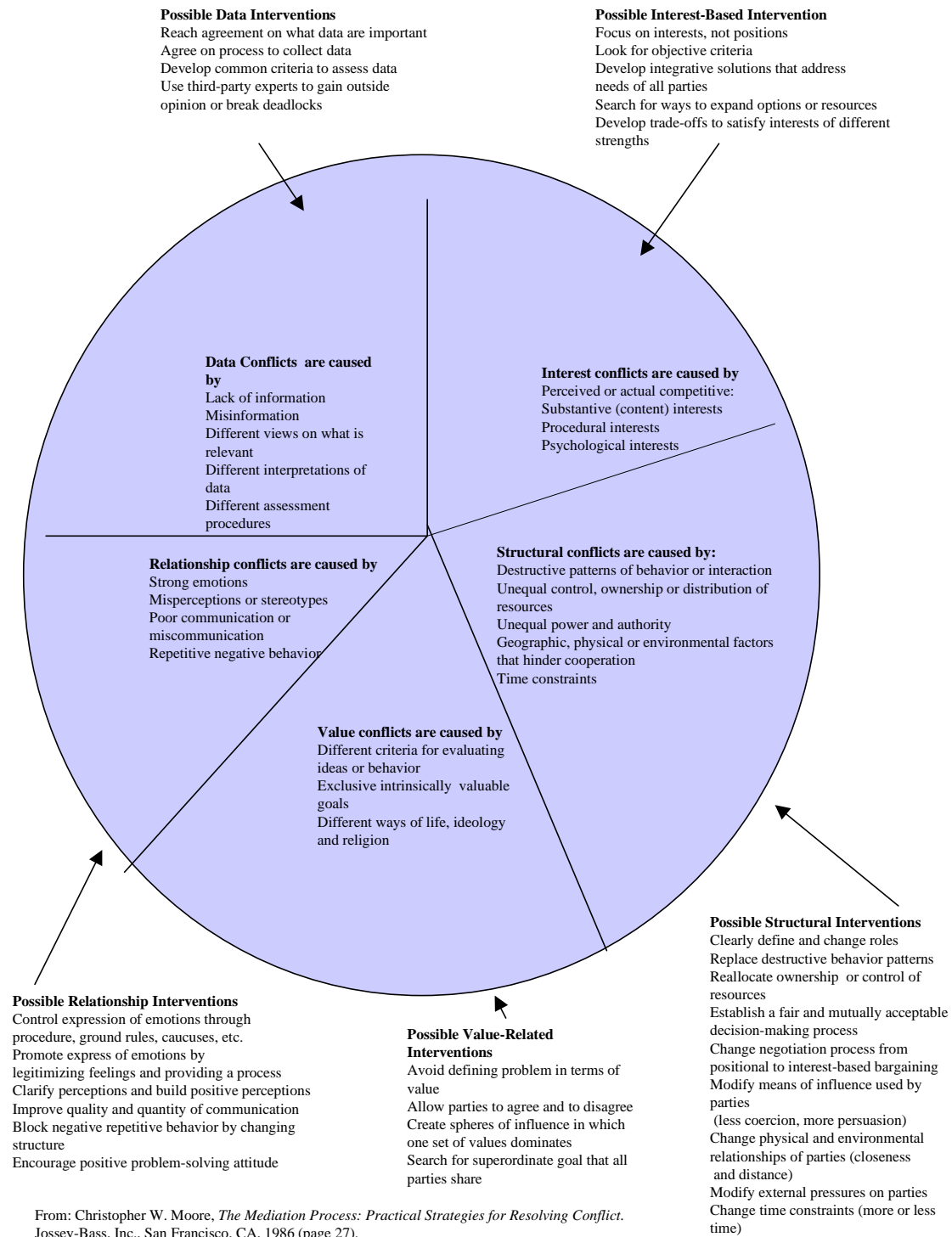
Annex C. Dams Cited

Aksomobo, Ghana
Aquamilpa, Mexico
Bisalpur, Rajasthan, India
Clark Fork River dams, US
Churchill River project, Quebec, Canada
Don Pedro, US
Driekoppies, South Africa
Foothills, US
Great Whale, Canada
Illisu, Turkey
Itá, Brazil
Ixvorul Muntelui Bicaz, Romania
Kama-Volga, Russia
Lesotho Highlands Water Project, Lesotho / South Africa
Maguga, Swaziland
Manatali, Mali / Mauritania / Senegal
Nam Theun II, Lao PDR
Pak Moon, Thailand
Portile de Fier I (Irongate), Romania
Salto Grande, Uruguay
Sardor Sorovar, India
Slatinka, Slovakia
St. George, Canada
Tennessee Valley Authority dams, US
Teton, Idaho, US
Yacyretá, Paraguay / Argentina
Yuaguzinskoya, Russia
Zimapan, Mexico

