



**Local conflict and water:  
addressing conflicts in water projects**

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## Note to the Reader

### Group on local conflict and water

The group responsible for the paper and other project activities such as workshops etc. was born out of a private initiative. In late 2003 we came together to discuss what role conflicts played in water management and how a conflict perspective could be integrated into water projects.

The Conflict & Water Group is made up of researchers and practitioners working in the sectors of development and conflict management. It works with a network of academics, individuals, practitioners and policy-makers investigating the issues of local and intra-state conflict in connection with water.

The work has been sponsored by the [Swedish Water House](#), an organism jointly funded by the Swedish Foreign Department and the Ministry of Sustainable Environment. For more information on SWH and its activities and projects please visit [www.swedishwaterhouse.se](http://www.swedishwaterhouse.se).

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### Disclaimer

The views expressed and conclusions drawn in this paper are the sole responsibility of the authors and do not necessarily reflect the views of the Swedish Water House.

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### Comments etc.

We would be happy for comments, suggestions, questions etc. For further information on the group's activities or comments/questions on the present paper etc. please contact the main writer, Fredrik Thomasson at [fredrik.thomasson@iue.it](mailto:fredrik.thomasson@iue.it).

## Objective

Let's give water its due importance, though still remembering that "it is important to keep in mind that society is not, at heart, hydrologically determined." (DIIS, 2004a)

At times the water sector tends to, as do many other fields, claim a central role in all human development. Solving water issues and extending the reach of access to water and sanitation is an extremely worthy endeavour and could possibly change the lives of large amounts of people all over the world. It is also one of the keys to a sustainable use of finite resources. Nevertheless, to reach this goal knowledge from a plethora of fields is important. This has also been the rationale for the development of Integrated Water Resources Management (IWRM), in all its forms and manifestations.

The aim of this paper is to investigate how conflicts influence water projects and to discuss how to address such conflicts. We will argue that one such field, to date a fairly small but quickly developing one, that is conflict analysis and conflict sensitive development aid, can be of use in water work. Briefly we will also address the issue how such knowledge could be incorporated in water management and water interventions.

The focus is on the national level, transboundary water relations are well researched. Most water interventions and projects are national and not international. Our focus is the water project as this is the level where investments are made.

The first step in the process of dealing with conflict in water interventions is to acknowledge that conflict is an important factor influencing water work. Our goal is to invite thinking and speculation as to how these issues of conflict may be addressed. The first step is to recognize conflict and bring it one step further up the ladder. Questions rather than answers are the focus at this stage.

The objective is not to propose solutions for this wide area, it may in fact be questioned if there are any such common solutions, only to highlight why such knowledge may be beneficial in strengthening the outcomes and results of water projects. We believe that further knowledge of conflict issues on the behalf of water professionals can be one of the ways to bridge the gap between the project level and the procedures and methods of conflict thinking. The level where projects are executed and investments made does at times seem unconnected with the experiences and knowledge produced in development research and within "conflict departments" of agencies and NGOs.

### *Structure of paper*

The paper starts with a rationale for why addressing conflicts in water projects is important and why local conflicts may become more frequent in the future. We discuss how conflicts can be related to water and what distinguishes such conflicts. We briefly introduce a typology of water related local conflict and investigate how water projects are influenced by conflict and what the risks of conflict are in water interventions. A short discussion follows on to what extent conflicts are addressed in the methodologies of IWRM (Integrated Water Resource Management) where we take the GWP (Global Water Partnership) IWRM Toolbox as an example of how IWRM "ideology" deals with conflict related issues.

The next section discusses how conflict thinking could contribute to water management and possibly diminish the risk of negative consequences to water interventions and some examples are introduced from conflict sensitivity practice. The paper is concluded with a few recommendations on how the water sector could introduce procedures and practices explicitly addressing the issue of local conflicts in the context of water projects.

## **Introduction**

The complexity of water management is bewildering and there are no signs that this complexity will diminish in the future. The challenges water projects are exposed to can make the best professional despondent. How to include yet another perspective, new scientific findings and deal with the results from social sciences that have started to make inroads into the water sector?

The inclusion of new ideas into an area as vast as water issues must by definition be haphazard and fragmentary. There are few authorities, if any, that can exert influence enough to actually impose procedures or change thinking at the project level.

Recently there has been a new focus on intra-state conflicts that are related to water. The risk of international "water-wars" has been proven improbable and focus has shifted to intra-state and local conflicts with water aspects. We argue below that conflicts are one of the factors that have a decisive influence on the results of water projects.

Most water projects are executed on the national scale and it is therefore important to investigate how such projects are related to existing or possible conflicts. Findings from Peace and Conflict research and the experiences gained in humanitarian assistance have underlined the importance of conflict analysis and conflict sensitivity when planning and executing projects. This knowledge is slowly entering the development practice but has so far not been systematically introduced in the water sector. A number of interesting projects have or are presently trying to develop such methods in water management.

We believe that a deeper analysis in project planning and conflict sensitive monitoring during the execution could be one of the methods used in ameliorating the outcomes and impacts of water interventions. Such methods are inspired of "conflict practice" that has recently been developed in the area of humanitarian assistance and other sectors of development. Parts of these procedures and methods are already present in IWRM methodology but rarely in a structured way.

Many of the arguments and recommendations below will seem self-evident and many readers might believe that the methods and processes we are discussing form an integral part of water projects, however, this is not the case. Project reviews and interviews with different actors make it clear that projects often do not consider the issues discussed. As expanded on below it is difficult to talk about conflict and to incorporate such thinking in project management. Nevertheless, we believe that concerted efforts in this direction may be one of many contributions improving the results of water investments.

We do not wish to underplay the complexity of development work. Many of the issues below have been discussed thoroughly and are central to the debate on the relationships between rich and poor countries. Conflicts are not particular to development work, though it could be argued that such conflicts have greater impacts in developing countries where resources are scarce and the need for functioning water supply and sanitation is considerably greater than in advanced economies.

### **More conflicts in the future?**

We do not wish to be an alarmist voice regarding the risk for increased conflicts. The cries of "water wars" have finally died down and it is not a good idea to introduce such an element to the thinking on local conflicts with water components. Nevertheless, there are a few things to consider when assessing the possibilities for future conflict in relation to water:

- Water interventions have traditionally operated on the supply side. Problems have been solved by adding capacity. This is getting more and more difficult in water stressed environments. The focus on water demand management will lead to more difficult political decisions where questions of equity, power etc. will play a more decisive role. Large groups of inhabitants in poor societies will probably have to change their livelihoods and if issues of equity etc. are not addressed conflict is possible.

- If promises of additional resources towards development aid budgets are kept, a considerable part of these resources will be directed towards the water sector. "Spending pressure" and similar structural causes may lead to interventions that are not sufficiently well planned and executed.
- Signals from multilateral institutions indicate that large infrastructure projects are being considered. Projects such as dams for storage, irrigation and hydropower are on the agenda again. Experience show that such projects are conflict prone.

More projects, in both number and size will simply mean more potential for conflict, this should be considered a challenge rather than a risk. Hopefully, additional resources will not have negative repercussions. If the MDGs are to be even partly fulfilled the challenges are enormous, both financial and on the execution level.

Projects such as large dam construction receive a large amount of political attention which to a certain extent might keep them in another realm than "ordinary" water intervention. There are signs that the most contended water issues at the moment, dams and privatisation, have slipped out of the hand of the development sector and entered the general debate on globalisation and equity issues. The results of this shift are not yet discernable.

### Box 1: Words and concepts

#### **Actors, stakeholders, beneficiaries**

We use "actors" below to describe the different parties in projects and conflicts. There is something vaguely condescending in the concept of "stakeholder" and "beneficiary". In addition, the development sector often has had problems recognising its own role as one of the actors.

It is all too easy to try to teach people to behave in front of the pump. One of the advantages of "conflict thinking" is that it considers all parties actors and thus active participators in a situation.

#### **Developing countries, South, Third world, poor countries, LICs etc.**

We will use the concepts above alternatively, there is of course no way to assemble countries into one single group considering the particularities of each country's situation. Still, the large differences in access to water and sanitation are among the factors that distinguish the gap between rich and poor countries.

#### **Local conflict versus intra-state, national, internal, civil etc.**

There are different words for describing conflict within countries. Most water related conflict identified below is small scale and could be defined as local. Such local conflicts are afflicting specific areas of a state and do not involve the whole nation. Nevertheless, there is no common recognised way of defining intra-state conflict in terms of extension and intensity. We have chosen to use "local conflict" as we believe it is the most common scale/level of conflict with water components.

#### **Governance**

One of the recent concepts used to describe the failure of predominately Southern countries to serve their own populations is the absence of "governance". The lack or weakness of institutions is often at heart of this debate and IWRM has focused on the development of institutional frameworks in connection with water. Governance will not be explicitly discussed below even though we recognise that the institutional issue is central to the development of water and sanitation.

### Geographical focus

The focus on the South is partly justified by the direness of the water situation in many poor countries and partly by the lack or weakness of institutions that manage the distribution of and disputes over water. There is no lack of societal conflicts in rich countries, only there they rarely turn violent.

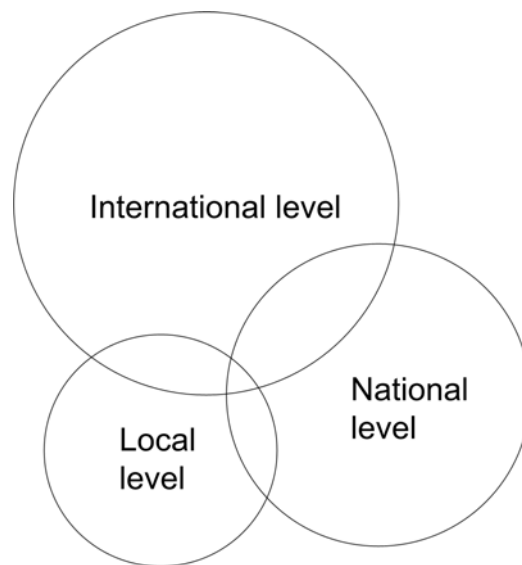
Inversely most sources on conflict and conflict practice are of Northern origin. Academic research, donor agency policies and manuals, think-tank and NGO reports etc. are the dominant sources on the subject. This unbalance is unlikely to change in the near future - it is only to be recognised that research and policy products from the countries where the interventions are taking place is not abundant. (Fjelde, 2005)

### Why local and not international?

The conflict potential of water issues has been extensively researched on the international level. There is a wealth of empirical data and several initiatives that analyse and record situations of transboundary issues, both on river basin level and in other circumstances. ([Atlas...](#), 2002; the [Transboundary Freshwater Dispute Database](#) etc.) New areas in this research touch upon for example shared aquifers, coastal waters etc. Transboundary water projects, or water projects with international effects, tend to have conflict management components incorporated in the project set-up. Many of these projects are in fact themselves conflict management instruments such as river basin commissions etc.

Conflicts with water components on the national scale have been less investigated. Projects and interventions tend to be national. The nation-state is still the level of most development activities and water projects are predominately national. Many observers have recently remarked that the risk of water-related conflict is inversely related to scale, the smaller the setting, the greater the likelihood of conflict. ([Wolf, 1998](#); [Ohlsson, 1999](#); [Allan, Nicol, 1998](#); [Baechler et al, 2002](#))

**Figure 1: Overlap between different levels of conflict**



There is obviously a certain amount of overlap between different kinds of conflicts. Localised conflicts can have repercussion on the national stage by for instance inviting mobilisation on a certain issue such as water distribution privatisation. Local conflicts sometimes flow over geographical borders; an example is when nomadic populations move over relatively recently established borders. How to determine the scale of water interventions is an area for debate where some parties advocate "basin-integrated" approaches, by nature often international and other parties that believe that less extensive geographical approaches that adhere rather to societal than geographical criteria may be more adequate when designing interventions. ([Barham, 2001](#))

#### *Differences between international and local conflict*

By concentrating on intra-state and local issues we do not assert that there are fundamental differences in the dynamics between international and intra-state conflicts. Different conflicts obviously generate different kinds of manifestations but it is probably the methods of possible resolution that differ the most between international and intra-state conflict. In conflicts at the national level it is more likely that there are institutions and legislation that at least have formal means to address the conflict. Even if it is not always an optimal solution, there is often a possibility that an overarching authority can take charge of the situation. In the transboundary cases this is less obvious considering the lack of international law covering water issues. On the other hand, international issues tend to get more attention and more easily attract both mone-

tary and political support in resolving contentious issues. Most of the existing river basin bodies, e.g. the [Mekong River Commission](#) and the [Nile Basin Initiative](#), are to a large extent financed by the international community.

