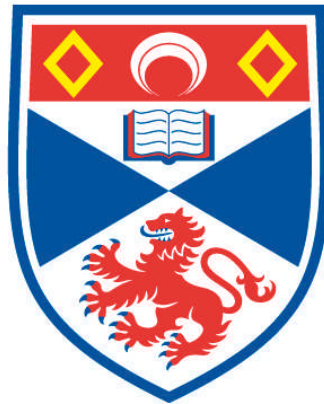


# **NORMS AND TRANSBOUNDARY CO-OPERATION IN AFRICA: THE CASES OF THE ORANGE-SENQU AND NILE RIVERS**

**Inga M. Jacobs**

**A Thesis Submitted for the Degree of PhD  
at the  
University of St Andrews**



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THE CASES OF THE ORANGE-SENQU AND NILE RIVERS**

**Inga M. Jacobs**

School of International Relations  
University of St Andrews

Submitted for the Degree of Doctor of Philosophy in International Relations

December 2009

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## ABSTRACT

The inter-scalar interaction of norms is pervasive in African hydropolitics due to the nature of freshwater on the continent – shared, strategic and that which necessitates cooperation. However, with few exceptions, particular norms created at specific levels of scale have been researched in isolation of those existing at other levels. It is argued that this exclusionary approach endangers the harmonised and integrated development of international water law and governance, producing sub-optimal cooperative strategies. The notable contributions of Ken Conca and the Maryland School's research on the contestation of norms occurring at different levels of scale, and Anthony Turton's Hydropolitical Complex (HPC), will be examined through a Constructivist theoretical lens, in terms of their applicability to furthering an understanding of multi-level normative frameworks.

Through the use of the Orange-Senqu River basin, and the Nile Equatorial Lakes sub-basin (NELSB) as case studies, it is argued that norm convergence is possible, and is occurring in both case studies analysed, although to varying degrees as a result of different causal factors and different biophysical, historical, socio-political and cultural contexts. This is demonstrated through an examination of regional dynamics and domestic political milieus. Notwithstanding their varying degrees of water demand, Orange-Senqu and NELSB riparians present fairly different political identities, each containing existing constellations of norms, which have affected the ways in which they have responded to the influence of external norms, how the norm is translated at the local level and to what extent it is incorporated into state policy. In so doing, the interface between international norms and regional/domestic norms will be explored in an attempt to understand which norms gain acceptance and why.

It is therefore advocated that a multi-level interpretation of norm development in Africa's hydropolitics is essential to an understanding of the interconnectedness of context, interests and identities. Each level of scale, from the international to the sub-national, give meaning to how norms are translated and socialised, and how they in turn, transform contexts.

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**“The spirit of Ubuntu – that profound African sense that we are human only through the humanity of other human beings – is not a parochial phenomenon, but has added globally to our common search for a better world”**

**Nelson Mandela**

### **All Day I Hear the Noise of Waters**

*All day I hear the noise of waters  
Making moan,  
Sad as the sea-bird is when, going  
Forth alone,  
He hears the winds cry to the water's  
Monotone.*

*The grey winds, the cold winds are blowing  
Where I go.  
I hear the noise of many waters  
Far below.  
All day, all night, I hear them flowing  
To and fro.*

**James Joyce**

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## LIST OF ACRONYMS AND ABBREVIATIONS

AFDB	African Development Bank
AMCOW	African Ministerial Council on Water
ANC	African National Congress
AU	African Union
CMA	Catchment Management Agency
COMESA	Common Market for Eastern and Southern Africa
DWAF	Department of Water Affairs and Forestry (now, DWEA, Department of Water and Environmental Affairs, South Africa)
EAC	East African Community
ENCOM	Eastern Nile Council of Ministers
ENSAP	Eastern Nile Subsidiary Action Programme
ENSAPT	Eastern Nile Subsidiary Action Programme Technical Team
EU	European Union
FAO	Food and Agriculture Organisation
FTA	Free Trade Agreement
GDP	gross domestic product
GEF	Global Environmental Facility
GWP	Global Water Partnership
HDI	Human Development Index
HPC	Hydropolitical Complex
HSCT	Hydrosocial Contract Theory
IBT	Inter-basin transfer
ICJ	International Court of Justice
ICOLD	International Committee on Large Dams
IGAD	Inter-Governmental Authority for Development
IGO	Intergovernmental Organisation
ILC	International Law Commission
INGO	International Non-governmental Organisation
IOC	Indian Ocean Commission
IWRM	integrated water resource management
JIA	Joint Irrigation Authority
JPTC	Joint Permanent Technical Commission
JTC	Joint Technical Committee
KBO	Kagera Basin Organisation
LHDA	Lesotho Highlands Development Authority
LHWC	Lesotho Highlands Water Commission
LHWP	Lesotho Highlands Water Project
LVBC	Lake Victoria Basin Commission
LVFO	Lake Victoria Fisheries Organisation
MAP	mean annual precipitation
MAR	mean annual run-off
MDG	Millennium Development Goal
MENA	Middle East and North African region
MMA	Multilateral Monetary Agreement
NBD	Nile Basin Discourse
NBDF	Nile Basin Discourse Forum
NBI	Nile Basin Initiative
NEL-COM	Nile Equatorial Lakes Council of Ministers
NELSAP	Nile Equatorial Lakes Subsidiary Action Program

