



Addressing Power Asymmetry: How Transboundary Water Management May Serve to Reduce Poverty



**REPORT 29** 

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ISBN: 978-91-978846-2-4

ISSN: 1404-2134

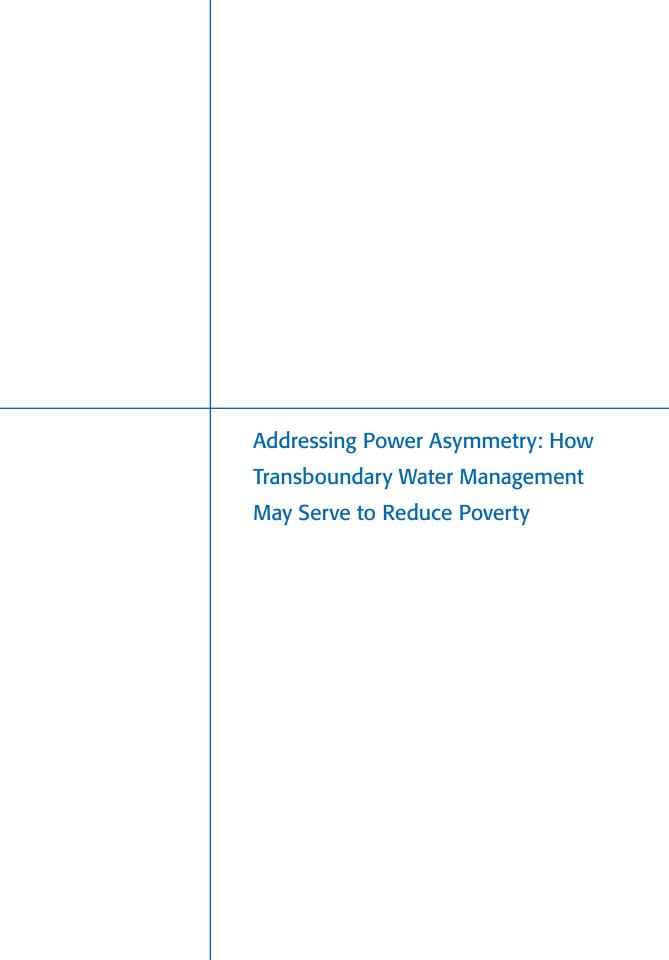
How to Cite: Zeitoun, M., Jägerskog, A. 2011. Addressing Power Asymmetry: How Transboundary Water Management May Serve to Reduce Poverty. Report Nr. 29. SIWI, Stockholm.



Design and production by Britt-Louise Andersson, SIWI. Printing by Ekotryck Redners, Stockholm, Sweden. The printing process has been certified according to the Nordic Swan label for environ-

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Cover photo: Celine Dubreuil



## Note to the Reader

This report is based on a paper by Mark Zeitoun, commissioned by and originally prepared for the Swedish International Development Cooperation Agency (Sida) and presented at a workshop on: Increasing Benefits from

Transboundary Water Management for People Living in Poverty, held in Nairobi, Kenya, on 15-16 April 2010. The views expressed in this report do not represent the official views of the Swedish Government or Sida.

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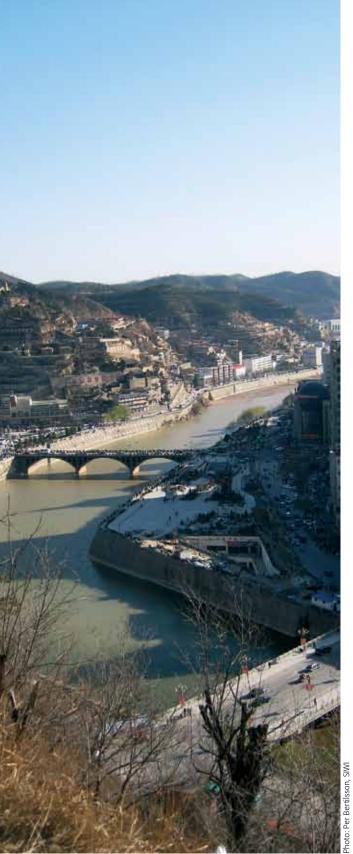
## **Summary**

This report explores how power asymmetry mediates the relationship between transboundary water management (TWM) and poverty reduction. This link between TWM and poverty reduction is potentially important, but it is indirect as TWM policy and projects promoted by basin organisations and development partners have, in most cases, not been designed chiefly to address poverty. There are several ways, however, that improved TWM arrangements may bring about benefits for poor people living within shared basins. More equitable and efficient water sharing amongst farmers across borders, for example, can lead to more sustainable water use and more secure yields. Transboundary initiatives can also attract new financial investments and the resulting economic benefits can, under particular circumstances, extend to poor people.

As the relationship between TWM and poverty-reduction is tenuous, they are viewed here as integrated into part of two different spheres: the broader political-economic and the social, context. Our hypothesis is that power acts on both spheres through either the enablement or prevention of a) the political-economic context that nourishes 'effective' TWM, or b) the equitable distribution of benefits that may result from it.

Recent TWM analysis has highlighted the interests and engagement of the basin hegemon as a key limitation in productive and equitable TWM (see WWF-DFID, 2010: 27). Here we identify two approaches to address the power asymmetry that characterises such basins: its influence or its challenge. The promotion of efforts that rely on influencing power rest on the liberal assumption that 'speaking the truth' to power can alter its more egregious effects. A number of interventions undertaken through this approach may be sub-classified into tactics of the generation of positivesum outcomes (e.g. benefit-sharing), or the encouragement of transformation (e.g. dialogue platforms). The approach of challenging power assumes that greater symmetry in power will achieve more equitable and sustainable outcomes. Tactics employed under this strategy include 'levelling the players' (e.g. building institutional and technical capacity) or 'levelling the playing field' (e.g. strengthening law and regulation).