### Future flows of resources to water projects

Most observers believe that additional resources will flow to the water sector in the near future. Cost benefit analyses stress that investments in water have an excellent rate of return, both in increased health etc. and even in pure economical terms. (SIWI, 2005a) Statistics on aid is generally a complicated area and there are few recognised standards. It is difficult to estimate the amount spent on water and sanitation by international donors. (OECD, 2003) No matter in what form such additional resources are going to be transferred to the South it is clear that to fulfil the MDGs substantial amounts of resources must be spent by local governments; the development aid budgets can only be one of the contributions to this goal. (Figuères, 2003) Considering the risks facing water projects financial resources are not the only key to a successful development of water resources.

### Box 2: Water and sanitation as development objectives

Most indicators show that the resources dedicated to the water sector in the developing world will grow in the near future. The development of water and sanitation is also highlighted in objectives of the Millennium Development Goals as well as in the results of a process like the Copenhagen Consensus. If the millennium goals are to be met investments in urban water and infrastructure will have to be substantially increased. There seems to be consensus in the development community that water and sanitation will be one of the highly prioritised sectors. For a comprehensive run through of how the MDGs are related to water issues see [SIWI, 2005b](#).

#### Millennium Development Goals

|           |              |  |
|-----------|--------------|--|
| Target 10 |              | Halve, by 2015, the proportion of people without sustainable access to safe drinking water   |
|           | Indicator 29 | Proportion of population with sustainable access to an improved water source   |
| Target 11 |              | By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers   |
|           | Indicator 30 | Proportion of people with access to improved sanitation [Urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum dwellers] |

#### Copenhagen consensus

The results of the Copenhagen consensus project where development goals and projects were ranked according to their cost effectiveness put a heavy focus on water and sanitation. Among the ten highest rated areas three were in water and sanitation.

|                               |   |
|-------------------------------|---|
| Project 6: Sanitation & Water | Small-scale water technology for livelihoods      |
| Project 7: Sanitation & Water | Community-managed water supply and sanitation     |
| Project 8: Sanitation & Water | Research on water productivity in food production |

([Copenhagen consensus, 2004](#))

## Local conflict and water

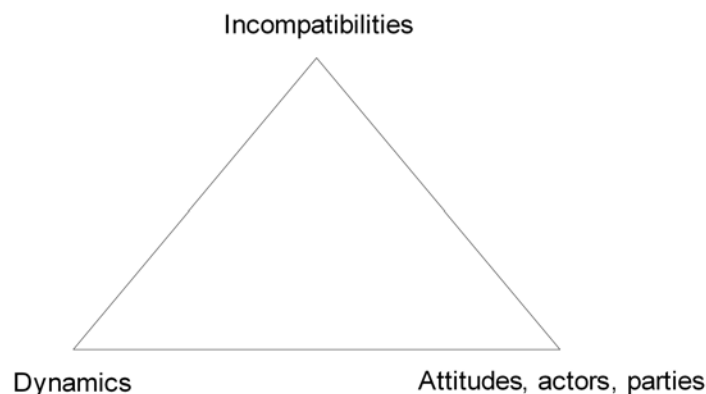
### Definition of conflict

How do you define conflict? Should it include only violent confrontations? Do people have to be killed? Is major tension enough to be classified as (latent) conflict?

One proposed theoretical definition of conflict is: "conflict [...] (is) a social situation in which a minimum of two actors (parties) strive to acquire at the same moment in time an available set of scarce resources". (Wallensteen, 2002)

This definition and varieties of it, seems to have gained some acceptance. It covers many aspects of what is commonly intended by "conflict". This definition is often illustrated by the conflict triangle.

Figure 2: The conflict triangle



A few issues are important to stress in this context. Resources, in the definition above, are meant any kind of resources, material as well as political etc. The classic intra-state conflict is about territory and/or government, i.e. who or which groups shall access the political resource of governing a specific territory or the entire state.

It is incompatibilities over resources that create grievances or conflicts. It is important to recognise that "scarce" does not have to mean that the resource is limited. An incompatibility often arises over the use and distribution of a resource. The perception of a resource as limited is often connected to inequalities in the distribution. This is especially important when considering water related conflict. In some situations there is obviously a true physical scarcity, but conflicts over distribution are probably more common. A consistent result of research on conflict is that the gap between different groups in society is often a more important factor spurring conflict than the absolute levels of income, of access to resources and services etc. of the groups.

The attitudes are the standpoints of the actors in the conflict. "Attitudes" are often replaced with "actors" or "interests" to make it more evident that these are the actual parties to a conflict. The parties in a conflict can of course be more than two; in many local conflicts or in situations of social conflict that turn violent, there are several actors. This underlines the importance of thoroughly investigating all possible actors in a conflict.

The dynamics are the way the conflict evolves, whether violent or not. Conflicts often change in intensity over time and eventually disappear or become transformed to "normal" political issues. They might of course become full blown violent conflicts but this only happens in very few cases. By studying escalation and de-escalation the dynamics of a conflict can be understood; the historical background of conflict is often important to comprehend present tension etc.

### *Conflicts and social tensions connected to water issues*

Water related conflict rarely involves organised armed groups but particularly some rural conflicts over water and land use sometimes see major levels of violence and may resemble war in

ferocity and number of deaths. By conflict in the context of water interventions we mean not only open armed conflict but also explicit social tensions that impede the possibility of reaching the goals of the project. We also acknowledge that everything that mars projects is of course not attributable to such conflict.

Conflicts in this context could be for instance: sabotage of facilities, breaking treaties and agreements and contracts, less than peaceful demonstrations by parties involved or affected by the project, sometimes referred to as "water riots". (DIIS, 2004b)

It is hard to define conflict in any stable quantitative or qualitative way, but most of us have an intuitive feeling of what it is when we encounter it. Obviously such a feeling is not enough to base future evaluations and appraisal of projects upon. A more comprehensive and nuanced definition of water conflict and in the larger context, conflicts with natural resource components in general, would be most useful.

#### *Conflict is not inherently bad*

It is important to underline that conflict, at least when it is not violent, is not inherently negative. Change often leads to conflict and the main difference between how conflict evolves is based on the availability of institutions or mechanisms that are accepted by the parties and that can address the conflict. Inversely conflict brings change, when a conflict is resolved or managed this often creates a new situation which is hopefully lessens the incompatibilities and grievances of the parties in conflict. We will not discuss the concept of "governance", but the availability of institutions lies at heart in the issue of how to mitigate and resolve conflict.

#### **Does water conflict exist?**

It is difficult to prove that there is conflict which is only related to incompatibilities over water. What is clear is that there are conflicts that have water as an important aspect, sometimes the element that actually sparks a conflict that may have been latent for a long period.

Water can be an important component in a conflict as a symbolic or material incompatibility. Granting or denying access to water has also been a common feature of both international and local warfare and conflict since pre-history. (Gleick, 2004) History shows that incompatibilities about symbolic issues are as common as competition for material resources. There is a large body of research and debate around international conflict and water, (good bibliographies in [Mohamoda, 2003](#); [Tamas, 2003](#); [Turton et al., 2002](#)).

Most research deals with shared freshwater resources, especially in a river basin perspective. The realisation that the risk of water-related conflict probably is inversely related to scale, has not yet sparked extensive research on intra-state water related conflicts. Such local conflict is commonly related to access to water for livestock or small-scale agriculture, and conflicts over water arise when it is of vital importance for the subsistence of local populations. Such conflicts might in their turn result in loss of livelihoods and social tension when populations are forced to migrate or to find other means of sustenance. A majority of reported local conflicts with water elements are of this type. Research on water related internal conflict has often focused on such rural incidents, especially between pastoralists and agriculturalists, or between different pastoral groups. To a certain extent the definition as transboundary or intra-state is irrelevant in some of these conflicts. The relations between different communities are often older than the border of modern states but the fact the conflict has turned international does affect the possible solutions of the conflict.

A relatively new set of conflicts are visible in the context of urban water supply and distribution, the expansion of cities, growing industries and intensive and irrigated agriculture. Some observers claim to see geographical patterns in tensions and outbreak of local conflicts over water, such conclusions will have to be substantiated in further research. ([Postel, Wolf, 2001](#))

Sometimes an ethnic component is explicitly present in the project documentation of the cases we have surveyed. In the Nairobi project discussed below different ethnic groups are mentioned particularly in the locally produced documentation. In the Melamchi case mentioned below, grievances are sometimes expressed in the framework of "ethnicity".

In the absence of structured empirical data on local conflicts with water components the different criteria set up by the MAR (Minorities at Risk) project discussed below gives an idea on how we can think about societal conflict when analysing such situations.

### Box 3: The debate on natural resource conflict and water

The literature on natural resources and conflicts is growing fast. Two articles that serve as good introductions to the area and the debate are [Gleditsch, 1998](#) and [Ross, 2004](#).

The role of resource scarcity or abundance is ever present in the public discourse about the environmental factors in conflict, intra-state as well as international. A group of thinkers, often called Neo-Malthusians, point to the role of population growth and the physical limitations to growth, thus creating scarcities of resources worth fighting for. They also stress that the world's natural resources are finite. Others place greater emphasis on distributional issues, e.g. situations where a large part of the resources are being consumed by a certain group or a minority of the population.

The resource scarcity scenario has been challenged from at least three different perspectives: Technological optimists or "Cornucopians", argue that natural resources are usually quite abundant and, when they are not, can be traded, substituted through technological innovation, recycled, or rationed through market mechanisms. The "curse of resources" school argues that resource abundance is more important than resource scarcity in creating conflict. Groups start fighting over material resources, especially of the kind that are easily extracted and transported, such as diamonds, various minerals, oil and timber etc. Liberal institutionalists argue that cooperation is a more common answer to resource scarcity than armed conflict, in the research on international shared water resources this is confirmed by the far greater number of cooperative treaties than of conflicts.

One of the important specificities of water is its low economic value, water is not a lootable resource, it has a low value per unit of weight and is hard to capture and transport. Water is thus less likely to give rise to abundance conflicts than other natural resources. In some respects it is doubtful whether water should be considered a "natural resource" in the same context as the other resources listed above.

Notwithstanding the difficulty of proving that water has been an important incompatibility or element in major conflict some authors still picture water as a future factor of conflict.

Current academic research tends to downplay the role of water as the central element of conflict. Inversely, international water relations have recently been identified as a field of cooperation and dialogue. Instead of being pictured as a source of war, water has been made out to be a factor that instigates cooperation that will have repercussions on international relations in general. The idea is that cooperation on water issues will spread to other sectors and improve relationships between countries. If this reasoning is regarded critically it may be seen as a way for the water sector to maintain water's pivotal role in international relations. A good example of this view is the UNESCO PC – CP project: [\*From Potential Conflict to Co-operation Potential\*](#).

### Local conflict with water as a component

If we narrow the definition from water conflict to conflicts with water components we can clearly state that there are conflicts where an important component in the incompatibility is related to water issues. In some situations the actual grievance may be the access to water, predominately in rural areas where the livelihood is directly affected by water access. In other situations water can be used as a means for political mobilisation. The access to water becomes a core issue in a situation where large parts of populations are denied access to any kind of basic services. Water is a highly political issue and might be an easier issue to focus on than lack of public health care or education. The water situation affects large groups of inhabitants and is a concrete issue, easily understood and explained. Such large "material" issues are easier to mobilise political action around than more complicated social issues. In societies with high levels of social tension any such issue seems to be a possible focus for contention. The conflict over the management of Bolivian natural gas has recently created similar political circumstances as the year 2000 water riots in Cochabamba.

**Box 4: Reported local conflicts with water components**

A search on water and clashes/riots etc. in Internet news archives comes up with a variety of cases. Many different types are represented, from the well-known riots in Cochabamba, Bolivia to less publicised strife in Africa and South Asia. Not all of the situations below resulted in violent deaths, but all of them had clear water component/s. Two European examples have been added, not surprisingly from dry Mediterranean areas.