NELTAC	Nile Equatorial Lakes Technical Advisory Committee
NEP	National Environmental Policy of Lesotho
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental Organisation
NILE-COM	Council of Ministers of Water Affairs of the Nile Basin States
NILE-SEC	Nile Basin Initiative Secretariat
NILE-TAC	Nile Technical Advisory Committee
NRA	National Resistance Army
NWA	National Water Act (South Africa, 1998)
OKACOM	Okavango River Basin Commission
ORASECOM	Orange-Senqu River Commission
PPP	Purchasing Power Parity
PWC	Permanent Water Commission
RBO	River Basin Organisation
RIA	Regional Integration Agreement
RIFF	Regional Integration Facilitation Forum
RISDP	Regional Indicative Strategic Development Plan (SADC)
RPF	Rwandese Patriotic Front
RSAP	Regional Strategic Action Plan (SADC)
RSCT	Regional Security Complex Theory
RWP	Regional Water Policy (SADC)
RWS	Regional Water Strategy (SADC)
SACU	Southern African Customs Union
SADC	Southern African Development Community
SADCC	Southern African Development Co-ordination Conference
SADC PF	SADC Parliamentary Forum
SADC WD	SADC Water Division
SAHPC	Southern African Hydropolitical Complex
SANCOLD	South African National Committee on Large Dams
SAP	Strategic Action Programme
SIRWA	Structurally Induced Relative Water Abundance
SOLD	Survivors of the Lesotho Dams
SVP	Shared Vision Program
SWI	Shared Watercourse Institution
TCTA	Trans-Caledon Tunnel Authority
TECCONILE	Technical Co-operation Committee for the Promotion of Development and Environmental Protection on the Nile
TFDD	Trans-boundary Freshwater Dispute Database
TRC	Transformation Resource Centre
UN Convention	1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses
VNJIS	Violsdrift and Noordoewer Joint Irrigation Scheme
WB	World Bank
WCI	Water Crowding Index
WMA	Water Management Area
WRMP	Water Resource Management Programme
WUA	Water user association
WWF	World Water Forum
ZACPLAN	Zambezi River Basin System Action Plan
ZACPRO	Zambezi River Basin System Action Project
ZAMCOM	Zambezi River Commission

# CHAPTER 1

## INTRODUCTION

### 1.1. PROBLEM STATEMENT

The governance and management of an international river basin<sup>1</sup> implies the management of competing demands on the resource (Postel, 1999). These demands will continue to intensify as a result of increasing water scarcity, degrading water quality, rapid population growth, urbanisation and industrialisation, and uneven levels of economic development (Giordano and Wolf, 2002: 2). As a result, these and other factors are often cited as disruptive forces in co-riparian relations, leading academics and policy-makers alike to warn of impending conflict over shared water resources (ibid.).

Moreover, the management of international rivers has become increasingly problematic due to the state of freshwater water today – the only scarce natural resource for which there is no substitute (Wolf, 1998: 251), and one which fluctuates in both time and space (Giordano and Wolf, 2003: 163). As a result, ‘water’ and ‘war’ are two topics that have been assessed together at great lengths. Water disputes have indeed been labelled as one of the “New Wars” in Africa, comparing it to the likes of other ‘resource wars’ such as those over oil and diamonds (Jacobs, 2006). Thus, there is a great fascination with the notion of a ‘water war,’ and while there is evidence to the contrary and the debate over ‘water wars’ won in favour of co-operation<sup>2</sup> (Jacobs, 2006; Turton, 2000a, 2000b) this argument still rears its head time and again.