In regions where the basin hegemon has enabled 'positive' interaction between the actors, approaches to both influencing and challenging power asymmetry have been shown to have some degree of success. In basins where the hegemon is leading 'negative' transboundary interactions, neither the influence or challenge approach has proven effective.



# **Key Messages**

Failure to engage the basin hegemon constructively will hamper effective cooperation on transboundary waters. Equitability in TWM is key to effective cooperation. Existing power asymmetries that prevent equitable outcomes or processes can be confronted through strategies to either 'influence' or 'challenge' them. Approaches to influence powerful actors include matching interests or encouraging transformation. Options to challenge power are centred on strategies to 'level the players' (by building capacity in weaker actors) or through 'levelling of the playing field' (e. g. through emphasising international water law).

The effectiveness of strategies to confront power asymmetries varies from basin to basin. Capacity building may be the best means to challenge power in one region while in another, the development of benefit sharing schemes may be more effective. A thorough analysis of the geo-political and socio-economic context of the basin is necessary to decide on appropriate strategies and ways of support.

Effective TWM may contribute to poverty reduction, though further research is required. While much of the support to TWM is not intended to directly alleviate poverty, this report suggests that its effect within the broader political context can contribute indirectly to it. Substantial research into the indirect impact that different types of basin projects and programmes have on poverty reduction is required, before the merits can be claimed.



# The Relationship between Power, Poverty, and TWM

This report explores the relationship between power, transboundary water management (TWM), and poverty. The goal is to begin to address the central question: How does 'power' impact TWM efforts and poverty-reduction? More specifically, how can power asymmetry in transboundary water settings enable or prevent poverty reduction?

The objective of this exploratory and forward-looking report is to outline areas in need of further research, and provide guidance for policy-makers involved in transboundary water initiatives .

One of the stated aims of most development agencies who provide support to TWM in Africa, Asia South America and other parts of the world is to reduce poverty. While it seems clear that financial or technical support to TWM may enhance 'positive' interaction, prevent conflict, and in some cases improve international or regional economic integration, the contribution it can make to poverty reduction is less sharp (see e.g. Levene 2010). As development agencies evaluate the results of their support to TWM efforts

worldwide, many are seeking better knowledge on how their work in transboundary waters may contribute to reducing poverty.

While the will to demonstrate impact of donor funds directly onto poverty reduction is laudable, it is worth questioning whether demanding this of TWM efforts is warranted. It is entirely possible that TWM efforts may end up directly benefitting the economic elites (by encouraging cross-border industrial-level irrigation schemes, for example), or else small and medium size enterprises and subsistence farmers (through environmentally sustainable water use). Evaluations of efforts focused solely on reducing poverty run the risk of missing the mark if they do not consider impacts on the political economy that are not covered in standard poverty indicators. In any case, greater research exploring the TWM - poverty link is necessary to provide the base of evidence before assessing TWM according to goals they were not explicitly designed for. The analysis of this report is based on an understanding that this link is indirect.

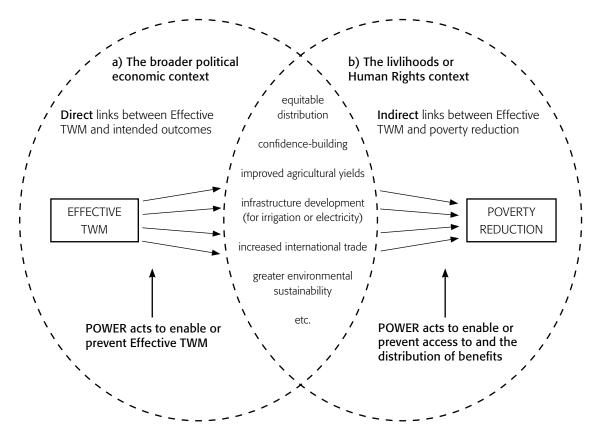


Figure 1. The indirect links between effective TWM and poverty reduction, and how power may enable or prevent either. The focus of this report is on 'a' how power can influence effective TWM.

For instance, TWM efforts undertaken to meet traditional TWM objectives may indirectly benefit poorer segments of society - as shown in Figure 1. Improved cooperation over shared rivers can, for example, result in more sustainable river use and may lead to higher agricultural yields over the long-term, perhaps, thus contributing to the farmer's livelihood and his family's income. Other TWM goals with indirect links to poverty-reduction include: increased trade through regional economic integration; financial support for water resources exploitation infrastructure; more equitable distribution of resources; more sustainable water supply and use; more certainty in terms of water supply; improved adaptation to variability; and (possibly) the valuation and equitable distribution of a number of hydrological 'ecosystem services'

(e.g. river water quality, air quality, soil bank stability, etc). The role of power in these indirect TWM-poverty links (part 'b' of Figure 1) is directly relevant to the distribution of water resources and benefits deriving from them (see e.g. Cleaver, et al., 2006).

This report focuses instead on how power (and power asymmetry) may affect the broader context which enables the indirect TWM-poverty links, as shown in part 'a' of Figure 1. It is limited to international transboundary water settings and employs a political economy lens which sees the broader political context as determining, with hydro-politics and transboundary water cooperation subordinate to it. The analysis also considers the biophysical processes related to water as inseparable from related social processes.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The approach also sees analysis of direct causal links between natural resources and social or international relations (the 'environmental determinism' approach) as being unhelpfully narrow.