It is safe to say that local water conflict is underreported. One may also suspect that such incidents, as with internal conflict in general, often go unreported in countries with less free media. China is maybe the clearest case where information on civil strife is haphazard. In rural areas situations probably have to reach a certain level of conflict (deaths?) before getting picked up by local media and consequently by the international agencies.

|   |                           |
|---|---------------------------|
| Athens rubbish dump row hots up<br><a href="http://news.bbc.co.uk/2/hi/europe/4118776.stm">http://news.bbc.co.uk/2/hi/europe/4118776.stm</a>  | BBC News 05-06-22         |
| KENYA: Struggling against drought in Turkana<br><a href="http://www.irinnews.org/report.asp?ReportID=47464&amp;SelectRegion=East_Africa&amp;SelectCountry=KENYA">http://www.irinnews.org/report.asp?ReportID=47464&amp;SelectRegion=East_Africa&amp;SelectCountry=KENYA</a>                                   | IRIN News 05-06-03        |
| SOUTH AFRICA: Rising pressure on govt to deliver quicker<br><a href="http://www.irinnews.org/report.asp?reportid=47366&amp;SelectRegion=Southern_Africa&amp;SelectCountry=South_Africa">http://www.irinnews.org/report.asp?reportid=47366&amp;SelectRegion=Southern_Africa&amp;SelectCountry=South_Africa</a> | IRIN News 05-05-27        |
| Thousands flee Kenyan water clash.<br><a href="http://news.bbc.co.uk/1/hi/world/africa/4201483.stm">http://news.bbc.co.uk/1/hi/world/africa/4201483.stm</a>   | BBC News 05-01-24         |
| Herdsmen flee Ethiopia's drought.<br><a href="http://news.bbc.co.uk/1/hi/world/africa/2607839.stm">http://news.bbc.co.uk/1/hi/world/africa/2607839.stm</a>  | BBC News 02-12-26         |
| India: Recriminations flow as Cauvery stops.<br><a href="http://news.bbc.co.uk/1/hi/world/south_asia/2322387.stm">http://news.bbc.co.uk/1/hi/world/south_asia/2322387.stm</a>   | BBC News 02-10-14         |
| Algerians riot over water shortages.<br><a href="http://news.bbc.co.uk/1/hi/world/middle_east/2127885.stm">http://news.bbc.co.uk/1/hi/world/middle_east/2127885.stm</a>   | BBC News 02-07-14         |
| Italy: Torna la guerriglia urbana nella Palermo senz'acqua.<br>(The urban guerrilla is back in Palermo without water)<br><a href="http://www.repubblica.it/online/cronaca/siccipa/torna/torna.html">http://www.repubblica.it/online/cronaca/siccipa/torna/torna.html</a>                                      | La Repubblica.it 02-06-04 |
| Mexican clash kills 26.<br><a href="http://news.bbc.co.uk/1/hi/world/americas/2021312.stm">http://news.bbc.co.uk/1/hi/world/americas/2021312.stm</a>  | BBC News 02-06-02         |
| Fresh land clashes in Kenya.<br><a href="http://news.bbc.co.uk/1/hi/world/africa/1697529.stm">http://news.bbc.co.uk/1/hi/world/africa/1697529.stm</a>   | BBC News 01-12-07         |
| Violence erupts in Bolivia.<br><a href="http://news.bbc.co.uk/1/hi/world/americas/706770.stm">http://news.bbc.co.uk/1/hi/world/americas/706770.stm</a>  | BBC News 00-04-08         |
| Twenty killed in Somalia clashes.<br><a href="http://news.bbc.co.uk/1/hi/world/africa/685638.stm">http://news.bbc.co.uk/1/hi/world/africa/685638.stm</a>  | BBC News 00-03-21         |
| Panama riot police clash with students.<br><a href="http://news.bbc.co.uk/1/hi/world/americas/232123.stm">http://news.bbc.co.uk/1/hi/world/americas/232123.stm</a>  | BBC News 98-12-10         |
| Self-immolation by Indian villager highlights water protest<br><a href="http://news.bbc.co.uk/1/hi/world/south_asia/192408.stm">http://news.bbc.co.uk/1/hi/world/south_asia/192408.stm</a>  | BBC News 98-10-13         |

*Intensity and levels of local conflict*

Research on conflict is usually geared towards international and major intra-state conflict. To a certain extent "conflict" has been equalled to "armed conflict". The most well known projects studying conflicts have number of deaths as criterion for inclusion in their databases; the Uppsala University "[Uppsala Conflict Data Program](http://www.uppsalaconflictdata.org/)" requires a minimum of 25 battle deaths in a

given calendar year. The [Correlates of War](#) (currently hosted at Pennsylvania State University) project's criterion is at least 999 battle deaths during the span of the conflict. Most data sets include intrastate conflict but often require that government is one of the actors in the conflict. The types of conflicts that are related to water issues obviously do not qualify for inclusion in such databases in the great majority of cases. The databases above are directed towards the analysis of armed conflict, normally such conflicts presuppose a certain degree of organisation by the conflict parties. Reported conflict with water aspects tends to be of a more "spontaneous" kind but this does though not mean that it is impossible to predict or prevent.

*Determining levels of local conflict*

The [Minorities at Risk Project](#) at the University of Maryland follows and analysis conflict in relation to minorities and groups within countries. In the cases such groups are active in several countries they are defined and "counted" in each country. It maintains data on 284 politically active groups all over the world. In many of the cases the grievances of the tracked group, or the responses from government or other groups, have led to open conflict in the form of social unrest; riots, clashes with the military and the police or with groups of different political and/or ethnic origin.

One of the merits of the MAR project is that it is trying to define and describe a wider range of conflict behaviour and manifestations than the violence registered in the armed conflict databases. It nuances the conflict concept and shows that there are ways to classify and define conflict of an essentially different kind; social tension, verbal and symbolic resistance etc.

Table 1: Conflict levels from Minorities at Risk project

| Levels of intra-state conflict in <a href="#">MAR codebook (2004)</a> |                                   |   |   |
|---|-----------------------------------|---|---|
|   | FCCS1 365                         | CC1X 409  | PROT 422  |
|   | Severity of intra-group conflict  | Intercommunal Conflict with Antagonist Group  | Group Protest Activities  |
| 0   | None                              | None evident  | None reported   |
| 1   | Sporadic violent attacks          | Individual acts of harassment against property and persons with no fatalities.        | Verbal Opposition<br>Public letters, petitions, posters, publications, agitation, etc.  |
| 2   | Series of bombings/assassinations | Political agitation, campaigns urging authorities to impose restrictions on group.    | Symbolic Resistance<br>Scattered acts of symbolic resistance (e.g. sit-ins, blockage of traffic, sabotage, symbolic destruction of property) or political organizing activity on a substantial scale. |
| 3   | Substantial rioting               | Sporadic violent attacks by gangs or other small groups. Some fatal actions occurred. | Small Demonstrations<br>A few demonstrations, rallies, strikes, and/or riots, total participation of less than 10,000.  |
| 4   | Sporadic armed clashes            | Anti-group demonstrations, rallies, marches.  | Medium Demonstrations<br>Demonstrations, rallies, strikes, and/or riots, total participation of less than 100,000   |
| 5   | Protracted communal warfare       | Communal Rioting, armed attacks.  | Large Demonstrations<br>Mass demonstrations, rallies, strikes, and/or riots, total participation greater than 100,000   |
| 6   |                                   | Communal Warfare (protracted, large-scale intergroup violence)                        |   |

The levels are taken from three coding categories in the MAR codebook ([MAR, 2004](#)) The codebook is the manual that defines how the societal situations considered by the project shall be entered as data in the database. The database contains so far 451 parameters, any given situation will only qualify for the use of a part of all these parameters/database fields.

Not all of the levels listed in the example from the MAR project above are relevant in relation to the conflicts with water components that can be identified, but many of the “manifestations” have been observed in relation to water issues. Going through the MAR list of tracked groups and the countries and areas they are active in, there is a certain congruity with known cases of water conflict ([MAR, 2004](#)). MAR focuses on political groups and minorities and so far many of the water related conflicts have not been expressed through the means of an explicit organised political framework.

#### *Does conflict breed conflict?*

An old adage in conflict and peace research sustains that the best indicator of future conflict is past conflict. Root causes for conflict are constantly debated in the research and there are few conclusive results on how previous conflicts affect or instigate future conflict. ([Walter, 2004](#)) The situations where water is cited as one of the central grievances in a conflict are often situations where a propensity for violent conflict already is present. In the case of the rural conflicts, in many of the areas there is a history of conflict in the relations between different groups. Several of the urban cases where violence erupted in conflicts with water components have already seen instances of violence in connection to other social issues such as property and rents, political violence etc. Examples are the highly politicised and volatile situation in Bolivia, the socially tense situation in informal settlements in large cities in Africa etc. To establish causal

relationships between the scarcity and the actual manifestation of conflict is difficult or impossible. Clear is that the presence of violence in an already unstable area, violence of any kind one might venture to say, should have a direct impact on the planning of interventions.

### **Types of local water conflicts**

There are different ways to classify local conflicts with water elements. There is a mix of geographical and social criteria when classifying the situations. The different categories listed below are often overlapping. See [Shandler and Granger \(1997\)](#) and [Kramer \(2004\)](#) for interesting typologies.

Some local cases also have transboundary implications; upstream conflicts tend to have repercussions downstream and downstream is sometimes another nation. Conflicts between pastoralists sometime spill over national borders, borders that have been established more recently than older patterns of pasture and agriculture.

A few distinctive groups of conflicts seem to get most attention: rural conflicts, often between pastoralists and agriculturalists, urban conflicts connected to water supply and privatisation and issues relating to dams. Irrigation versus urban use of water is also being singled out as one of the most conflictual issues as cities are growing and consuming more water from more or less distant countryside sources.

An interesting definition of water conflict is proposed by Peter H. Gleick in his *Water Conflict Chronology*. ([Gleick, 2004](#)) One of the categories he uses to define water conflicts is "Development dispute". This is a wide category where probably most of the conflicts we are discussing would feature. The definition is not very explanatory but the list of cases makes for interesting reading.

If trying to establish root causes a few basic categories seem to be the most frequently cited:

- conflicts over a limited resource
- conflicts over the control of the distribution
- conflicts over the quality of the resource
- conflicts in large infrastructure projects

Again, it is important to recognise that "limited" does not have to mean that the resource is scarce, only that there is competition or an "incompatibility" over the use or access to the resource. This does of course not mean that scarcity is unimportant; most, but not all conflicts related to water do erupt in situations where water is not abundant.

#### Limited resources

##### *Rural*

The most cited and researched local water conflicts are rural conflicts. Water supply is closely connected to livelihoods. Common conflicts are between pastoralists and agriculturalists, between different communities of pastoralists etc. Some of these conflicts are often referred to as "inter-ethnic" conflict. There is a large spectrum of such conflicts involving different sectors of society.

##### *Rural - Urban*

Typical rural - urban conflicts occur when cities are growing and start consuming more of the water in the surroundings. The people living in the town develop their water supply by drilling wells, resulting in a falling water table. Sources around the town are developed either for piped supply or are used for loading tankers. These are often similar to the livelihood conflicts that generate serious violence in rural areas. Water that has been used for irrigation is transferred to urban use and rural populations often seem to have less political clout in such situations.

### *Inter-Catchment*

Water from one catchment is transferred to another. In the case of growing cities this can be seen in many cases. Some such cases, e.g. the Lesotho Highlands project, are clearly trans-boundary, that is, affecting actors in more than one country. The inhabitants in the catchment where water is extracted are typically not compensated for the loss of their resource which leads to grievances and conflicts. Such projects often involve major infrastructure schemes such as dams and water diversions.

### *Economic Sector*

In many cases several economic sectors are competing for the same resource. The commercial and large-scale agricultural sectors often competes for water with the industrial sector or commercial forestry. There are rural conflicts between large-scale agriculture and smaller farmers. The phenomenon of urban agriculture is a possible source of conflict. Research indicates (Mwalukasa, 2000) that around 90 % of leafy vegetables sold in the markets of Dar es Salaam are grown in the city often using already scarce piped drinking water for irrigation.

### *Distribution and control*

The discussion on service delivery and privatisation of water has spread far outside the water community and has become one of the emblematical discussions in the globalisation debate. Many of the issues discussed are not specifically geared to water and touch large quandaries on the relations between both first and third world and the internal conditions of each country.

### *Unequal distribution*

Municipalities sometimes use the public water system to generate a continuous cash flow and at times do not make necessary investments or maintenance. Large parts of the population are not served by the water companies (public or private) and they will have to get water through other means. There can be a large market in the non-piped areas where the right to sell water can be either distributed through corrupted or criminal practices, or "spontaneously" filled by individual water entrepreneurs. Shortages, often with large seasonal variations, generate a complex market creating opportunities for water vendors. Different social classes in an urban area usually have different types of access to water and sanitation. This may sometimes lead to open threats or conflict.

### *Privatisation*

Among the most publicised conflicts of any kind in urban areas have been the privatisation conflicts. These conflicts have the same basic ingredients all over the world. Private companies are contracted to manage and deliver water in predominately urban areas. Companies not only operate and sometimes improve the water system, but also formalize the water market. In many cases this leads to the exclusion of poor people. These groups might not have been served by the former water utilities but still often had access to water by "informal" connections.