#### 1.1.1 NORMS AND TRENDS IN THE WATER CONFLICT DISCOURSE

The (mis)perception of water as a source of international warfare is pervasive not only in the public mind but also in political circles. In 1985, former Secretary General of the United Nations, Dr. Boutros Ghali, uttered the famous words: “The next war in the

---

<sup>1</sup> The term *international rivers* is used in this study to refer to freshwaters (surface and groundwater) whose basins are situated within the borders of more than one sovereign state as well as the lakes and wetlands through which some of these flows may pass. The term *transboundary rivers* is also used in this study to refer to rivers which cross or flow along international state (and therefore political) boundaries.

<sup>2</sup> The subject of the author’s M.A dissertation in International Studies, Stellenbosch University, 2006.

Middle East will be fought over water, not politics.” The literature on conflict and natural resources, and specifically, on conflict and water, is voluminous, particularly as a result of the real or perceived impact that increased scarcity may have on socio-economic development and the lives of people all over the world. Furthermore, the scarcity of water in an arid and semi-arid environment may lead to intense political pressures, or to what Falkenmark (1989: 113) refers to as ‘water stress.’ The Middle East is considered to be the ideal example of this, where armies have been mobilised and water has been cited as the primary motivator for military strategy and territorial conquest. However, this territorial argument, based on a state’s desire to obtain water beyond its borders, is limited when one considers the nature of water-sharing agreements over the use of the Jordan River between Israel and its neighbours. For example, as part of the 1994 Treaty of Peace, Jordan is able to store water in an Israeli lake while Israel leases Jordanian land and wells (Giordano and Wolf, 2002: 7). This example reflects the ability of states to co-operate without the desire to conquer territory.

Since the allocation of water has often been closely linked with conflict situations, there has been a tendency to rely on history (by reinterpreting history in a way which justifies one’s perspective) as proof of water’s ability to cause interstate war (Church, 2000: 21). Arguments such as these, however, isolate specific cases in which water becomes embedded in socio-political, economic, cultural or religious tensions, and is therefore used as a (falsely) justifiable reason for going to war. For example, Church refers to the early 1950’s dispute between Syria and Israel, where sporadic fire was exchanged due to the Israeli water development in the Huleh Basin (*ibid.*). But the author questions the degree to which this dispute can be classified as a water war, since the causal relationship between water and war is greatly obstructed by ethnic, cultural and religious tensions that existed between these states (*ibid.*). This leads one to ask the question, what really was the cause of the war? The unsuccessful military expedition by Egypt into disputed territory between itself and Sudan in the late 1950’s is another (mis)-cited example, and again, begs the question, what really was the cause of the conflict – water or a disputed territorial boundary? According to Church, this suggests that history does not provide the clear-cut lesson that much literature relies upon (*ibid.*).



Some scholars have also argued that the problems of water management are compounded in the international arena by the fact that the international law regime that governs it is poorly developed, contradictory and unenforceable (Giordano and Wolf, 2002). Analyses based on this argumentation, however, ignore the fact that there are more water agreements in the world than there are, or have been, water-related conflicts (ibid.)<sup>3</sup>. Despite the obstacles riparian states face in the management of shared water resources, these very states have demonstrated a remarkable ability to co-operate over their shared water supplies<sup>4</sup>. However, analyses cautiously point out that despite the lack of inter-state warfare, water has acted as both an irritant and a unifier. As an irritant, water can make good relations bad, but is also able to unify riparians with relatively strong institutions (Ashton, 2000a, 2000b; Wolf, 2005). Water's ability to increase inter-state tensions is most prevalent in the debate between sovereignty and equitable distribution of shared water resources. Underlying this is the contradiction between the compartmentalisation of states who claim sovereignty rights over resources in their territory vs. the indivisible and uninterrupted continuum of water (Westcoat, 1992). The question here is simple: can a country use its water as it pleases? This results in a clash of two global norms i.e. sovereign ownership and exclusive rights over one's resources vs. the principle of shared ownership and equitable utilisation of an international river. Depending on which side of the debate states sit, either the securitisation of water as an issue of high politics and national security