The report is founded on two base assumptions related to equitability. The first is that poverty – like water conflicts – is in part a result of inequitable distribution of resources² (see e. g. Granit and Claasen, 2009). The second assumption is that any policy or project that leads to both equitable resource distribution and sustainable resource use be considered 'effective', and is a step in the right direction towards poverty reduction. It follows that forms of TWM that are skewed in favour of one actor are considered less likely to lead to poverty reduction – and (whether this was the original intended goal or not) considered as 'ineffective'.

'Power' here is understood as a factor enabling effective TWM or the distribution of benefits. But it is not as a determining factor. Power and power asymmetry are thus seen as neither inherently 'good', nor 'bad'. The use of power happens, and power asymmetry is a fact of life. As an enabling factor, however, it is crucial to note that power can either encourage or discourage effective TWM, and thus result in either 'positive' or 'negative' transboundary arrangements (and thus indirectly to poverty reduction or creation). The comprehensive 2010 WWF-DFID review of the 'international architecture' related to transboundary water resources management, for instance, notes the

role of the most powerful actors in some negative transboundary water arrangements:

Many transboundary water resources are dominated by regional economically, militarily and/or politically powerful countries (hegemons) that have a significant existing use of the water resources or intend to unilaterally develop the resources in their country at the expense of other less developed riparian countries, be they upstream or downstream. In many cases, these powerful countries do not actively engage in transboundary initiatives, postpone meaningful engagement, pressure other parties through trade or military threats and/or subvert the terms of agreements, which jeopardises the entire process, often in basins that are in real need of cooperation (WWF-DFID, 2010: 28).

The enabling (or preventing) role that basin hegemons can play towards effective TWM has attracted analytical attention (e.g. Zeitoun and Warner, 2006, Fox and Sneddon, 2007, Cascão, 2009). This focus is not reflected in the policies and projects of development partners and basin organisations, however – at least not explicitly and upon immediate reflection. A closer look at the efforts suggests that interventions that confront power are the routine, however, not the exception.



The authors also note that cooperation over transboundary rivers can help break down barriers to 'development', such as tight political borders, language or technical capacity, etc.



#### **Determining vs. enabling factors**

Determining factors are aspects of a process that have direct causal links with outcomes. Determining factors related to our investigation of TWM and poverty include (at the national level) financial capacity, technical capacity, social structures, etc. A particular TWM effort may fail, for example, due to cyclical funding patterns and lack of sustained commitment on the part of the donor, or from inequitable distribution of the benefits due to predatory social structures favouring the political elite.

Enabling factors are factors in a process that make outcomes possible. In the sense that they concern effective TWM, enabling factors can be considered to tilt the playing field between the stakeholders on each side of the border – either level or unlevel. Examples of enabling factors include individual or institutional agency and creativity, financial support (again), power, and power asymmetry. As we will see, a more powerful actor may enable an arrangement that is equitable and sustainable, or it may enable one that is inequitable and in conflict (Zeitoun and Mirumachi, 2008).

#### Multiple shades of power<sup>3</sup>

Power may usefully be conceived of in two forms — 'hard', and 'soft' (Zeitoun, et al., 2010). 'Hard' power is the power of force, measured at the national level in terms of military capacity, and economic strength. The use of hard power has been used by both Israel and Syria over the Jordan River in the 1950s and 1960s (Jägerskog, 2003), but is not common in international transboundary water settings.

'Soft' power is the much more common form of power employed in transboundary water settings. If hard power can be seen as the stick, then soft power is the carrot. Soft power may take on several forms, ranging from incentives (used e.g. to encourage cooperation), to control over thoughts and ideas (what Gramsci (2003 [1935]) terms 'hegemony'). A very common form of soft power active in transboundary water settings is 'bargaining' power. The bargaining power an actor has stems from its legitimacy in a relationship, and may be leveraged to ensure compliance without resort to hard power. This is analogous to what Scott (1985) calls the 'weapons of the weak', and is exemplified through the resolution of tensions

A commonly held perception with transboundary waters is that the upstream riparian has the natural advantage in power. Certainly the governments of upstream Turkey and China are exploiting that advantage while building dams on the Tigris and Mekong rivers. But the same riparian position enjoyed by Ethiopia on the Nile or by Nepal on the Ganges poses no similar advantage – suggesting that 'power' in transboundary water settings can transcend topography, and is certainly more subtle than it first appears.

over the River Scheld in Holland's (rather than in Germany's) favour (Warner and van Buuren, 2009). The leverage provided to so-called weaker states (or groups, or individuals) through bargaining has its limits, of course, as Cascao (2009) has demonstrated on the case of the Nile.

Gaventa's (2010) 'power cube' allows us to further conceptualise how power is employed. As shown in Figure 2, he recognises that the 'space' within which bargaining occurs can be a strong determining factor of the outcome. These spaces can be 'closed' (official, behind the scenes), 'invited' (formal participatory arrangements) or 'claimed' (demanded by an actor, when the 'space' did not previously exist) (Gaventa, 2010). The outcomes of negotiations between Palestinian and Israeli officials ('closed' space) may have great impact upon but little influence from the Palestinian farmers who suffer the inequitable distribution (AI, 2009), for example. Similarly, the bargaining power of stakeholders of large irrigation schemes invited to an exercise of token public participation may be compromised by pre-determined decisions to proceed with the project (Lankford, 2004, Warner and van Buuren, 2009).