Annex D. Figure 1: Stages in Decision-Making



Annex E. Figure 2: Sphere of Conflict – Causes and Interventions



Annex F. Figure 3: Tools for Public Participation (see especially EDRB 1995)

Information Bulletins, Newsletter, Discussion Documents, Reports, Etc.	Provides written information at different levels of complexity to a wide public.
Displays and Exhibits	On-site or location specific information sharing about a decision or the availability of a public participation program. Can provide limited feedback and 'advice.'
Press Releases, Editorials, Conferences	Allow dissemination of more detailed information to a very wide audience. Impact depends on audience literacy.
Newspaper Insert	Similar to above but provides for feedback in a limited, survey-like fashion.
Radio & Television	Less detailed one-way communication; but very wide audience. Radio call-in shows can provide for limited feedback.
Targeted Briefing	Location- & population-specific, often with Q & A afterward.
Open House	As above, but provides larger time frame for interested individuals to attend, become informed, & give feedback. However, does not allow the views of different sectors of society or individuals to be exposed to each other.
Site Visit	Visits to the site for specific purposes (e.g. alternatives, comparisons, monitoring, etc.)
Field Office	As for Open House, except for time period extended throughout project cycle.
Interviews with Key Individuals	Individuals should be essential stakeholder representatives.
Formal Surveys	Wider response, however, survey returns may be low or limited due to literacy concerns.
Polls & Questionnaires	Higher level of response than surveys. Outsiders conducting polls may receive inaccurate or misleading answers.
Public Seminar	Small group facilitated meeting to share information, concerns, and opinions.
Focus Groups	Open-ended discussions intended to gather information on probable public responses to proposals or proposed decisions.
Large Public Meetings Town Hall Meetings	Generally used at specific stages to share information and garner limited feedback. Without professional facilitation and some technology it is difficult to acquire a good deal of input.
Conference	Usually has a limited attendance and includes both stakeholders and scientific experts. Generally designed to answer technical questions and generate options rather than decide policy.
Samoan Circle	Process designed to allow large groups to participate in possibly contentious discussions. Up to 100 can participate with 5-6 "speakers' chairs" in the middle.
Advisory Panels	Blue Ribbon Commissions, or other advisory groups. Serve as a link between affected stakeholders and government/proponents.

Working Parties	Designed to focus on a single issue, take input, and create guidelines for later decisions.
Task Force	Limited duration and size groups designed to focus on a single issue, testing ideas, monitoring processes, or examining technical issues.
Brainstorming	Facilitated problem solving, option generating processes.
Nominal Group Techniques	A set of techniques used to generate and present ideas and options in a structured manner. Possible outcomes are ranked according to generated criteria.
Planning Cell	Technique used to incorporate public participation in resource allocation and usage plans.
Unassisted Negotiation	Direct Negotiations Between Stakeholders
Mediation	Facilitated Negotiation

Endnotes

ⁱ There is no Lesotho Highlands Dam, but rather the “Lesotho Highlands Water Project.” It consists of a series of dams, weirs, transfer tunnels (by gravity to South Africa) and hydroelectric infrastructure. The Katse Dam, the highest in Africa at 186 m, was built during the project’s first phase. Only Phase 1 (with two sub-phases) has been approved to date.

ⁱⁱ The authors of this review would ask the reader to keep in mind that this is a thematic rather than an empirical document. What this means for the entire paper, and for this section particular, is that our method of examining relevant literatures on dams, facility siting, public participation, and conflict resolution combined with selected interviews of concerned and knowledgeable individuals provides a useful overview, but not a detailed analysis. While we strongly believe that this literature supports our contention that conflicts around dams and dam building will continue to grow, we do not have authoritative empirical evidence of this as fact. Regardless, we believe that the ‘best practices’ outlined in later sections are useful and valuable tools, and should be implemented.

ⁱⁱⁱ As discussed in Section IV.C. Conflicts involve many parties and extend over time, whereas disputes involve specific and bounded issues that parties pursue over shorter periods.

^{iv} For example the South African National Water Act (Act 36 of 1998) and National Environmental Management Act (Act 107 of 1998); for laws for every country of Central and Eastern Europe, see Nagy *et al.* 1994 and Stec 1995.

^v Including: International Labour Organization Convention 169 Concerning Indigenous Tribal People, IUCN Indigenous Peoples and Conservation Initiative, UN International Decade of the World’s Indigenous People (1995), UN Draft Declaration on the Rights of Indigenous Peoples (1993), Fund for Development of Indigenous Peoples of Latin America (1992), the International Finance Corporation Social Development Group, Conservation International, the Permanent People’s Tribunal Charter on Industrial Hazards and Human Rights (1979), Agenda 21 – Chapter 26, and others.

^{vi} As have the issues and assumptions concerning large-scale industrial development, of which large dams are a major example.