### *Quality conflicts*

Conflict can arise due to pollution. Most of these cases concern industrial use and sanitation rather than water supply. The disposal of wastewater generates substantial problems worldwide; not only in the third world. Water supply tends to generate more conflicts in poor countries, while conflicts over pollution and water quality are more common in richer and more environmentally conscious countries.

One common problem resulting in quality issues for drinking water is the salinisation of estuaries and water tables which affects poor and rich countries alike, but the issue does not result in conflicts if it does not concretely affect access to water.

### *Large infrastructure projects*

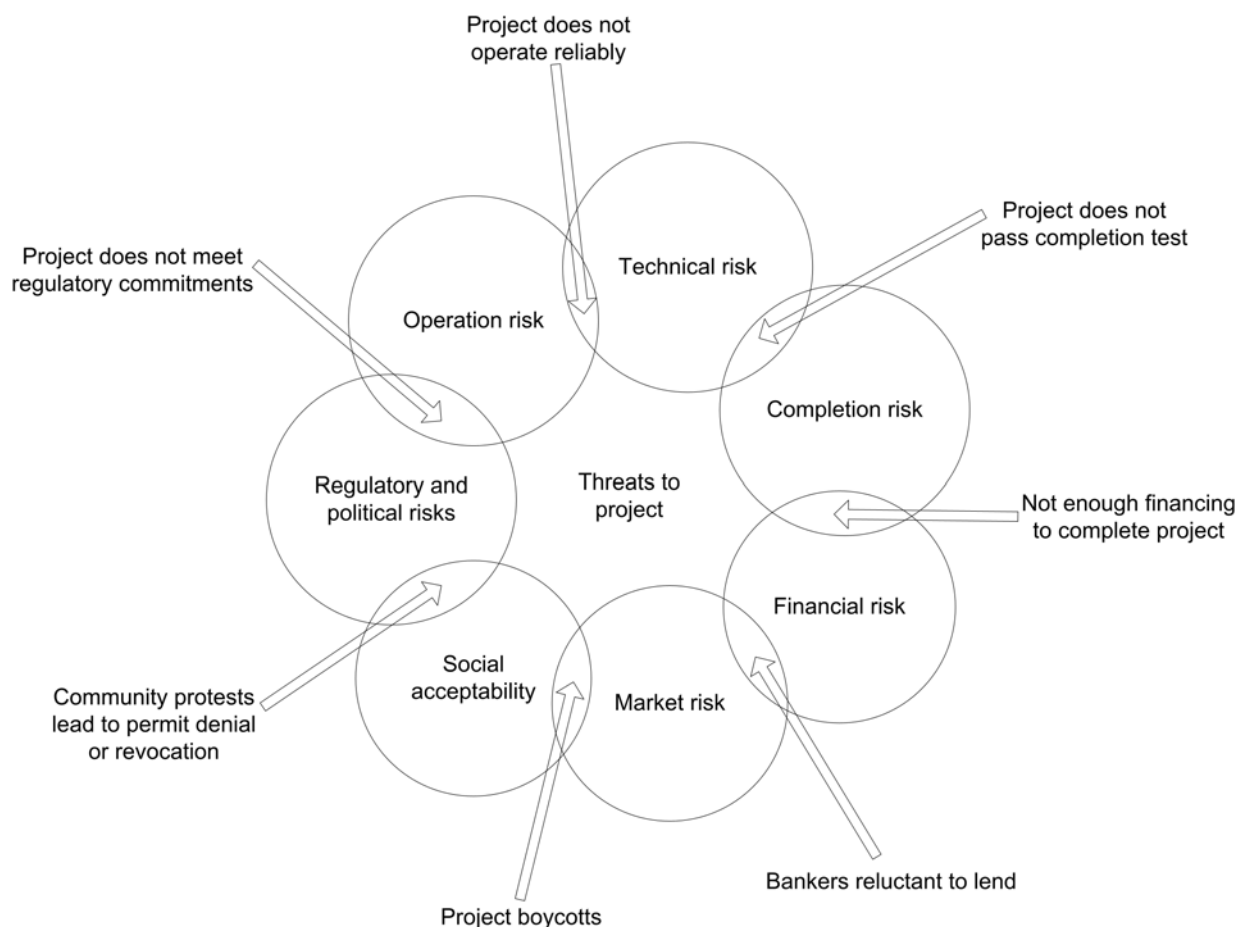
Among the most commonly cited conflicts in relation to water is the civil strife afflicting large infrastructure projects, particularly dams. Dams have, together with the privatisation conflicts, captured a large part of the public discussion on water conflicts. The construction of large

dams tend to involve several of the categories above in addition to maybe the most contentious issue in dam construction at the moment; the situation of populations displaced by the dam construction. Dam construction is probably the intra-state water issue that attracts most political attention and has been extensively dealt with on the international level with the work of the World Commission on Dams, NGOs etc. ([WCD, 2000](#); [WWF, 2002](#)) The debate and polemics on dams and to a certain extent the privatisation projects have arguable taken dimensions that have put such large projects on another level than most water interventions. As suggested above it may be questioned whether these projects are part of the water sector anymore.

## Water projects and conflicts

Interventions in the water sector are most commonly framed in the “project” mould. It can always be discussed how to achieve major change in societies through impacts derived from in time and resources fairly limited “projects”. There has recently been discussion on how to see developmental projects as a part of longer processes and how to sequence projects to fit into such a process in the water sector (e.g. [World Bank, 2002](#)). However, most interventions are still framed in the project form and when discussing how conflict influences water work in the developing world the project remains the most common unit.

Figure 3: Threats to large projects\*



\* From [Miller et al., 2000:116](#)

### Risks in projects

The track records of large projects, the above figure relates to so called LEPs (large engineering projects), are not overwhelmingly positive when it comes to keeping cost, respecting deadlines or delivering promised results. Time and cost overruns are legion and this does not specifically affect projects in developing countries. A comparative study (according to the authors probably the largest existing) on transportation infrastructure projects and their results includes the construction of rail, roads and fixed links (bridges, tunnels etc.). ([Flyvbjerg et al., 2002, 2003, 2005](#)) The study investigates 258 projects, completed between 1927 and 1998 on five continents, with a total gross budget of approximately 90 billion USD (1995 prices). Some of the conclusions are that 9 out of 10 projects fall victim to significant cost overruns and that the (positive) outcomes and impacts are grossly overestimated in the planning and financing of the projects. No learning seems to take place; cost escalation is the same now as 10, 30 or 70

years ago and escalation appears to be more pronounced in developing countries than in Europe and North America.

Results from transportation projects can of course not be extrapolated and applied in the water sector. Hypothetically it is possible to consider the differences and similarities between transportation and water projects and discuss to what extent the critical factors for success or failure are similar.

#### *What goes wrong in water projects?*

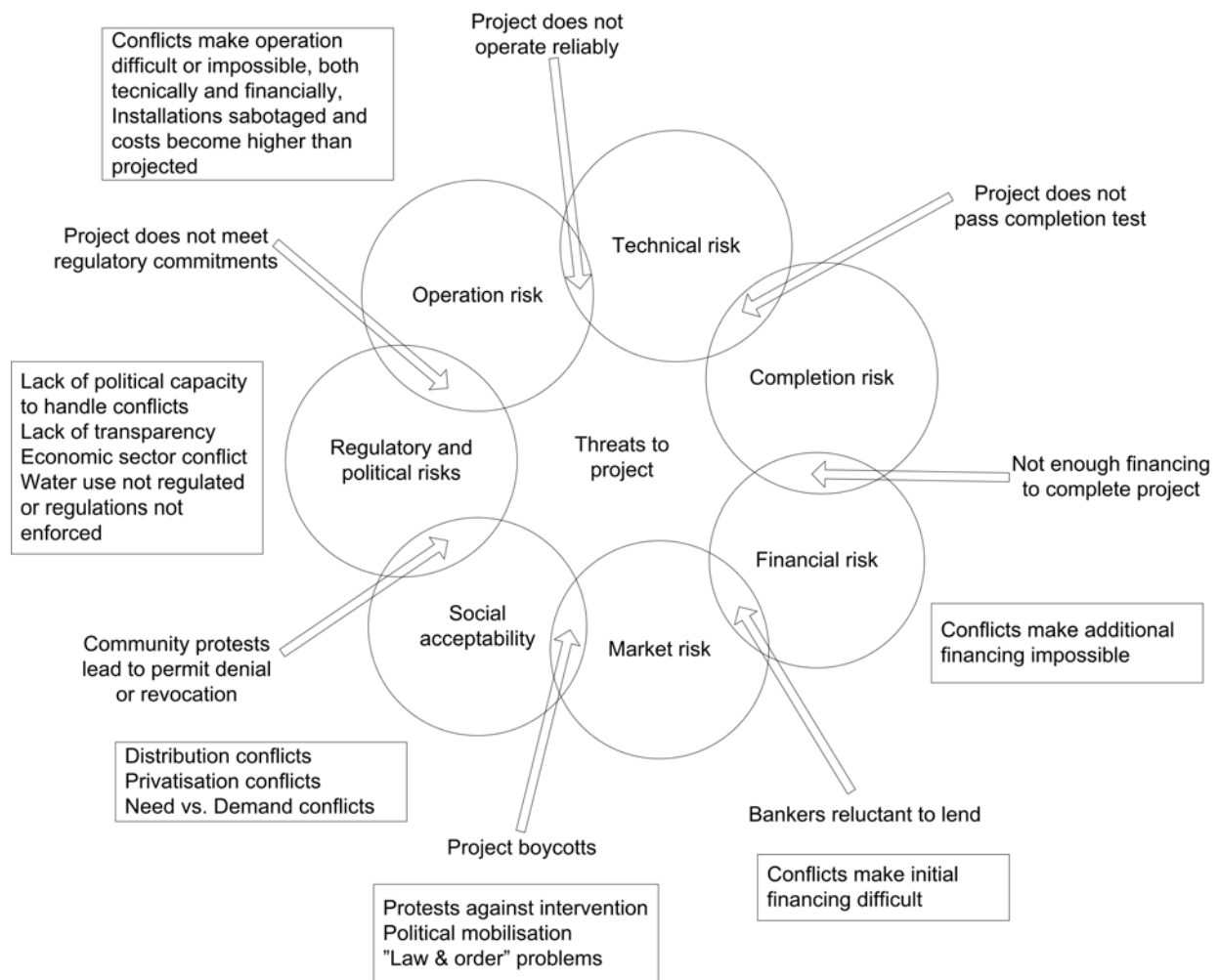
We are not aware of a similar macro study on water projects; the area in the water sector that has been at all investigated in a systematic manner seems to be the construction of dams, partly because of the huge costs involved and the political debate around many such projects. An interesting document on Indian hydropower projects [Time and Cost Overrun of Sanctioned On-going Hydro Electric Projects \(no date\)](#) lists causes for time and cost overruns. One of the common reasons is "law and order problems" which are in many situations attributable to conflict.

Information on water projects is spread among evaluations, monographs etc. and it is almost impossible to form an empirically valid picture on the successes and failures of water interventions. One of the few sources of aggregated information on water projects is the World Bank's Operations Evaluations Department (OED) documentation. Even so there is no study that has scrutinized a large number of projects over a long period of time. The projects looked upon are obviously only those with financial contributions from the bank. The bank is active in most areas of water projects. In terms of comparison to other sectors that the bank is involved in OED observes: "This evaluation notes that OED ratings of the outcome, institutional development impact, and sustainability of closed projects have improved over the 1990s although the sector continues to rank low among all sectors rated by OED." ([World Bank, 2003](#)) Another broad bank review [Bridging Troubled Waters. Assessing the World Bank Water Resources Strategy \(World Bank, 2002\)](#) is enlightening in the way that it shows the complexity of water projects in bank contexts. It is not possible to extrapolate from the conclusions drawn in bank projects, as in the case of the infrastructure study above, in order to maintain that they are valid for the entire water sector. Nevertheless, the complexity of projects and the problems encountered are probably to a large extent similar in projects managed and financed by other parties.

#### *The consequences are greater in the developing world*

One could arguably maintain that mismanagement and failed projects have a larger impact in the developing world than in rich countries, notwithstanding the smaller amounts of money involved. Financial resources are scarcer and poor populations are often not served by acceptable water infrastructure and thus suffer more from the failure of infrastructure projects. A large sector of the debate on how to improve the water and sanitation situation in the South focuses on the need for investment. To make these investments more efficient systematic knowledge is needed on past and present experiences of outcomes of water projects.