#### Two types of transboundary water interactions

As previously noted, the exercise of any form of power can be used to either subjectively-defined negative or positive arrangements. As an enabling factor, 'soft' power can be used to underplay a transboundary water conflict in order to divert attention to or away from it. This can be through the negotiations process, which ends in treaties that are skewed in one side's favour – even when the treaty is consented to by the weaker side. Selby (2003) refers to the Israeli 'domination dressed up as cooperation' along the Jordan River, and suggests that 'cooperation' alone is an inadequate term to describe the range of interaction that exists between states over trans-boundary waters.

'Effective TWM' is understood here in the positive sense of "inter-state interaction that generally tends to meet the interests of the actors, and contributes to improvement or sustained relations at the broader political level" (Zeitoun and Mirumachi, 2008: 310). With this logic, effective TWM will either follow from or generate effective transboundary water cooperation – as in the relationship stemming from the 1909 Boundary Waters Treaty between Canada and the United States, for lack of a better example.<sup>4</sup>

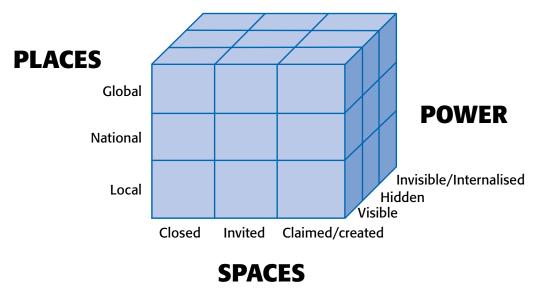


Figure 2. Gaventa's 'power cube', demonstrating the forms, levels and spaces of power.

Though real concerns with the Treaty's limited jurisdiction must be noted to qualify the evaluation (see e.g. Bakker, 2007). There is evidence of US unilateralism e.g. on the 'North Dakota' Devil's Lake, for instance, where the Treaty was not invoked.

The flip-side form of effective or 'positive' transboundary water interaction is 'negative' interaction, which is defined as "inter-state interaction inducing a significant degree of resentment with one or more of the actors, thereby negatively affecting the broader political context" (Zeitoun and Mirumachi, 2008: 309). Of course, all forms of water conflict fall under this category, as do the inequitable arrangements that may otherwise be portrayed as 'cooperative' (see Zeitoun, et al., 2010). Upstream dam-building by hegemons on the Tigris or Mekong rivers (MRC, 2010), and other unilateral actions on transboundary rivers have been identified as examples of negative interaction.

#### **Choosing the right approach**

Two approaches have been identified to confront power asymmetry in transboundary water settings: either through its influence or through its challenge (Zeitoun and Jägerskog, 2009). Efforts by donors and basin organisations for effective TWM can be classified into either approach, as shown in Table 1 and discussed following.

First, the approach of influencing power asymmetry rests on the logic of the liberal 'reform' view of change and how to confront power asymmetry: that recognition of inequitable (or unfair) situations will lead to its rectification.<sup>5</sup> 'Speaking the truth to power',

in other words, is thought to be able to alter its more egregious effects. It is illustrative to view this approach as achieved through tactics in two sub-categories: the matching of interests (through the creation of 'positive-sum' solutions), and the encouragement of transformation. The logic of 'matching interests' solutions rests on the assumption that efforts meeting the interests of powerful stakeholders will be supported by them. Identification of projects beneficial both to the weaker side and to the stronger side are sought, and developed. Examples include the sharing of benefits related to water (such as food, or hydropower) (Sadoff and Grey, 2005, Phillips, et al., 2006, Dombrowsky, 2010), or cooperative projects based on sharing risks (WWF-DFID, 2010: 38).

The tactic of 'encouraging transformation' to influence power is based on the idea that the more powerful side may be persuaded to allow changes to existing arrangements primarily through appeals to their leadership. The interests of the weaker side may be met in part, it is supposed, by policies that are 'championed' by a particularly powerful person or group. Similarly, economic and pricing signals, or 'naming and shaming', can be used to elicit transformation. The focus of such interventions remains on the hegemon, which must be persuaded by them or otherwise see them as sufficiently persuasive (or coercive). 'Dialogue plat-

Approach	Influencing Power		Challenging Power	
Tactic	Matching interests	Encouraging Transformation	Levelling the Players	Levelling the Playing Field
Examples of interventions	Generation of positive-sum outcomes: TB pollution clean-up; 'joint risk' efforts; equitable water sharing; benefit- sharing;	Economic signals; 'naming and shaming'; Environmental diplomacy; dialogue platforms (Ward, et al., 2007);	Building capacity (technical, negotiations, administration); establishment of WUAs;	Objective water sharing standards (IWL); Harmonisation of national environmental regulation;

TB = transboundary; IWL = International Water Law (the 1997 UN Watercourses Convention, and the Draft Articles on Groundwater); WUA = Water Users Associations.

Table 1. Theoretical examples of typical TWM efforts and interventions that either a) influence or b) challenge power. Each approach may be further sub-classified into two tactics, as shown. The classification of existing efforts may permit strategic planning aimed at the creation of an environment enabling equitable sharing/poverty reduction.

<sup>&</sup>lt;sup>5</sup> This approach is analogous to Cascao's (2009) identification of resistance to hegemony through existing structures – what she terms a 'coerceive mechanism' in her study of counter hydro-hegemony (see also Kistin 2010: Table 2.4).

forms' which bring stakeholders together (e.g. Ward, et al., 2007) are one possible route facilitating the transformation once the interests are established.