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<sup>3</sup> Adding to the counter-argument of poorly developed international water law is the fact that the international community has devised principles for international watercourse management in order to reduce the likelihood of conflict as well as to resolve existing disputes (Giordano and Wolf, 2002: 1). Over the past century, as Giordano and Wolf argue, these principles have been refined and, most recently, codified in the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses. Moreover, as the Orange-Senqu and the Nile both exemplify, basin communities, building on their own rich treaty history, have accelerated the development of co-operative institutions to manage shared rivers (ibid.). This point alludes to the functionality of legal instruments in facilitating effective transboundary water governance. As conflict prevention tools, legal instruments have been very effective, however, as a means to facilitate dialogue, build trust and confidence, and stipulate volumetric allocations, for instance, legal instruments have proved less definite in some areas.

<sup>4</sup> Oregon State University (OSU) compiled a quantitative dataset of every reported interaction between two or more nations, whether conflictive or co-operative that involved water as a scarce or consumable resource, or as a quantity to be managed where water was the driver of events (Wolf, 2005: 9-10). The result was that co-operative interactions between riparian states over the past fifty years have outnumbered conflictive interactions by more than two-to-one: 507 conflict-related events versus 1228 co-operative events (Giordano and Wolf, 2002: 2-3). Of the 507 conflict-related events, 37 were acute disputes (those involving violence), of which 30 were between Israel and one of its neighbours (Wolf, 2005: 9). This study showed that violence over water is not strategically rational, hydrographically effective, or economically viable.

is prioritised, or the desecuritisation of water as an issue to be debated in the public domain wins out.

In current debates, there are those who focus on the regional (and global) conflict potential of accelerating environmental problems such as drought and sea water rise. Here, the Malthusian discourse is noteworthy. It hypothesises a linear relationship between population growth and scarcity. Malin Falkenmark is instrumental in this regard, for developing the 'water scarcity indicators,' based on the central notion of a 'water barrier' (Falkenmark, 1989: 112). Her thesis postulates that as populations increase, so too does water scarcity, which leads to competition and potentially conflict. This type of theorisation then led other authors to conclude that the inherent linkages between water scarcity and violent conflict predicted the inevitable occurrence of water wars in the twenty-first century.

Homer-Dixon, the most prominent author on the subject of scarcity and conflict, outlines three major sources of environmental scarcity and their interaction (Homer-Dixon, 1994: 5-40). Firstly, supply-side scarcity describes how the depletion and pollution of resources reduce the total available volume. Secondly, demand-side scarcity explains how changes in consumptive behaviour and a rapidly growing population can cause demand to exceed supply. And thirdly, structural scarcity occurs when some groups receive disproportionately large slices of the resource pie, leaving others with progressively smaller slices (Turton, 2000a: 41). Homer-Dixon does, however, acknowledge that environmental scarcity is never a conflict determining factor on its own, and is usually found in conjunction with other more detrimental causes (Homer-Dixon, 1994: 5). As such, environmental scarcity can aggravate existing conflict and make it acute. In southern Africa, this plays out when marginalised communities are forced to migrate and settle on contested land, thereby bringing these incoming communities into conflict with people who are already struggling to survive. Migrations away from the Kalahari towards the panhandle of the Okavango Delta, and migration towards Windhoek in Namibia, are two such examples.

Then, there are those who see environmental degradation as an opportunity for social ingenuity, conflict prevention and management. Leif Ohlsson argues that as water scarcity increases, so does the need for social adaptation to the consequences of this

scarcity (ibid.). With increased desertification or the greater frequency of droughts, lifestyles have been forced to adapt and social patterns have been forced to shift. Ohlsson also distinguishes between first-order resources, and social or second-order resources. Adaptive capacity is therefore determined by the degree to which some states that are confronted by an increasing level of first-order resource scarcity (scarcity regarding the resource i.e. water) can adapt to these conditions provided that a high level of second-order resources (social adaptive capacity or what Homer-Dixon refers to as ‘ingenuity’) are available.