Figure 4: Risks related to conflict in water projects\*



\* Adapted from [Miller et al., 2000:116](#)

### Risks in water projects related to conflict

In this context it is necessary to investigate which risks are connected to conflict and the threat of conflict. Lack of data makes it difficult to draw conclusions. Large projects are complex and conflict is only one factor that influences outcomes. There are some sources on risks in water management but they are mostly discussions of a general kind rather than conclusions from projects or interventions. ([GWP, 2002](#)) Risks afflicting projects are more often seen as environmental or operational risks than social. Nevertheless some types of conflict do seem to repeat themselves in connection to water projects. How conflict is dealt with within a "project" is a large and complicated question and as emphasised above, conflicts are not particular to developmental projects.

#### *Projects in a wider conflict context*

There are two distinct categories where conflict has an impact on projects. The first obvious group is where conflict has broken out during the execution phase of a project. An example of such a project is the Melamchi water supply project in Nepal where water is to be drawn from a neighbouring valley to serve the city of Kathmandu. The project has suffered delays and contractors have resigned in face of threats from the conflict. The Maoist rebels have a history of destroying water facilities. ([Gleick, 2004](#))

Major societal conflict tends to hinder most large scale economic activity and put a stop to investments. This is of course true for all economic activity and does not affect water interven-

tions in particular. It could be argued that water projects, by their often diffused geographical character, are more difficult to protect than many other types of projects, for example industrial developments that can be contained to specific sites. Water facilities are easy to disturb or interfere with and such actions have repercussions on large groups of society.

#### *Projects with conflicts*

The second is category is probably more common. This is a situation where the project is taking place in a zone where there is latent or open localised conflict and where the project possibly can have an impact on the conflict, positive or negative. There might be cases where an intervention actually creates conflict but causal relationships are hard to establish when it comes to the outbreak of open conflict. The most reported of such conflicts are presently the privatisation projects of urban water supply which have led to protests and riots in several cities. The widely reported rural incidents are to a certain extent less dependent on "projects" and reflect the results of long processes of loss of livelihoods due to demographic pressure, restricted access to water, draught and irrigation leading to water losses downstream etc.

It is in this category that the "ordinary" water project often finds itself and where we believe that the introduction of conflict analysis and monitoring may be beneficial to outcomes. Conflicts, in addition to the risk of violence and societal problems, may lead to delays, cost overruns and a substantially lower number of people served than estimated etc.

Social conflict has effects on project outcomes, irrespective of the intensity of conflict. This perspective has been highlighted in the World Bank's series "Influential evaluations", the quoted case concerns a water and sanitation project in Flores, Indonesia:

"In 13 per cent of the sample villages water supply schemes were never completed - in some cases not even begun - even though communities had contributed cash and labour. Social conflict was the major reason, especially concerning the sharing of water resources between villages. The projects had no mechanisms to deal with this important determinant of sustainability, neither in brokering agreements nor in facilitating alternative supply options in the absence of reasonable agreements." ([World Bank, 2005a](#))

#### *Taking the bet on large projects*

The factors influencing outcomes are complicated and the role of different factors are difficult, probably in many situations impossible, to determine. What can be stated is that conflicts are one of these factors, in certain projects probably the critical factor. A cost benefit analysis of the above mentioned Melamchi project led observers to conclude:

"In the case of the MWSP, [Melamchi water supply project] the ADB [Asian Development Bank] and other donors must in effect place a bet on the future of the Nepalese people and their economy, giving large subsidies now in the form of grants and concessional financing in the hope that the benefits to future generations in Nepal are far more valuable than the costs today 'to whomsoever they may accrue.' It is indeed the kind of bet that developers of large infrastructure projects have always made." ([Whittington et al., 2004](#))

Conditions of conflict make such bets even riskier. If conflicts can be managed or overcome the odds of such bets may become somewhat better. It should be stressed again that such bets arguably have been taken during the development of infrastructure in the rich world, with, according to the studied mentioned above, ([Flyvbjerg et al](#)) very mixed results. Public debate on fulfilling development goals, e.g. the MDGs, often focus on the financial resources needed for investments. If present knowledge on water intervention outcomes is compared to the amount of investments needed to fulfil such goals the conclusion must be that there will be a lot of betting going in the near future.

#### *Acknowledged conflicts in water management projects*

It would be unfair to say that the water management sector does not acknowledge conflict or the results of conflict. Particularly the dam construction and water privatisation conflicts have

recently received considerable attention, not only from NGOs but also from actors such as multilaterals banks and donor agencies. An example is the Swiss project Public-Private Partnerships for Water Supply and Sanitation which has extensively addressed the conflicts and causes of conflict in this area and proposed a series of guidelines and tools to avoid or mitigate such conflict. ([Implementation Guidelines, 2005](#)) The dam quandary has also received a fair share of attention as discussed above.

The question is to what extent knowledge on conflict has entered the level of project appraisal and management. The case described in the box below is an example of how conflict can be dealt with on the project level.

#### **Box 5: Community based water distribution in Nairobi**

There are signs that small projects are as affected by conflicts as larger ones, if we by small mean projects costing less money. It would be tempting to say (without any research proving this) in analogy with the conclusion referred to above on international versus local conflict that the lower the level and the smaller the size of the project, the larger the risk for conflict.

A small project that resulted in conflict was an intervention supported by an international donor and executed by a local Kenyan NGO. The objective was to build sanitation infrastructure and to establish water selling points in an informal settlement which was badly or not at all served by piped water or sanitation. The area is served by private water vendors but their presence cannot be counted on and the access to water has great seasonal variations.

Among other activities the NGO contracted local CBOs (Community Based Organisations) to establish water selling points. These "kiosks", supplied by the municipal water system, undercut the price of water charged by the already present local water vendors. These vendors protested and one of the selling posts was subjected to arson. Altercations took place but no one died. After some negotiation with the water vendors the CBO reached an agreement to raise the price of the water. The additional income this raise would generate was supposed to have been invested in the construction of further showers and latrines etc.

A whole range of issues were visible in the project. The involved actors had very little knowledge of commercial ventures, something which you probably would call the water selling component. This led to problems of both unaccounted for water and money disappearing. The complexity of water pricing combined with seasonal variations is not to be undervalued. There seems to be some consensus that the local water vendors were not organised or "criminal" but nevertheless they stood outside most government control. This is an example of a distribution conflict but with other actors than the usual suspects and shows the complexity of the issues.

In the reviewed documentation in the archives of the donor there were scant references to the conflict. There was only one vague allusion of the outbreak of violence in a memorandum that concluded that the project should be financed as planned but that the NGO's demands for additional financing should not be met. The NGO was more straightforward when reporting on the difficulties in the project but did still not refer to the actual violent conflict.

It is both impossible and useless to assign guilt to any of the actors in the project. If the conflict was discussed explicitly it may have led to further support and changes in the setup of the project. There were early warning signs in the NGO documentation regularly sent to the donor during a couple of years before the conflict erupted, but these were not acted upon.

This project only came to our attention because somebody "knew about it". It would not have been possible to trace the conflict solely on the basis of the documentation.

#### *Projects add resources and may influence conflict*

One of the main insights arising from conflict analysis is how the actual input of resources can lead to negative or positive effects in relation to conflict. Experiences from working in conflict zones have led to the development of practices that analyse the impacts of aid projects. The "Do no harm" approach has been widely accepted as a framework to avoid fuelling conflict and safeguarding some of humanitarian assistance's most important principles, neutrality and impartiality. ([Anderson, 1999](#))

Less focus has been put on how “ordinary” development projects can influence societal conflict. It could be said that any additional inflow of resources, especially in a situation where there is a real or perceived scarcity of the resource, for an example access to water, might create additional tensions. An evaluation of German developmental aid in this respect presents a list of how “technical cooperation” projects may affect intra-state and local conflicts.

**Table 2: Possible Impacts of Development Cooperation in Conflict Situations**

| Possible positive impacts / contributions  | Possible negative impacts / contributions   |
|--|---|
| Eventual removal of causes of conflicts (regional disparities, employment opportunities, defusing of conflicts over resources, etc.) | Direct support for and stabilization of the government (through official development cooperation), which is itself a party to the conflict                    |
| Political and social stabilization in the short and medium term due to reconstruction efforts  | Wrong signals sent to the government and opposition forces through "omission" (e.g. failure to seize opportunities during the policy dialogue) and "approval" |
| Political openness, participation, democratization and increase in conflict awareness of societies and political systems             | Exacerbation of the conflict through the encouragement given to clientele systems and opportunities for corruption  |
| Achievement of security and improved human rights conditions due to the presence of development cooperation personnel                | Increased regional imbalances through the promotion of certain regions to the ruling elite's liking   |
| Removal of opportunities for self-enrichment and of clientele systems by means of economic reform programmes / structural adjustment | Violent countermeasures taken by the regime as a result of pressure for political reform (eventually, however, removal of potential for violence)             |
|  | Easing of the pressure exerted by development cooperation for action to deal with the causes of conflicts ("internationalization" of government tasks)        |

**Other problematical impacts**

- Possible exacerbation of conflicts by the shutdown of projects or the withdrawal of personnel
- Increase in the pressure for modernization
- Increase in competitive behaviour in the public sector due to economic reform programmes
- Absence of influence on measures taken by multilateral donors that exacerbate conflicts

(Klingebiel, 1999)

**Mainstream conflict perspectives in water resources management**

Water resource management is a large and complex area made out of a variety of elements. To describe what it comprises of and how to “execute” a water management project or intervention is of course impossible. To define this area the concept of Integrated Water resources management (IWRM) has been introduced. The concept has matured during the last decades. It would be possible to discuss water management without the introduction of IWRM but the concept has gained wide acceptance, at least at a nominal level, even if it could be discussed whether IWRM is actually practised in the majority of water resources management projects. A relevant discussion is it is whether IWRM is adopted in the North or if it is a concept that is essentially only “sold” to the South.

One of the foremost promoters of the IWRM concept, the Global Water Partnership (GWP) defines the concept and its rationale as:

"The extent of crisis in water resources management is well known, but how to deal with it is more difficult. If effective, long lasting solutions to water problems are to be found a new water governance and management paradigm is required. Such a new paradigm is encapsulated in the IWRM concept, which has been defined by GWP as 'a process which promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital eco-systems'." ([GWP Toolbox, 2003](#))

The concept of IWRM has evolved during the past decades and its contents seem to grow in the wake of the realisation of the growing complexity of water resources management. IWRM has been criticised from various standpoints. Some observers find it too complex and sustain that the framework of IWRM is disproportional to many actual projects dealing with water management. The history of the concept is briefly commented upon and some aspects are criticised by Ramaham and Varis:

"Although IWRM is the current buzzword of water resources development, future challenges remain in reducing the gap between theoretically agreed policies and implementation.

The integration of different sectors related to water management is very challenging. Moreover, the problems and solutions associated with IWRM implementation in different regions may not be universal. Overly general or universal policies and guidelines for implementing IWRM may become counterproductive." ([Ramaham, Varis 2005](#))

Other sources stress that the actual outcomes of IWRM related projects have been put in second place when focussing on the process based approach of IWRM:

"Notwithstanding the strong consensus with regard to the need for IWRM, however, recent major evaluations of the water sector (including OED's) [Operations Evaluations Department, World Bank] have revealed that the IWRM concept is too complex to define operationally, often poorly focused and understood more in terms of process (although important for local ownership) rather than in terms of outcomes and impacts." ([World Bank, 2004](#))

Even considering the critique against the concept and its usage it is necessary to relate to IWRM when discussing contemporary water management. The concept is now rooted and the development of conflict thinking in water management, if successful, will probably become another facet of IWRM.

#### *Conflicts and conflict analysis in IWRM*

An argument proffered by some water professionals is that IWRM per se is a method of resolving conflict. Managing water resources is to distribute and handle a resource which in some way is scarce; to do that successfully is a way of managing conflict. This could have been a valid argument if the world actually was hydrologically determined, but the factors that influence water projects are innumerable and many are not specifically related to water. IWRM and its focus on basin approaches have dealt with conflict, but so far predominately with transboundary issues.

There are a few examples of projects explicitly addressing local conflict and water issues. ([Kramer, 2004](#)) These projects are mostly initiated by donor agencies and NGOs and are conflict oriented. They often have as one of their main objectives to create mechanisms dealing with the conflictual issues related to water management.

#### *The GWP IWRM Toolbox*

GWP (the Global Water Partnership) is trying to define and concretise the many elements of IWRM by listing and defining them in the so called "IWRM Toolbox". One of the main merits of the Toolbox is that it tries to structure and systemise the different types of knowledge and procedures needed to plan and execute an IWRM project. According to the Toolbox these tools

are valid from a macro institutional level, designing national IWRM plans, to the execution of individual IWRM projects in smaller settings.