The second approach to confronting power in transboundary water settings sees power asymmetry as a disabling factor to be addressed. If the 'influencing power' approach may be considered 'reformist', the 'challenging power' approach can be considered 'liberating' – borrowing from Cascao<sup>6</sup> (2009). Scott's 'weapons of the weak', and Gaventa's 'power cube' applied for social transformation follow this approach. Zeitoun and Jägerskog (2009) suggested that this approach is sought also through two tactics: levelling the playing field or to levelling the players (Table 1). The sub-approach of 'levelling the players' relies on increasing the legitimacy or authority of the less powerful side. Institutional capacity-building and other classic donor interventions (e.g. the creation of water users associations (WUAs)) in TWM are examples - though they may generally not be considered as addressing power asymmetries. In that respect bilateral support programmes of donors to water authorities (not necessarily with direct linkage to TWM support) and similar actors are further important components.

The tactic of 'levelling the playing field' recognises that effective TWM can be prevented (or disabled) by the fact that the terms of interaction between the stronger and weaker parties are not balanced. Effective TWM may thus be the result of an even playing field, which may come about through e.g. strengthening of the legislative and regulatory context, such that all parties are subject to the same regulation. Efforts devoted to strengthening the application of the principles of international water or environmental law are further examples of tactics undertaken in the 'challenging power' approach, as are attempts to harmonise or standardise national environmental regulation.



<sup>6</sup> Cascao (2009) uses the term 'liberating mechanisms' to describe counter hydro-hegemonic devices that challenge legitimacy through the advancement of alternatives (see also Kistin 2010: Table 2.4).

<sup>&</sup>quot;Asymmetries in the capacity of riparians pose a significant impediment to effective cooperation, from stronger hegemons and from weaker riparians. Particular area of focus [sic] should be: Processes to facilitate cooperation between riparians in stressed or threatened basins should therefore involve targeted national institutional capacity building initiatives to "level the playing field" and ensure national alignment with the pre-requisites for effective transboundary cooperation (such as policy, legislation and institutional arrangements) (WWF-DFID, 2010: 53).

It would be naïve to think, of course, that law itself is beyond the reach of powerful actors. As Rolling notes, "In all positive law is hidden the element of power and the element of interest. Law is not the same as power, nor is it the same as interest, but it gives expression to the former power-relation. Law has the inclination to serve primarily the interests of the powerful" (B.V.A. Rolling 1960, cited in Malanczuk, 1997: 33).



As we have seen, power can enable effective TWM and in turn contribute to poverty-reduction, but is not necessarily a determining factor. The more powerful actor(s) in an international river basin, in other words, may either facilitate or block efforts at effective TWM - refer to Table 2. For the sake of our exploration of the role between power, effective TWM and poverty-reduction, the role that basin hegemons play may be labelled 'enabling' or 'preventative'. While the weaker actors in Table 2 may be considered spoilers (or 'free riders') of TWM processes (see e.g. Schlager, 2007: 132), they generally lack the luxury of ignoring initiatives or moves from their stronger neighbours. Our real interest is with the behaviour of the basin hegemon - and whether they act as a 'basin bully' or 'basin leader'.

A basin leader that encourages positive transboundary water interaction (effective cooperation that, by our definition above, leads to improvement of relations at the broader level) can thus be considered to be an enabling force for effective TWM. It has been argued that hegemonic South Africa plays a

Basin	Hegemon	Other basin actors
(numerous)	US	Canada
Orange	South Africa	Lesotho, Namibia
Tigris	Turkey	Syria, Iraq
Jordan	Israel	Palestinians, Jordan
Mekong	China	Viet Nam, Thailand, Laos, Cambodia, Burma
Ganges	India	Nepal, Bangladesh

Table 2. Examples of basin hegemons.

leadership (and thus enabling)has enabled effective TWM regime between Lesotho, Botswana and Namibia on the Orange-Senqu River (Turton and Funke, 2008), similar in some ways to the Canada-US case. While there is evidence of unilateral and self-interested action by the basin hegemons in both cases, they are used here as counter-point to the more evidently 'negative' interaction existing in other basins.

By contrast, in developing the waters of the Ganges River, sequential governments of basin hegemon India could be seen to have countered efforts for more effective TWM by their weaker riparian neighbours. India's signing of double bi-lateral Ganges River treaties with Nepal and Bangladesh is one example (Barrett, 1994, Ahmad and Ahmed, 2004). Gyawali (2001) notes that Nepalese proposals of water development schemes through a mix of diplomatic negotiations and the compilation of scientific data of their preferred projects have not been taken up by India (see also Dhungel (2009)) and it may be considered to keeping the bargaining space 'closed'. Infrastructure development by China upstream on the Mekong has occurred outside of spaces that were attempted to be claimed by states with less hard power thus effectively limiting options for the countries downstream (see Cronin and Hamlin 2010). Similarly, subsequent Israeli governments have maintained the asymmetrical water allocation over their Palestinian co-riparians (Selby, 2003), through the 'invited' space of two rounds of direct negotiations (in 2000 and 2008) following the original round in 1995 (see e.g. Lautze, et al., 2005), as well as through prevention of attendance of their representatives at conferences (PWA 2008a, 2008b).

While the 1980s Apartheid regime dominated relationships with neighbouring countries, the authors argue, support of post-Apartheid governments for water treaties and regional water management institutions (i.e. in Southern Africa Development Community) is evidence of the new integrative manner in which the power is exercised (see also Kistin et. al. (2009)).