Still, other scholars oppose any causal linkages between scarcity and war (as opposed to conflict). Anthony Turton defines a water war simply as a war caused by the desire for access to water. “In this case, water scarcity is both a necessary and sufficient condition for going to war” (ibid: 36). Turton therefore identifies ‘pseudo’ wars as those conflict events that take place when hydraulic installations such as dams and water treatment plants become targets of war. A war in this category is thus caused by something quite unrelated to water scarcity, and is therefore, not considered to be a true water war, but rather a conventional war, with water as a tactical component. Furthermore, when rivers form part of contested international boundaries, they may also be the focal point of war as water issues become politicised. In this case again, water scarcity is neither a necessary nor a sufficient condition for going to war (ibid.). One example is that of the military confrontation that broke out between Botswana and Namibia over the control of an island (important for grazing) situated in the contested boundary area of the Chobe River (Breytenbach, 2003: 4). As such, water as the cause of war is a very narrowly defined condition, with limited empirical evidence of its existence over time. Most authors, arguing for the increasing threat of water wars, are often misled when labelling conventional wars as water wars, or exaggerating the threat of a dispute escalating into military aggression.

### **1.1.2 NORMS AND TRENDS IN THE WATER CO-OPERATION DISCOURSE**

Since the idea of a water war is an ever-looming fear, and the reality of localised water conflicts a constant concern, an ensemble of normative codes of conduct in the form of global, regional and domestic norms, principles of best practice, and laws have developed over time dictating appropriate behaviour in the governance of transboundary

rivers in an attempt to eradicate or minimise real, perceived or predicted conflicts (Jacobs, 2007: 1). The global norm set of transboundary co-operation is arguably the most prominent, comprising of principles such as equitable and reasonable utilisation, the no harm doctrine, information exchange, consultation with other riparian states and ecosystem protection. This norm set has evolved over time into its current form as a result of the attempt to reconcile the tension between shared river protection and the rights of states to utilise their water resources as they see fit. This dissertation uses a widely accepted definition of norms developed by Katzenstein (1996: 5): norms are “collective expectations for the proper behaviour of actors with a given identity.” As such, they provide standards of appropriate conduct and prescribe social practices (Dimitrov, 2005: 3).

It can certainly be argued that the need to accommodate the multiplicity of demands on water, has led to an ‘institutionalised’ way of knowing and dealing with water (Lach, Ingram and Rayner 2005) that is considered to be normatively ‘good’, driven largely by influential state and non-state actors of the North. Research conducted on the degree to which global norms have diffused to lower levels of scale raises the question of the appropriateness of these global norms to different contexts, which are often accepted rather uncritically as a goal for which to strive. Described by Acharya (2004) as the first wave of normative change, these analyses tend to give causal primacy to “international prescriptions” and in so doing, often undermine the important agential role of “norms that are deeply rooted in other types of social entities – regional, national, and sub-national groups” (Legro, 1997: 32). As Checkel observes, this focus on the global scale, creates an implicit dichotomy between what is considered to be “good” global norms, seen as more desirable and “bad” regional or local norms (Acharya, 2004: 242; Checkel, 1999; Finnemore, 1996; Finnemore and Sikkink, 1998). Analyses that take this stance often perpetuate a biased moral superiority of the “global”, by regarding global norm diffusion as a process of “teaching by transnational agents,” which downplays the agency role of local actors (Acharya, 2004).

If the global norm set was in fact the most appropriate standard to be emulated in water agreements at lower levels of scale, and applicable to all contexts, then there would be evidence of easy and exact diffusion of the entire norm set at regional, basin, sub-basin and national levels. The inapplicability of *all* the norms found in the global norm set of

transboundary co-operation to particular (and specifically developing country) contexts is reflected in the ineffectiveness of many international environmental agreements, as a result of powerful actors who impose foreign norms onto local contexts, for instance, as lip service rhetoric to external donors or other international institutions. At best, these norms are manipulated and transformed into a context-specific code of conduct, but may also become institutionalised in their globally relevant but locally inapplicable form. In essence, “bad” (or inapplicable) norms become institutionalised too. Similarly, that which is considered to be best practice is in most cases, context specific. There is therefore, not one set of criteria for normatively assessing “good” and “bad” practice in transboundary water governance.