*GWP Toolbox as a reference model*

We have chosen to use the Global Water Partnership’s GWP Toolbox as an example of how IWRM deals with conflicts. Even if there is no consensus on what IWRM actually consists of we have chosen the Toolbox as a reference model. It gives a picture of contemporary thinking on IWRM and water project management.

The Toolbox is structured as a list of elements important when planning and executing IWRM. Each tool is briefly introduced and accompanied by cases. The number of cases related to each tool varies, from one case related to social impact assessment up to twenty cases related to the conflict management tools.

**Box 6: The IWRM Toolbox instruments**

|   |
|---|
| <p>A1. POLICIES – Setting goals for water use, protection and conservation</p> <ul style="list-style-type: none"> <li>A1.1 Preparation of a national water resources policy</li> <li>A1.2 Policies with relation to water resources</li> </ul>  |
| <p>A2. LEGISLATIVE FRAMEWORK – Water policy translated into law</p> <ul style="list-style-type: none"> <li>A2.1 Water rights</li> <li>A2.2 Legislation for water quality</li> <li>A2.3 Reform of existing legislation</li> </ul>  |
| <p>A3. FINANCING AND INCENTIVE STRUCTURES – Financial resources to meet water needs</p> <ul style="list-style-type: none"> <li>A3.1 Investment Policies.</li> <li>A3.2 Financing Options: I Grants and internal sources</li> <li>A3.3 Financing Options: II. Loans &amp; equity</li> </ul>  |
| <p>B1. CREATING AN ORGANISATIONAL FRAMEWORK – Forms and functions</p> <ul style="list-style-type: none"> <li>B1.1 Reforming institutions for better governance</li> <li>B1.2 Transboundary organisations for water resource management</li> <li>B1.3 National apex bodies</li> <li>B1.4 River basin organisations</li> <li>B1.5 Regulatory bodies and enforcement agencies</li> <li>B1.6 Service providers and IWRM</li> <li>B1.7 Strengthening public sector water utilities</li> <li>B1.8 Role of the private sector.</li> <li>B1.9 Civil society institutions and community based organisations</li> <li>B1.10 Local authorities</li> <li>B1.11 Building Partnerships</li> </ul> |
| <p>B2. BUILDING INSTITUTIONAL CAPACITY - Developing human resources</p> <ul style="list-style-type: none"> <li>B2.1 Participatory capacity and empowerment in civil society</li> <li>B2.2 Training to build capacity in water professionals</li> <li>B2.3 Regulatory capacity</li> </ul>  |

|  |
|--|
| <b>C1. WATER RESOURCES ASSESSMENT - Understanding resources and needs</b> <ul style="list-style-type: none"><li>C1.1 Water resources knowledge base</li><li>C1.2 Water resources assessment</li><li>C1.3 Modelling in IWRM</li><li>C1.4 Developing water management indicators</li><li>C1.5 Ecosystem assessment</li></ul>   |
| <b>C2. PLANS FOR IWRM - Combining development options, resource use and human interaction</b> <ul style="list-style-type: none"><li>C2.1 National Integrated Water Resources Management Plans</li><li>C2.2 Basin Management Plans</li><li>C2.3 Groundwater management plans</li><li>C2.4 Coastal zone management plans</li><li>C2.5 Risk assessment and management</li><li>C2.6 Environmental Assessment (EA)</li><li>C2.7 Social Impact Assessment (SIA)</li><li>C2.8 Economic Assessment</li></ul> |
| <b>C3. EFFICIENCY IN WATER USE – Managing demand and supply</b> <ul style="list-style-type: none"><li>C3.1 Improved efficiency of use</li><li>C3.2 Recycling and reuse</li><li>C3.3 Improved efficiency of water supply</li></ul>  |
| <b>C4. SOCIAL CHANGE INSTRUMENTS – Encouraging a water-oriented society</b> <ul style="list-style-type: none"><li>C4.1 Education curricula on water management</li><li>C4.2 Communication with stakeholders</li><li>C4.3 Information and transparency for awareness raising</li></ul>  |
| <b>C5. CONFLICT RESOLUTION - Managing disputes, ensuring sharing of water</b> <ul style="list-style-type: none"><li>C5.1 Conflict management</li><li>C5.2 Shared vision planning</li><li>C5.3 Consensus building</li></ul>   |
| <b>C6. REGULATORY INSTRUMENTS - Allocation and water use limits</b> <ul style="list-style-type: none"><li>C6.1 Regulations for water quality</li><li>C6.2 Regulations for water quantity</li><li>C6.3 Regulations for water services</li><li>C6.4 Land use planning controls and nature protection</li></ul>   |
| <b>C7. ECONOMIC INSTRUMENTS - Using value and prices for efficiency and equity</b> <ul style="list-style-type: none"><li>C7.1 Pricing of water and water services</li><li>C7.2 Pollution and environmental charges</li><li>C7.3 Water markets and tradeable permits</li><li>C7.4 Subsidies and incentives</li></ul>  |
| <b>C8. INFORMATION EXCHANGE – Sharing knowledge for better water management</b> <ul style="list-style-type: none"><li>C8.1 Information management systems</li><li>C8.2 Sharing data for IWRM</li></ul>   |

### *Conflict analysis and management in the Toolbox*

There are a few elements in the Toolbox that relate to conflict and how to address conflict issues in water management. These elements are spread out in different categories and have a varied level of concretion. The tools that most concretely relate to contemporary conflict thinking are found under the headings:

- C2. PLANS FOR IWRM
  - C2.7 Social Impact Assessment (SIA)
- C5. CONFLICT RESOLUTION
  - C5.1 Conflict management
  - C5.2 Shared vision planning
  - C5.3 Consensus building

#### *C2.7 Social Impact Assessment (SIA)*

Recent literature on Social Impact Assessment argues that SIA should be integrated into the planning and decision-making process in any larger project. SIA is often compared to an Environmental Impact Assessment, though the procedures and results are quite different. The tool acknowledges that: "Although often seen as part of EIA (Tool C2.6), it may be better carried out separately from the main environmental studies, since specialist skills in social sciences may be needed, and the timescales and study areas of the physical and social analyses may be very different." The results of a well executed SIA would be of great importance when planning and implementing development projects in relation to conflicts. There is though scant evidence that such analysis is done in water projects and there is only one case study in the Toolbox. SIA has been criticised for being a tool predominately used in rich countries but recent literature has introduced this method to development contexts. (Becker, Vanclay, 2003) SIA is probably the tool which comes closest to the analysis of actors, incompatibilities and dynamics which form the basic parts of conflict analysis.

#### *C5 Conflict resolution*

Under the heading of "CONFLICT RESOLUTION - Managing disputes, ensuring sharing of water" three tools are listed. The advice is on a general level but many of the elements considered are relevant and part of mainstream thinking on conflict management. These tools are presented as "especially useful in early stages of IWRM planning and design". There is also a strong institutional focus: "It is most important to stress that the ultimate mechanism for conflict resolution is the law and legal procedures." This focus is evident through the Toolbox and is connected to the GWP goals of creating viable institutions in countries lacking efficient institutional mechanisms for water management.

Each of the three tools has a number of cases attached, describing both international and intra-state situations where conflict management techniques have been of use.

#### *Focus on participation*

Much focus has been put on participation in the toolbox. There are a number of tools/methods prescribing local participation, stakeholder forums, consultations, communication with stakeholders. Such elements are found in:

- B1.9 Civil society institutions and community based organisations
- B2.1 Participatory capacity and empowerment in civil society
- C4.2 Communication with stakeholders
- C4.3 Information and transparency for awareness raising

Participation of all actors involved in a project is regarded as one of the techniques used to achieve sustainability and projected outcomes. Participation procedures have reached the level of commoditisation in the development sector; this is also the case in many water interventions, e.g. river basin stakeholder forums. Participation as an “ideology” has received a fair amount of criticism lately; one of the disadvantages in a conflict perspective is that they often tend to disregard the role of the donor/executor/implementer. Except for the problem of token participation it is to be doubted if projects actually always manage to include all important actors in the participatory processes. Conflict analysis is a way to more thoroughly investigate who the different actors are and what interests they represent.

### *Conclusions*

The Toolbox has integrated many elements of conflict thinking and has a strong focus on participation as one of the key methods to address conflict. The integration of all these elements might seem somewhat unstructured and it is difficult to see how a conflict perspective could be applied throughout the project cycle. Most tools are focussing on planning and the early stages of a project. If IWRM projects are to be successful a fair amount of societal change may be foreseen. It is not obvious that a focus on good planning is the only key factor in navigating a project to reaching the desired outcomes.

## Addressing conflicts in water projects

If the notion that conflict does have effects on water interventions is accepted, how is it possible to deal with such conflicts? A relatively recent area in development and humanitarian assistance has focused on conflicts and the impacts that resources in the form of assistance and development aid can have on situations of conflict. To be able to adopt such methods the first criteria is to acknowledge that there are conflicts and investigate how these influence outcomes and impacts. We feel safe in saying that conflicts do have a substantial impact on a number of water interventions, to what extent and how conflicts evolve in relation to water interventions is an area for further research.

### Why is it so difficult to address conflict in projects?

Before discussing how to address conflict on the project level it should be recognised that there are structural factors that often make it difficult to openly admit the existence of conflict. The reluctance to acknowledge conflict is not particular to water projects but is probably a common feature in projects, both in the context of development and in other circumstances. There are of course number of reasons for this unwillingness, in the project context some of the most important may be:

#### *Conflict equals failure*

On the project level the mentioning of conflict seems to equal failure. Project documentation seldom contains references to conflicts. Knowledge on conflicts in projects is spread by word of mouth and is difficult to find documented. The lack of documentation impairs learning from experience. To get knowledge on conflicts in projects you will often have to speak to involved actors; no tracks are left in the documentation. Every time information is passed on from project to local donor office or embassy, from embassy to ministry etc. information on conflict is downplayed or left out. (Klingebiel, 1999)

#### *Political issues*

Conflict is often a gauge of political divisions. A tacit understanding appears to be that many actors in projects want to avoid mentioning conflict because it can bring up political issues. It is better to sustain that all involved actors do have the same objectives and deal with (or not deal with) the conflicts informally.

#### *The goal of development*

Conflict, whatever the reason for it, tends to compromise the assumption that all actors in development have the same goal, in this case the goal of "development". Being explicit about conflict risks putting this goal in question. By acknowledging conflict and its consequences such issues will have to be confronted. The breaking up of this often false consensus is a difficult process per se.

#### *Addressing conflict "negation"*

Acknowledging conflict is a process of learning and learning from experience is not made easier by the fact that conflicts often are downplayed and scantily documented. The uneasiness in confronting conflict on the project level makes such learning at times impossible. There is of course no one solution to the above problems. Research has investigated how incentives influence outcomes and sustainability of interventions. (Ostrom et al., 2002) Considering how closely conflict is related to an image of failure a variety of measures are probably needed if conflict is to be acknowledged, documented and learnt from.

#### *Acknowledging conflict*

The first goal of introducing an explicit conflict perspective is to acknowledge the existence of conflict. As discussed above there are often strong barriers against such recognition. This might be done by gradually introducing procedures in the management of projects that take conflict into consideration. At this stage it is doubtful if "conflict mainstreaming" would be a viable way of addressing the issues in water management.

This does not mean conflict perspectives should not be introduced into water projects. Such inclusion must be made in participation with the already existing conflict units of donors and NGOs that focus on conflict and it should not be constructed as another onerous process pressed down by top management. Issues related to conflict and conflict management are still at an early stage of development and will be difficult to communicate in the same self-explanatory way as environmental and gender issues. The success of gender and environmental mainstreaming could of course be discussed but it must be recognised that these efforts have had an impact on the programming of many donors.

When it comes to the introduction of new practices in development large donors probably are among the few actors that have enough leverage to influence how conflicts are dealt within the water sector.

#### *Costs and benefits of conflict sensitivity*

The methods and thinking on conflict in water interventions entail costs. In the first stages in additional time and resources spent in preparing and analysing projects, further during execution and monitoring, in capacity building etc. The relative newness of the concepts and the lack of data on the results of such methods make it difficult to draw any conclusion on the effects of such practices. Considering the amount of factors and the number of actors involved it will be very difficult, or even impossible, to evaluate results at the present stage. If it wasn't for the lack of research on the results it would be tempting to say: "if you think action is expensive, try inaction". It is clear though that conflicts, especially when they turn violent, incur very high costs on societies; both in economic and social terms.