## **Making Support Strategic**

As discussed, most TWM efforts supported by development partners tend to fall into any of the three sub-approaches listed below (and adapted from Sida's current review on transboundary water management and poverty reduction, Levene, 2010):

- Strengthened organisational and institutional capacity and frameworks, including basin management agreements.
- Strengthened processes of regional TWM cooperation through formal organisations, civil society and networking.
- Contribution to regional stability, peace, coopera-tion and financial growth.

Each of these has been plotted in Table 3 in order to demonstrate how proven or existing TWM efforts may be developed into strategies to support weaker actors. The approach permits strategic planning towards creating a more enabling environment for equitable sharing/poverty reduction.

Table 3 represents preliminary work to systematise learning on how TWM efforts can address power asymmetry. All of the activities listed are routine; it is only their classification that is novel. The innovation of the frame suggested is that it permits both a) identification of which actors specific interventions should be focused on; and b) the formation of strategic combinations with perhaps more effect than uncoordinated interventions.<sup>10</sup>

It also assists development partners to evaluate how power asymmetries impacts their work in transboundary basins and possibly provides direction on the development of a strategy to confront them.

Efforts to create an enabling environment for such a strategy should prioritise focus on the hegemonic actor in the basin. Likewise, capacity-building efforts should be concentrated on the non-hegemonic actors. If applied to the South Asia Water Initiative, for instance, environmental diplomacy (e.g. Kjellen, 2007) efforts should be concentrated on India,



<sup>10</sup> The approach is similar to the 'Targetted Engagement Strategy' developed for wetlands conservation in Nigeria, in Barr (2007

	Influencing Power		Challenging Power	
	Positive-Sum Outcomes	Encouraging Transformation	Levelling the Players	Levelling the Playing Field
Types of TWM efforts available (from Table 1)	Generation of positive-sum outcomes: TB pollution clean-up; 'joint risk' efforts; equitable water sharing; benefit- sharing;	Economic signals; 'naming and shaming'; Environmental diplomacy; dialogue platforms (Ward, et al., 2007);	Building capacity (technical, negotiations, administration); establishment of WUAs;	Objective water sharing standards (IWL); Harmonisation of national environmental regulation;
	Exemplification			
Development partner interventions	Contribution to regional stability, peace, cooperation and financial growth	Long-term commitment to creation of 'enabling environment'	Strengthening of organisational and institutional capacity and frameworks;	Strengthening of TWM cooperation through formal organisations, civil society and networking, or of basin management agreements
	Towards a strategy			
Efforts to focus on:	Hegemon and non- hegemons	Hegemon	Non-hegemon	Hegemon and Non- hegemon
Timing of the focus:	Implementation	Setting an enabling environment	Setting an enabling environment	Setting an enabling environment
Participatory approach	Top-down	Top-down	Bottom-up	Bottom-up

TB = transboundary; IWL = International Water Law (the 1997 UN Watercourses Convention, and the Draft Articles on Groundwater); WUA = Water Users Associations; tbd = to be discussed.

Table 3. Framework for the development of TWM strategies to redress imbalances. The table shows actual TWM efforts that either influence power or challenge power. It is suggested that the use of the table permits strategic planning towards creating a more enabling environment for equitable sharing and poverty reduction.

and support should be provided for Nepali and Bangladeshi actors to improve their capacity in negotiations (which appears indeed to be the case, at least from its outset in 2009). This approach differs from most basin initiatives in that it raises uncomfortable facts with the basin hegemon (by pointing out its control over or distribution of the flows). Most initiatives take what is termed a pragmatic approach and end up suggesting only 'solutions' that the basin hegemon will sanction. It is also worth noting that support to capacity building programmes may, apart from strengthening the weaker parties, also contribute to a building of trust among riparians in a basin.

Planning, development and implementation of a strategic coordination of interventions are key to enable

effective TWM. This is part of an iterative process that should identify efforts to both influence and challenge existing power asymmetries. The focus and timing of the interventions are crucial here, as early actions may need to work to create an enabling environment and later ones can work to help with implementation.

Testing the approach of confronting power against previous efforts will helps refine its effectiveness. Along the Jordan River in the 1990s, the power and influence of USAID was applied in part to 'levelling the players' through e.g. capacity-building programmes for the Palestinian Water Authority (PWA, 2003). Less effort has been spent on 'encouraging transformation' of the basin hegemon Israel through the US-chaired (and generally 'closed') tri-lateral meet-

ings, while no attempts have been made to 'level the playing field' (for instance through support for International Water Law, or attempts at conflict resolution that might invoke customary state practice). Palestinian farmers continue to eke out a living in an highly variable climate due to the continued asymmetric distribution of the transboundary flows, and may claim space of their own to challenge the status quo. While it is certainly too much to attribute the failure of effective TWM on the Jordan River to a single cause, the case does exemplify the limitations of an uncoordinated approach.

Increasingly, TWM support is being channelled through Regional Economic Communities (RECs)

as noted by Earle et al (2010). This is perhaps due to the issue of regional integration becoming ever-more important. In the case of the Lake Victoria Basin Commission (LVBC), which is a subsidiary institution of the East African Community (EAC), this has led to improved coordination and alignment among the five countries in the Lake Basin (Okurut and Weggoro, 2011). An emerging understanding of the need to enhance capacity in the weaker states is apparent throughout the basin (Matano, 2010). While an increasing involvement of RECs (or its subsidiary institutions) in the management of transboundary waters is important, it is yet to be proven that this will enable effective cooperation.