^{vii} Figure 2 (Annex E) details how different interests and psychocultural dispositions shape conflict beginnings.

^{viii} In almost all circumstances concerning large dams or their alternatives, there will be a small set of “decision-makers” who have the final authority to decide on most issues. Some experiments have been conducted with fully collaborative decision-making in Canada, U.S., and Europe that provide for all stakeholders to have full involvement in the process of decision-making with the understanding that the governmental “decision-makers” will abide by the decision of the collaborative group, in exchange for agreements that the individual collaborative partners will not take the governmental agency to court after the agreement is made. For the most part these experiments have involved issues such as rule making, waste cleanup, and environmental policies and plans; rarely have they been tried for large scale facility siting such as dams.

^{ix} For information on consensus building and conflict resolution for larger scale and cross-boundary river basin planning, see Bingham, Gail, Aaron Wolf, and Timothy Wohlgenant, *Resolving Water Disputes: Conflict and Cooperation in the United States, the Near East, and Asia*, (Washington DC: Agency for International Development, ISPAN, 1994). For additional information on decision-making and public involvement, see Kaner, S, Lind L, Toldi C, Fisk S and Berger D, 1996. *Facilitator’s Guide to Participatory Decision-making*. New Society Publishers in co-operation with Community at Work, Canada.

^x For their part, builders of dams may or may not see themselves as stakeholders, but they do not believe that they are being intentionally destructive or intentionally victimizing people.

^{xi} In the best public involvement programs, the designers and implementers of the process should be impartial as towards the project; however, often in practice the public participation practitioners are employees of either the government or the consortium of firms building the dam.

^{xii} While usually a serious issue of contention, some cases have been seen as relatively transparent, such as Salto Grande, Driekoppies, Maguga, Lesotho Highlands Water Project Phase 1B (although not entirely, according to some commentators), and St. George.

^{xiii} See also the International Association for Impact Assessment (IAIA), www.iaia.org.

^{xiv} For more information dispute resolution processes for water issues in the United States, see Bingham, Gail, *Seeking Solutions: Exploring the Applicability of ADR for Resolving Water Issues in the West*, Report to the Western Water Policy Review Advisory Commission, 1997.

^{xv} Sources for some of the existing tool-kits for public participation are:

- ◆ Creighton and Creighton. 1999 (2nd edition). *The Public Involvement Manual*.
- ◆ EBRD (European Bank for Reconstruction and Development). 1995. *Manual on Public Participation for Investors in Central and Eastern Europe and the Former Soviet Union*. EBRD, London.
- ◆ IAP2 (International Association for Public Participation). (<http://www.iap2.org>)
- ◆ IDS (Institute for Development Studies). University of Sussex. (<http://www.ids.ac.uk/ids/particip>)
- ◆ IFC (International Finance Corporation). 1998. *Doing Better through Effective Public Consultation and Disclosure*. IFC.
- ◆ IIED (International Institute for Environment and Development). Resource Centre for Participatory Learning and Action. (<http://www.iied.org/resource/>)
- ◆ IPMP (Institute for Participatory Management and Planning). (<http://www.ipmp-bleiker.com>)
- ◆ UNDP (United Nations Development Program). 1998. *Empowering People: A Guidebook on Participation*. UNDP, New York (<http://www.undp.org/csopp>) [includes extensive bibliography, lists of organizations in many countries, and sources of participation on the internet]
- ◆ USEPA (United States Environmental Protection Agency). 1991. *Community Relations in Superfund: A Handbook*. EPA, Washington, DC.
- ◆ WB (World Bank). 1996. *World Bank Participation Sourcebook*. World Bank, Washington, DC.

^{xvi} Some of the existing tool-kits for conflict resolution are:

- ◆ ACUS (Administrative Conference of the United States). 1987. *Sourcebook: Federal Agency Use of Alternative Means of Dispute Resolution*. Washington, DC.
- ◆ Brown, Scott, Christine Cervenak, and David Fairman. 1998. *Alternative Dispute Resolution Practitioners Guide*. U.S. Agency for International Development, Bureau for Global Programs, Field Support, and Research, Center for Democracy and Governance, Washington, DC. [abraginski@usaid.gov]
- ◆ Moore, Christopher W. 1986. *The Mediation Process. Practical Strategies for Resolving Conflict*. Jossey Bass Publishers, San Francisco, CA, *et al*.

- ♦ Susskind, Lawrence and Jeffrey Cruikshank. 1987. *Breaking the Impasse*. Basic Books, New York.
 - ♦ Susskind, Lawrence, Sarah McKernan, and Jennifer Thomas-Larmer. 1999. *The Consensus Building Handbook*. Sage Publications, Thousand Oaks, CA, *et al.*
- ^{xvii} Criteria drawn from d'Estrée, T.P. and Colby, B's Forthcoming guidebook on evaluating environmental dispute resolution cases.