On the macro level, the impact of development aid in general on conflicts is probably very limited. (Klingebiel, 1999) On the project level, if conflict perspectives can be linked to projected outcomes and used in analysing impacts, it may be beneficial. The challenge is to maintain such a link and focus on the results, otherwise conflict practices might end up facing the same criticism as has been advanced against the IWRM concept, i.e. that it is overtly process oriented and that results tend to be secondary.

On the other hand, conflict sensitivity is process oriented and a way of changing the execution and monitoring of interventions. At this stage it might not be feasible to link such analysis to results but rather regard it as one of many tools to be used in design and execution of interventions. The information gained in analysis and monitoring must be acted upon and fed back into the project. To create and maintain this link is crucial to the implementation of conflict practice in project management.

#### *Risks of focussing on conflict*

It should be mentioned that there is a possibility that an overtly conflict oriented approach may bring its own problems. Conflict analysis and conflict sensitivity have been developed when working in situations with open conflicts. It will take some time before the practice has been adapted to the application in other types of situations with different levels of conflict intensity.

The analysis of actors and their respective interests may exaggerate the difference between the actors. It is also easy to get paranoid when assigning (hidden) interest or agendas to involved parties. An important step when recognising the interests of all actors is to ponder the interests of the party you are representing as a project actor as well as your own goals. Such a comparison might be beneficial when understanding how interests are acted upon and how the role of the donor and project owner, be it an international body or a national government agency, interacts with the goals and interest of other actors. Such analysis could maybe be said to be present in the criticism that is often ventured from Southern actors against the Northern development sector when discussing interests and the objectives of development work. Development aid actors are accused of harbouring self interest, of promoting hidden agendas etc. As any other practice conflict analysis and sensitivity must be operated with caution and balance.

### Traditional methods for water conflict management

Peace and conflict research has a long tradition of investigating local methods of conflict resolution. More recently local methods have been investigated when looking at water distribution and conflicts over the use and allocation of water. The crucial issue in this context is to what extent such methods are applicable in the present conflicts with water components. Much of this research is the result of projects promoting conflict resolution and transformation in areas where water is an issue. The findings are based on established relationships within and between different communities and do not often take into account the effects of additional resources brought in from the "outside" by external actors such as donors and/or national governments. These methods are by and large rural and are probably difficult to transplant to urban settings.

There is sometimes a subtle component of nostalgia in the proffered respect for these methods; some authors admit that traditional methods already have been weakened by changes in society. (Attia, 1985) Aaron Wolf discusses whether such local methods can be transposed to the international stage:

"This work investigates the water negotiation practices of the Berbers of the High Atlas Mountains and the Bedouin of the Negev Desert, in the search for guidelines to help resolve water conflicts between modern nations. While doing so, I fully recognize that transposing such guidelines from location to location or from the local to the international setting has inherent limitations: these approaches to resource management were developed within particular social constructs and physical environments; they apply to small scale local settings where near-total transparency prevails; and they are adhered to by relatively homogeneous populations with widely shared values – none of which is true of international basins. Nevertheless, I feel that these experiences are useful to add to the global record of approaches to problem solving, such that they might be drawn upon and modified where appropriate." (Wolf, 2000)

Another example is Medhane Tadesse who writes in the end report of the ECOMAN project: *Transformation of resource conflicts: approach and instruments*. (Baechler et al, 2002) He discusses traditional conflict resolution mechanisms in relation to various ethnic groups in Ethiopia and how they are used in dealing with among other things water issues. Tadesse explains how different methods are used in various communities and comments on the interaction between communities:

"Although both groups have a rich tradition of resolving conflicts within their respective communities, they have difficulties to turn it into a mechanism of conflict resolution in interethnic wars. There may be several reasons for this fact. Firstly, the two main groups maintain distinct cultural identities. Secondly, it seems to be difficult to harmonize two different systems and provide them with religious justification. Thirdly, there is no common base on which an initiative could be launched. Thus most of the time the resolution of conflicts between the Borana and the Somalis necessitates the involvement of a third party, preferably a powerful one such as the central government. Nevertheless, this does not mean that local initiatives are always weak." (Tadesse, 2002)

It seems that methods that are based in local traditions have difficulties when interacting with other communities. Tadesse recognises the necessity for central government involvement and Wolf propagates for the institution of an "international water dispute authority" in the article cited above.

It is important to ponder whether such methods are congruent with donor's requirements on democracy, transparency, gender equality etc. Traditional methods are by definition a way of preserving traditional societal structures. Such questions obviously have a bearing on all aid activities and how they affect local communities and the societies at large which they act in. William Zartman observes:

“The spirit of traditional conflict management is conservative, maintaining the status quo, an appropriate stance in an era little marked by social and political change. The modern era is radically different, for better or for worse, but “better or worse” is no help in determining which conflicts need managing in the direction of status quo and which in the direction of change.” ([Zartman, 2000](#))

Further exploration of local methods will add knowledge and give inspiration in developing new ways of resolving water issues as underlined above. Some observers note that not taking such existing methods in consideration when developing institutional water management frameworks might in itself add risk to the project. ([Maganga, 2002](#))

### **Addressing causes or symptoms of conflicts?**

Peace and Conflict research often focus on the root causes of conflict and how such these can be addressed. Such solutions often entail major societal change, such as democratisation and economic growth etc., issues that cannot be addressed in the form of “projects”. The discussion on governance is similar in the respect that it deals with macro level issues. Realistically such change is not possible to address in water interventions, it might not even be desirable. While trying to maintain the link to outcomes lower ambitions might be warranted in many situations. Conflict sensitivity can be one of the methods of setting a realistic context and level of ambition in the project. Actors often have diverging views on the level of ambition. A policy report discussing how to introduce conflict-resolution mechanisms sustains:

“In situations where conflict-resolution mechanisms do need to be established from the outset, it is essential that they are developed in intimate collaboration with the stakeholders concerned. Experience with this form of participatory institutional development is still relatively rare within water-resource management, not least in relation to conflict resolution, and this is an important issue for further exploration and piloting through donor-funded efforts. [...] While such approaches constitute an important way forward in local dispute resolution, it is also clear that they need to be considered as part of the larger water-governance process. If this is not done, conflict resolution becomes a case of treating the symptoms rather than the disease.” ([DIIS, 2004a](#))

In the project mould it is difficult to address diseases, i.e. root causes. If objectives are realistically set and outcomes achieved many actors would agree that it is sufficient to treat the symptoms. High (perhaps too high?) ambitions are sometimes found to induce conflicts in water projects:

“The more ambitious schemes were more likely to expose conflicts, and conflicts tended to be more severe in drier areas, where competition for scarce resources, especially during the dry season, was more pronounced.” ([World Bank, 2005a](#))

If we accept the notion that society is not hydrologically determined we will also have to accept that water interventions can only have a limited impact on larger societal issues. Dealing with conflicts in projects can in this context be seen as a way of increasing the efficiency of the investment and not as a way of changing societal structures. As everybody involved in development knows, it is often impossible to clearly distinguish the limits of the project, a fact that often leads to the setting of unrealistic targets.

### **Introducing conflict analysis and sensitivity through the project cycle**

The following points are only intended as a brief introduction to conflict thinking. The amount of material on conflict analysis and conflict sensitivity is growing fast. When we refer to “conflict thinking” it must be admitted that there is no common framework or methodology used by different actors, though in essence, the various manuals and tools and the ideology and research backing up these procedures, are similar.

Many development agencies have produced their own manuals, toolboxes and frameworks dealing with conflict analysis and conflict sensitive development aid. These manuals are varied

in their level of concreteness but are to a certain extent similar in their structure. We will exemplify with material from such documents. There is little material concentrating specifically on water interventions, only some case studies presented in manuals deal with projects with water components.

So far the most comprehensive overview of both methodology and existing material is found in the "Resource pack" produced by a group of NGOs supported by international donors: *Conflict sensitive approaches to development, humanitarian assistance and peace building: Tools for peace and conflict impact assessment*. ([Conflict sensitive approaches...](#), 2004) A helpful list of tools for conflict analysis is found in [Annex 1](#) where many of the existing analysis tools and frameworks are described and commented.

#### *Diversity in water projects and cultural contexts*

Diversity in water interventions, from large basin wide initiatives and big dams to small community driven water and sanitation projects makes it difficult to define procedures or suggest solutions that fit every situation.

Different cultures and societies have various attitudes to consensus and conflict and how these should be, or not, dealt with. Again, it is important to avoid the fault of lumping together very different countries and areas, just because they are deemed poor. Conflict practice has also been used in developed world contexts. An interesting example is a conflict analysis methodology developed and illustrated by case studies from two watersheds in Southern France. ([Rinaudo, Garin, 2003](#))

#### *Conflict sensitivity*

"Conflict sensitivity" has gained some acceptance as a concept encompassing the different stages and procedures that make up "conflict practice". ([KOFF, 2004](#)) Another label is "Peace and Conflict Impact Assessment" (PCIA) which is similar in the methods and tools used for analysis but focuses more on work in conflict zones. ([GTZ, 2001b](#))

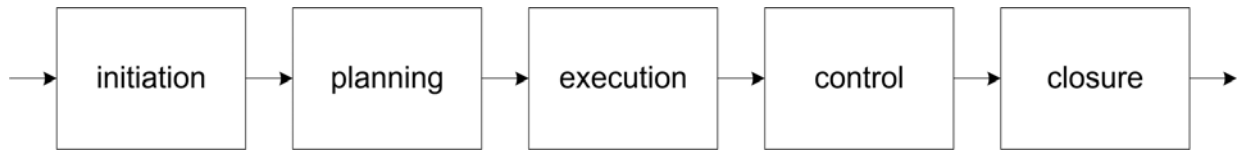
**Table 3: The "What" and "How" of conflict sensitivity**

| What to do   | How to do it  |
|--|---|
| Understand the context in which you operate                                    | Carry out a conflict analysis, and update it regularly  |
| Understand the interaction between your intervention and the context           | Link the conflict analysis with the programming cycle of your intervention  |
| Use this understanding to avoid negative impacts and maximise positive impacts | Plan, implement, monitor and evaluate your intervention in a conflict-sensitive fashion (including redesign when necessary) |
| <a href="#">(Conflict sensitive approaches..., 2004)</a>                       |   |

#### *Phases in projects*

There are a plethora of different definitions of how projects evolve, the five phases defined by the Project Management Institutes (PMI) probably covers most projects. ([PMI, 2004](#)) Such models are evidently grossly simplified and most sectors tend to sustain that projects in their own realm have specific characteristics. It is also questionable how adequate a time-sequence model is in describing complex processes.

Figure 5: Project phases



While discussing the role of conflict oriented thinking in water interventions it might be useful to relate to this general model and define where conflict sensitivity can be introduced.

*Conflict analysis*

Initial conflict analysis sets the context of the project and maps the risks of the project being affected by or in the worst case, creating or fuelling conflict. A first conflict analysis when considering major societal conflict looks at the three elements discussed above in “Definition of conflict”: incompatibilities, attitudes and dynamics. A template used by DFID (Department for International Development, UK) defines conflict analysis as the investigation of “historical and structural antecedents of violent conflict” and specifies the areas to investigate:

Table 4: Conflict analysis template

| <b>Structures</b>                                  | <b>Actors</b>                | <b>Dynamics</b>                  |
|--|------------------------------|----------------------------------|
| Analysis of long term factors underlying conflict: | Analysis of conflict actors: | Analysis of:                     |
| Security   | Interests                    | Long term trends of conflict     |
| Political  | Relations                    | Triggers for increased violence  |
| Economic   | Capacities                   | Capacities for managing conflict |
| Social   | Peace agendas                | Likely future conflict scenarios |

(DFID, 2002)

*Actors & interests*

The analysis of actors is fundamental to creating an understanding of how different parties in a project relate to the project and the intended outcomes. It is important to recognise that many actors will not have the same goal and interests will not always be expressed openly. The analysis of actors’ interests is similar to the social analysis done in Social Impact Assessments (SIA). There are various ways to implement and document such procedures, below is a Stakeholder Analysis Matrix from a World Bank social analysis sourcebook.