## **Conclusions**

This report has explored how power mediates the relationship between transboundary water management and poverty alleviation. Exploratory in nature, the report investigates primarily the enabling role that power can play in implementing effective TWM. A fundamental challenge to those interested in TWM from this perspective is that most TWM efforts have as their objective sound and effective water resources management, and not poverty-reduction. Effective TWM is thus taken as a proxy for how TWM can contribute indirectly to poverty reduction, with equitable distribution of water between states understood as a base component

Methods by which power asymmetry may be confronted have been explored in basins where the basin hegemon is preventing effective TWM. Power asymmetry can be confronted, it has been shown, through either its influence or its challenge. The approach of influencing power may be achieved through 'matching interests' or through attempts to encourage transformation. The approach of challenging power may be achieved through efforts to 'level the players' or to 'level the playing field'. Success of any efforts will depend on a deep understanding of the particular political economy of the particular context concerned.

Current efforts by development partners to implement TWM were briefly reviewed and found to generally fall into either or both of the two approaches to confronting power. The skeleton of a strategy to support weaker parties suggests that a coordinated programme would be much more effective than current un-coordinated approaches. In this respect, continued and improved donor coordination is imperative.

It is furthermore clear that strategies to address power asymmetries vary from context to context. While some overarching principles and lessons are learnt, the matter of using them must be related to the specific riparian context. In addition, and as noted by Jägerskog et. al. (2009), there is no option for development partners engaged in TWM other than to commit over the long-term.

The review and analysis in the paper confirms that the links between support to TWM and poverty reduction are indirect but potentially important. Building on one of the assumptions of the paper – that any policy that leads to equitable resource distribution and sustainable resources use is a positive step towards poverty reduction – improved strategies for addressing power asymmetries in transboundary water settings must be developed.

### References

- Ahmad, Q.K. and Ahsan Uddin Ahmed (2004). Regional cooperation on water and environment in the Ganges basin: Bangladesh perspectives. *The Ganges water diversion: Environmental effects and implications*. Mirza, M. M. Q. Dordrecht; Boston; London, Kluwer Academic Publishers.
- Al (2009). Troubled Waters Palestinians Denied Fair Access to Water: Israel-occupied Palestinian Territories. MDE 15/027/2009. London, Amnesty International.
- Bakker, Karen (2007). *Eau Canada: The Future of Canada's Water.* Vancouver, UBC Press.
- Barr, Julian (2007). *Jigawa Enhancement of Wetlands Livelihoods Project.* Report for UK Department for International Development London, ITAD.
- Barrett, Scott (1994). Conflict and Cooperation in Managing International Water Resources. Policy Research Working Paper 1303. Washington, DC, World Bank Policy Research Department.
- Cascão, Ana Elisa (2008). "Counter-Hegemony in the Nile River Basin." Water Policy 10(S2): 13-28.
- Cascão, Ana Elisa (2009). "Changing power relations in the Nile river basin: Unilateralism vs. cooperation?" Water Alternatives 2(2): 245-268.
- Cascão, Ana Elisa (2009). *Political Economy of Water*Resources Management and Allocation in the Eastern

  Nile River Basin. Department of Geography. King's

  College London, London.
- Cleaver, F., T. Franks, J. Boesten and A. Kiire (2006).

  Water governance and poverty: What works for the poor? University of Bradford DFID Research Report.
- Cronin, Richard and Timothy Hamlin (2010). *Mekong Tipping Point*. Washington DC, Henry L. Stimson Center.
- Dhungel, D.N. (2009). Historical Eye View. *The Nepal-India Water Relationship: Challenges*. Dhungel, D. N. and S. B. Pun. Dordrecht, Springer. 11-68.
- Dombrovsky, Inez (2010). "Benefit Sharing in Transboundary Water Management through intra-water sector issue linkage?" in Lundqvist, J. (ed.) On the Water Front: Selections from 2009 World Water Week in Stockholm. Stockholm International Water Institute (SIWI), Stockholm
- Earle, Anton, Anders Jägerskog and Joakim Öjendal (2010). Towards a Framework for Transboundary Water Management. *Transboundary Water Manage*-

- *ment: Policy and Practice.* Earle, A., A. Jägerskog and J. Öjendal. London, Earthscan.
- Fox, Coleen, A. and Chris Sneddon (2007). "Transboundary river basin agreements in the Mekong and Zambezi basins: enhancing environmental security or securitizing the environment?" International Environmental Agreements: Politics, Law and Economics (7): 237-261.
- Gaventa, John (2010). *Power Pack: Understanding Power for Social Change*. Brighton, UK, Institute of Development Studies, University of Sussex.
- Gramsci, António (2003 [1935]). Selections from the Prison Notebooks. London, Lawrence and Wishart.
- Granit, Jakob and Marius Claasen (2009). A path towards realising tangible benefits in transboundary river basins. *Getting Transboundary Water Right: Theory and Practice for Effective Cooperation*. Jägerskog, A., M. Zeitoun and A. Berntell. Stockholm, Stockholm International Water Institute.
- Gyawali, Dipak (2001). Rivers, Technology and Society; Learning the Lessons of Water Management in Nepal. London, UK, Zed Books.
- Jägerskog, Anders (2003). Why States Cooperate Over Shared Water: The Water Negotiations in the Jordan River Basin. Linköping, Sweden, Linköping University.
- Jägerskog, Anders, Mark Zeitoun and Anders Berntell (2009). Addressing Transboundary Water Management Challenges: Getting it Right. *Getting Transboundary Water Right: Theory and Practice for Effective Cooperation*. Jägerskog, A., M. Zeitoun and A. Berntell. Stockholm, Stockholm International Water Institute.
- Kistin, Elisabeth J., Peter J. Ashton, Anton Earle, Daniel Malzbender, Marion J. Patrick and Anthony R. Turton (2009). "An overview of the content and historical context of the international freshwater agreements that South Africa has entered into with neighbouring countries." International Environmental Agreements forthcoming (accepted 10 Nov 2008).
- Kistin, Elisabeth J. (2010). Critiquing Cooperation: The Dynamic Effects of Transboundary Water Regimes. Department of International Development. University of Oxford, Oxford.
- Kjellen, Bo (2007). A New Diplomacy for Sustainable Development. London, Taylor & Francis.
- Lankford, Bruce A. (2004). "Resource-centred thinking in river basins: should we revoke the crop water requirement approach to irrigation planning?" *Agricultural Water Management* 68: 33 46.