Another crucial distinction in this study is that co-operation and environmental multilateralism are not one and the same. Additionally, they are often regarded as the ideal despite producing sub-optimal outcomes i.e. vacuous institutions. Indeed, policy-makers have used these terms interchangeably as if referring to one concept. It should be emphasised at the onset that multilateral institutions have increased in the past three decades (Meyer, *et al.*, 1997) but this has not necessarily led to ideal co-operation between states or effective regimes that are intended to provide governance (Dimitrov, 2005: 1-2). Riparian cooperation is celebrated for its potential to produce benefits to the river, *from* the river, *because* of the river and *beyond* the river (Sadoff and Grey, 2002; 2005). However, the extent to which riparian interactions actually produce such benefits has been widely overlooked by the international water community. The persistence of such oversights contributes to a growing stream of well-intentioned but misinformed policy. Moreover, norms, institutions and governance are not conterminous despite being treated as such in existing scholarship (Dimitrov, 2005: 4). This Neo-Institutionalist assumption stems from the premise that institutions are instruments for providing governance, and norms serve as basis for both (*ibid.*).

Most pertinent to this investigation’s problem statement is therefore the manner in which norms are researched and viewed i.e. particular norms (e.g. equitable utilisation) created at specific levels of scale (e.g. international norms) have been researched in isolation of those existing at other levels of scale. This exclusionary (“silo”) approach endangers the harmonised development of international water law and governance as a

whole (De Chazournes, 2009). More specifically, the isolation of one norm ignores the manner in which one norm affects another's development trajectory, its acceptance, the resistance to it, the manner in which it is localised and morphed into something new. The thesis advocated here will argue for a more systemic and integrated interpretation, as each level of scale forms part of international normative frameworks regarding the governance of transboundary water, and various norms interact and function in the context of these systems (ibid.). Each level of scale therefore gives meaning to how norms are translated and socialised.

**Map 1: Shared River Basins in Africa (Ashton and Turton, 2007; UNEP, 2002)**



This dissertation's focus on Africa, and the hydropolitical and normative frameworks governing its transboundary rivers, is also significant in that all major rivers and freshwater lakes and aquifers on the continent are shared by two or more countries. Each country on the continent shares at least one freshwater body with its neighbours, which has at times resulted in hostile relations among riparian states (Toepfer, 2005). There are two hundred and sixty-three international lake and river basins in the world today, sixty three of which are in Africa as is evident in Map 1 (Wolf, Kramer, Carius and Dabelko,

2005: 3). Additionally, the hydropolitical climate in Africa is characterised by a diversity of local configurations, including a multitude of biophysical, socio-cultural and political contexts which contribute to Africa's hydropolitical fragility. These include, but are not limited to, a range of domestic policy variance between riparian states. There is also a great deal of variability in economic development between states and a broad spectrum of social, economic and cultural institutions, as well as the highly varied spatial and temporal precipitation and the (mal)-distribution of water. It is argued here that the necessity for the multi-level interaction of norms is well known in African hydropolitics due to the shared nature of freshwater on the continent. However, there is a disconnection between the perceived reality and how norms are researched.

As previously noted, there have been few attempts to conceptualise a multi-layered normative framework for transboundary water governance. The most notable contributions include Ken Conca and the Maryland School's<sup>5</sup> research on the contestation of norms occurring at different levels of scale (Conca, 2002, 2006; Conca and Dabelko, 2002; Conca and Wu, 2002; Conca, Wu and Mei, 2006; Conca, Wu and Neukirchen, 2003) and Anthony Turton's hydropolitical complex (HPC) that has to date, dominated southern African hydropolitical literature on multi-level normative convergence (Turton, 1999b, 2000a, 2001a, 2002, 2003b, 2003c, 2003d, 2005a, 2008a, 2008b; Turton and Ashton, 2008; Turton, Earle, Malzbender and Ashton, 2005). The latter, Turton's HPC, was developed as a conceptual tool to describe a nation's dependence on shared water systems that is of such a strategic nature that this dependence starts to drive inter-state relations of potential amity and/or enmity in a discernable manner (Turton and Ashton, 2008). Developed as a component of the Regional Security Complex defined by Buzan (1991), the HPC, as detailed by Turton (2003a, 2003b, 2003d, 2008b) and Ashton and Turton (2007; Ashton and Turton, 2008), suggests that riparian states are linked in a series of interstate arrangements at one or more levels of scale other than the river basin (i.e. the region), where water issues are drivers of international relations in their own right. By understanding the interdependency of various levels of scale, normative convergence is able to take place at the regional level, where the benefits of co-operation can most tangibly

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<sup>5</sup> The Maryland School refers to the team of researchers at Maryland University in the United States, including Ken Conca, investigating normative convergence of global principles into regional and basin agreements.

be seen. For this reason, the approaches advocated by Turton and Conca will be used as points of departure and analysed in detail in this dissertation in terms of their applicability to furthering an understanding of multi-level normative frameworks.