Table 5: Stakeholder analysis matrix

| Stakeholder Categories  | Relevant Stakeholders | Characteristics<br>Social Situation, Location, Size, Organizational Capability | Interests<br>Commitment to Status Quo vs. Openness to Change | Influence<br>H=High, M=Medium, L=Low |
|---|-----------------------|--|--|--------------------------------------|
| Government Policy-makers  |                       |  |  |                                      |
| Implementing Agency<br>Staffs                                   |                       |  |  |                                      |
| Intended Beneficiaries  |                       |  |  |                                      |
| Adversely Affected Persons                                      |                       |  |  |                                      |
| Organized Interest Groups (business associations, trade unions) |                       |  |  |                                      |
| Civil Society (NGOs, CBOs, Religious Organizations)             |                       |  |  |                                      |
| Donors  |                       |  |  |                                      |
| Other External / International Stakeholders                     |                       |  |  |                                      |

(World Bank, 2003c)

*Do not always assume a common goal*

A fair amount of introspection is warranted, what are the interests of the actor you represent, what are your own interests? Are they different from those of other actors involved?

The donor will necessarily become an actor if conflict arises, whatever the objectives. Donors and implementers could do well in asking themselves whether they have the competence and capacity to deal with conflict in the specific context of the project.

Most international donors work with local implementing agencies; to what extent are they neutral in the face of tension and conflict etc?

When looking at the scheme above it is important not to stop at the point of stakeholder analysis. Does such an analysis include all actors? How widely do the impacts of the project spread? Are all relevant actors included?

How is the role of the primary donor accounted for? What is the role of other donors? Is there sufficient coordination in the area of the intervention? The lack of consideration of what other donors are doing in the area or adjoining areas is a possible source of conflict:

“Small Water: It would appear that the development of water resources has the greatest impact on the potential causes of violent conflict in the Horn at the intra-society level, and principally the most localized “small water” type interventions in community water supply. The principal reason is that the approach taken by funders and implementers is frequently patchwork in a particular area and, though usually under a governmental “umbrella”, is not co-ordinated effectively between agencies. Thus, where water supply in arid, pastoral areas involves the develop-

ment of deep boreholes for human and livestock consumption, the impact on surrounding livelihood systems can be great." ([Allan, Nicol, 1998](#))

The position and interest of actors will change over time, both as a result of the outcomes of the project and because of other external factors. This is one of the reasons that the analysis of actors and interests must be updated regularly or be an integral part of the monitoring of the project.

#### *Determining scale of intervention*

Conflict analysis is one of the ways of determining the scale of a project. The analysis of actors and interest will give additional information when setting the limits for the intervention. As soon as we find that there are actors that belong outside the geographical or social context of the planned project these must in some way be included in the planning.

In this context the debate as to what approach to choose when designing projects is of relevance. The basin wide approach often promoted in IWRM might make such limitations difficult. A balance must be struck between considering the geographical/environmental criteria of wide approaches and the socio-cultural aspects defined in planning and analysis. A constant debate in conflict research is how the role of actors within the context differs from actors that take part in the conflict but which are not directly affected by the situation.

#### *Dynamics and escalation*

The concept of escalation and intensity of conflict is debated and discussed in Peace and Conflict research. There is some consensus on the process of escalation that leads to conflict, both internal and international. Higher levels of escalation often presuppose leadership and an ability to mobilise groups of the population. Escalation is often seen as a progressively changing scale of attitudes which lead to a higher propensity for conflict. The level of mobilisation required for a full-scale armed conflict is obviously considerably larger than most of the attitudes we can observe in the local conflicts where water is one of the grievances.

#### *Conflict sensitive management/implementation*

During the execution of a project the issues of conflict should be monitored and followed. No single intervention is exactly like another and each project will present its own special problems and challenges. Project management is to a certain extent dealing with unplanned and often unwished for effects of the implementation. This does not change when trying to integrate conflict sensitivity in projects. Additional information gained in analysis will make decisions on how to proceed more conscious of the aspects of conflict and how it influences outcomes and impacts.

The box below is from a recent World Bank conflict analysis of Somalia. The analysis also gives recommendations on project execution. Somalia is obviously an extreme case of a conflict ridden environment where to execute projects. This extreme situation makes the advice especially clear. The list below is a mix of issues from planning and execution of projects. Many actors involved in executing projects can probably exemplify situations from many of the points listed out of their own experiences. The list is based on the presumption that projects can have positive impacts on conflict situations, something that is of course difficult to prove as discussed above. Even so, only to avoid conflicts within the project may be a worthy enough goal. The checklist synthesises many of the elements to consider when trying to implement a conflict perspective in development projects.

## Box 7. Operational Issues to Consider in Program Design and Implementation

Programmatic interventions in conflict-affected Somalia could have an impact on the peace and conflict environment. The key is to manage these impacts so that they do not create or escalate conflict. It may be helpful for teams to consider a series of questions in project design and implementation:

a. Where is the project located? Examine the chief conflicts prevalent in the area of the project. This will provide the sociopolitical context a highlight the potential tensions that may arise. The team should also be cognizant that the conflicts could influence the outcome of the project.

b. Who are the main beneficiaries/target groups of the project? The teams should take special care to understand the clan basis of the groups.

c. What are the relationships among the main target groups? Here it may be useful to examine current relations as well as a brief history of the relations.

d. Who are the main stakeholder groups in the area? What is their relation with the target groups of the project? In what ways, if any, would the project create or increase differential access to opportunities within and between target and stakeholder groups?

e. What are perceived as wins and losses arising from the project? Is it perceived as a zero-sum outcome by certain groups; will it create competition within target groups and between target groups and others?

f. How will the project affect traditional power structures? How will it affect traditional authority and decisionmaking; how does it threaten the vested interests of certain groups, who are not the beneficiaries of the project?

g. Does the project contribute to collaboration among groups? How will it serve to be a bridge between groups? How will it lead to cooperation and reduction of tensions?

h. How can local conflict management institutions and processes serve as constructive influences?

i. If the project creates unnecessary tensions, what kind of contingency plans have been designed? What kind of explicit mechanisms have been put in place to address the conflict dimensions that may arise during project implementation?

j. How is the client staff represented in the project? Is it representative of the groups affected by the project, or does it go beyond directly affected groups?

k. Who makes decisions on issues such as staffing, allocation of funds, and project resources? How may these decisions affect relations among groups?

l. Who makes decisions on contracts, including choice of contractors, resources such as building materials, cement, gravel, and so on?

(World Bank, 2005b)

### *Monitoring & evaluation*

Consistent monitoring of both outcomes and impacts is needed. Impacts are effects of the project which are not part of the planned outcomes and every project may be assumed to result in such impacts. All impacts are probably not possible to foresee whatever the quality of design and planning of the intervention.

Projects tend to be shaped during the course of implementation and monitoring is one of the ways to provide information on how to change aspects of the project in relation to the changed context. A functioning monitoring system throughout the project is need if impacts are to be discovered and addressed during the implementation phase. As underlined above it is difficult to establish causal relationships considering the amount of factors involved many of them external to the project.

There is so far little "practical" information on conflict sensitive monitoring in the available literature and most focus is put on how projects may influence a larger societal context. If we limit the conflict monitoring to trying to understand and discover contentious issues within the framework of the project the task will be easier. The challenge is to have the flexibility and re-

sources to be able to change and redesign the project in accordance with the information gained without losing the focus in the project.

## Recommendations

### *Recommendations for donors*

As pointed out above donors and other major investors are probably the only parties that can influence how conflicts are addressed on the project level. Many donors have already made efforts in this direction.

We have argued that some of the experiences and knowledge drawn from conflict practice do exist in the pool of water management knowledge. The challenge is to introduce in a structured form into projects to improve results and learning. To achieve this, a shift in attitudes is necessary on the behalf of all actors involved. One of the major first steps to achieve such a (slow) shift is by starting to acknowledge that conflicts do have an important effect on water management and water projects.

### *Acknowledge conflict*

If there is no information on conflicts in projects it cannot be seen to exist. Therefore no learning on conflicts can take place. We are aware of the strong barriers against acknowledging conflict on the project level. A donor representative called the state of the affairs "the cover up of the cover up". The first step is to accept that the donor is an active actor in conflict on the project level and accept the complexity of the issues.

### *Bridging the policy - management gap*

The common denominator for the difficulties of transferring knowledge from the science/academic sector to the world of decision-making and policy is "the science - policy gap". This is an issue that has been well investigated in the aid sector. ([de Vibe et al, 2002](#); [Ramalingam, 2005](#))

The problem, notwithstanding the proffered goal of almost all donor agencies to being "learning organisations", is that that this knowledge often does not seem to reach the actual programming and project execution level. In many cases a "policy - management" gap might be a better expression of the problems that affect some projects.

Many organisations have rules, regulations etc. that prescribe conflict analysis and impact assessments etc. but when looking at the individual projects the results of these prescriptions are seldom visible.

Our impression is that attention to these issues is growing, at least in the central departments of donors. But on the project level a conflict perspective is far from operational. The situation could be compared with the compulsory environmental or gender assessment that few actors question nowadays.

The process of acknowledging conflict has begun on the policy level; by introducing rules and regulations that demand conflict assessments and by prescribing conflict analysis on the macro level etc. Now it is time to bring this knowledge to the level where the investments are made - to the actual project level.

### *Avoid conflict mainstreaming at this stage*

Incorporating new practices is a slow process. Mainstreaming of environmental concerns in development has only recently had practical results on the operational level. The mainstreaming of gender issues has arguably yet not yet brought this perspective to an integrated role in development practice.

Conflict sensitivity is probably not mature enough for mainstreaming in all aid activities. Conflict perspectives need to be introduced but more awareness of results and methods is required before it is feasible to put conflict sensitivity as a goal for mainstreaming. It is not even sure whether mainstreaming is an appropriate process for introducing conflict perspectives.

*Require structured processes dealing with conflict*

"What is measured gets done" is an old saying. In the process of putting more focus on conflict donors need to put stricter demands on processes and how conflicts are addressed in monitoring and evaluations. Such processes will have to be documented. The point is not to demand more documentation from projects but to be able to guarantee that such processes have been followed and that conflicts have been analysed and addressed.

Agencies with many water interventions might consider looking into these interventions with an explicit conflict perspective to try to track performance and impacts as a first step in investigating if and how "their" interventions have been affected by conflicts.

*Include conflict components in requests for tenders etc.*

Request for tenders and project planning etc. should include explicit components that require the project to take conflict issues into consideration in a structured manner. Many donor agencies already have the competence in-house to evaluate and develop such project "modules".

*Accept that conflict sensitivity will entail costs*

When reviewing projects for conflicts and trying to understand how they have been dealt with the issue of undermanagement often comes to the fore. It is of course easy to prognosticate conflicts with hindsight and it is difficult to predict what measures are needed to avoid conflicts. What is obvious from evaluations and project reviews is that early warning signals often are disregarded; one of the reasons for this is the reluctance to acknowledge and pass on information on conflicts. If conflicts are to be dealt with in a structured manner as suggested above sufficient resources must be allocated.

*Recommendations for water sector professionals*

The influence of the single water professional on conflict issues may of course seem miniscule. The role of the individual is always extremely hard to define; the only thing we would advocate at this level is that professionals not see the inclusion of other types of knowledge and practices in water management as a threat. Social science practitioners often express a feeling of being sidelined when it comes to the actual execution level of the project; the reasons for this are probably manifold.

*Plan for conflict*

If you are in any way responsible for the design of the project try to make conflict analysis a requirement in the planning and execution of the project. The range and depth of such assessment should be in accordance with the size and extension of the projects. This is already a requirement of many donors but far from always acted upon. An initiative from the "project level" will possibly be regarded favourable by donors and financiers.

*Consult with donor or NGOs involved in conflict work*

Who is the donor? Can they offer assistance? The conflict departments of donor agencies are so far often not integrated in agency practice. By seeking their assistance you may get additional input on how to address the issues within the project.

## Acronyms

|                          |   |
|--------------------------|---|
| <a href="#">DFID</a>     | Department for International Development (UK)   |
| <a href="#">DIIS</a>     | Danish Institute for International Studies  |
| <a href="#">GTZ</a>      | Deutsche Gesellschaft für Technische Zusammenarbeit                                     |
| <a href="#">GWP</a>      | Global Water Partnership  |
| IWRM                     | Integrated Water Resources Management   |
| LIC                      | Low-income country  |
| MDG                      | Millennium Development Goal   |
| ODA                      | Official development assistance   |
| <a href="#">OECD/DAC</a> | Organisation for Economic Co-operation and Development/Development Assistance Committee |
| <a href="#">OED</a>      | Operations Evaluations Department (World Bank)  |
| PCIA                     | Peace and Conflict Impact Assessment  |
| SIA                      | Social Impact Assessment  |
| <a href="#">SIDA</a>     | Swedish International Development Cooperation Agency                                    |
| <a href="#">SIWI</a>     | Stockholm International Water Institute   |
| <a href="#">WB</a>       | World Bank  |
| <a href="#">WCD</a>      | World Commission on Dams  |
| <a href="#">WWF</a>      | World Wildlife Fund   |

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