- Lautze, Jonathan, Meredith Reeves, Rosaura Vega and Paul Kirshen (2005). "Water Allocation, Climate Change and Sustainable Peace The Israeli Proposal." Water International 30(2): 197-209.
- Levene, Josh (2010). *The Challenge of Transboundary Water Management and Poverty Reduction.* Unpublished paper prepared for the Sida review on TWM, 2010.
- Lukes, Steven (2005 [1974]). *Power: A Radical View 2nd edition.* Hampshire, UK, Palgrave MacMillan.
- Malanczuk, P., Ed. (1997). Akehurst's Modern Introduction to International Law 7th Edition. London and New York, Routledge.
- Matano, Ali Said (2010). Project Manager of the Lake Victoria Partnership Fund, administered by the lake Victoria Basin Commission (LVBC), Personal Communication, Kisumu, December 13, 2010.
- MRC (2010). *State of the Basin Report 2010.* Vientiane, Mekong River Commission.
- Okurut, Tom O. and Caleb. N Weggoro (2011). *Lake*Victoria Basin A New Frontier for Development of

  East Africa. Twaweza Communication Ltd. Twaweza

  House, Nairobi.
- Phillips, David, Marwa Daoudy, Joakim Öjendal, Anthony Turton and Stephen McCaffrey (2006). *Transbounda-ry Water Cooperation as a Tool for Conflict Prevention and Broader Benefit-sharing.* Stockholm, Sweden, Ministry of Foreign Affairs.
- PWA (2003). Water Projects Status and Donations Report. Ramallah, West Bank, Palestinian Water Authority, December 2003.
- PWA (2008a). Letter from PWA Chairman Shaddad al-Attili to Egyptian Ambassador to the EU Mahmoud Karem. Ramallah, Palestinian Water Authority, Private Correspondence made available through the Al Jazeera Transparency Unit. 7 October 2008.
- PWA (2008b). *Tiberias Water Management Training*.

  Email from head of PWA to USAID notifying of insitutional decision not to attend EXACT training programme scheduled at the Lake of Tiberias, following denial of access to some Palestinian participants by the Israel Civil Administration, 27 May 2008.
- Sadoff, Claudia W. and David Grey (2005). "Cooperation on International Rivers: A Continuum for Securing and Sharing Benefits." *Water International* 30(4).
- Schlager, Edella (2007). Community Management of Groundwater. *The Agricultural Groundwater Revolu-*

- tion: Opportunities and Threats to Development. Giordano, M. and K. G. Villholth. Wallingford, CAB International. 131-152.
- Scott, James C. (1985). Weapons of the Weak: Everyday
  Forms of Peasant Resistance. London, Yale University
  Press
- Selby, Jan (2003). "Dressing up Domination as 'Co-operation': The Case of Israeli-Palestinian Water Relations." Review of International Studies 29(1): 121-138.
- Selby, Jan (2003). *Water, Power and Politics in the Middle East The Other Israeli-Palestinian Conflict.*London, UK, I.B. Tauris.
- Turton, Anthony and Nikki Funke (2008). "Hydro Hegemony in the Context of the Orange River Basin." Water Policy 10 (Special Issue No. 2): 51-69.
- Ward, Christopher, Sabine Beddies, Khaled Hariri, Souad Othman Yaffiei, Anwer Sahooly and Barbara Gerhager (2007). Yemen's Water Sector Reform Program – A Poverty and Social Impact Analysis. Washington, Republic of Yemen, GTZ, World Bank.
- Warner, Jeroen and A. van Buuren (2009). "Multi-Stakeholder Learning and Fighting on the River Scheldt." International Negotiation 14: 419-440.
- WWF-DFID (2010). International Architecture for Transboundary Water Resources Management: Policy Analysis and Recommendations. London, Worldwide Fund for Nature and the UK Department for International Development, with Pegasys Strategy and Development, and the UNESCO Centre for Water Law, Policy and Science.
- Zeitoun, Mark and Anders Jägerskog (2009). Confronting Power in Transboundary Water Interaction. *Getting Transboundary Water Right: Theory and Practice for Effective Cooperation.* Jägerskog, A., M. Zeitoun and A. Berntell. Stockholm, Stockholm International Water Institute.
- Zeitoun, Mark and Naho Mirumachi (2008). "Transboundary water interaction I: Reconsidering conflict and cooperation." *International Environmental Agreements* 8: 297-316.
- Zeitoun, Mark, Naho Mirumachi and Jeroen Warner (2011). Transboundary water interaction II: Soft power underlying conflict and cooperation. *International Environmental Agreements* 11: 159-178.
- Zeitoun, Mark and Jeroen Warner (2006). "Hydro-Hegemony: A Framework for Analysis of Transboundary Water Conflicts." *Water Policy* 8(2006): 435-460.