Research and evidence has proven that while there is an unlikely probability of inter-state water wars (conventional warfare) erupting in the future, the lack of co-operation *does* carry security implications and sub-optimal water management strategies. Yet even this focus is misleading, for there is a danger in interpreting it to imply a normative appropriateness towards unprecedented co-operation and the sharing of international freshwater supplies. Framing the debate in this way depicts the concept of co-operation versus conflict as a continuum, as an all-or-nothing outcome, with *co-operation* existing as an extreme in direct opposition to *war* as depicted in Figure 1 (Sadoff and Grey, 2005). In this regard, scholars have argued that Africa's transboundary rivers could become *either* drivers of peace and economic integration *or* sources of endemic conflict (Turton, 2003a: 75). Co-operative management of shared watercourses has therefore been trumpeted as the ideal, since it can optimise regional benefits, mitigate water-related disasters, and minimise tensions. Additionally, current studies focus on the need to develop appropriate scientific/economic methodologies that can explain and predict future patterns of conflict and co-operation (Turton, 2003a, 2003b, 2003c, 2003d). Technocratic templates from the North, such as the concept of Integrated Water Resources Management (IWRM)<sup>6</sup>, have also been suggested as best practice. However, not enough attention has been placed on factoring in local configurations, domestic policy, political identities, and social and cultural institutions, particularly in the African context.

What is lacking in hydropolitics literature is *how* we get to this state of co-operative management (the practicalities thereof), and which types of co-operative strategies are best for each region and river basin. Indeed, transboundary river basins and the management

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<sup>6</sup> Integrated Water Resources Management (IWRM) is an evolving concept and as such several definitions and conceptualisations are used today (Moriarty, Butterworth and Batchelor, 2004). The most commonly used is that adopted by the Technical Advisory Committee of the Global Water Partnership (GWP), who have defined IWRM as a process that promotes the co-ordinated 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 ecosystems (GWP, 2000). Operationally, IWRM approaches apply knowledge from several disciplines and multiple stakeholders to devise and implement efficient, equitable and sustainable solutions to water and development problems. As such, IWRM is a comprehensive, participatory planning tool that involves the coordinated planning and management of land, water and other environmental resources for their equitable, efficient and sustainable use (Calder, 1999).



thereof exist within co-existing conflictive and co-operative dimensions, with actors co-operating on a particular aspect (e.g. information exchange for instance) and not co-operating or ‘fighting’ over another (e.g. the volumetric allocation of water).

The normative frameworks within which regions and transboundary river basin management exist are therefore critical to understanding the above-mentioned conflict-co-operation problematique. A central question in this regard relates to the convergence and/or resistance of norms and values around issues of governance, and particularly co-operative management in these shared ecosystems (Conca, 2006). Recently however, co-operation is slowly beginning to be viewed more broadly than just an outcome of conflict resolution or as a conflict prevention tool. Policy-makers have now begun to see transboundary co-operation as the way to jointly identify development options and socio-economic benefits that can only be achieved in this transboundary and multilateral context.

This benefit-sharing paradigm instigated by co-operative management strategies has implications for normative frameworks and vice versa. Can norms on water-sharing<sup>7</sup> evolve into a benefit-sharing normative framework<sup>8</sup> where actors begin to believe that the benefits of co-operating transcend merely sharing water but include benefits of regional integration, such as economic development and socio-political benefits? To what degree does norm resistance affect this dynamic, and if so, how? One way of addressing these questions is through an analysis of the way in which states perceive themselves. Sadoff and Grey (2005: 1) refer to this as the movement away from national agendas that are unilateral, to national agendas that incorporate significant co-operation and that converge on a shared co-operative agenda. Essentially, this refers to notions of sovereignty, and the evolution in the perception of sovereign interests.

Indeed, the degree to which riparians share a common “water ethos” or a regional culture of managing shared rivers is a major determinant of the level, types and effectiveness of co-operative strategies (Hogan, 2005). But given the multiplicity of meanings that water has for various stakeholders, how possible is it to create a shared water “ethos” at an international level that is able to cascade down successfully to a regional and

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<sup>7</sup> Norms of water-sharing, in this case, refer to standards of appropriate behaviour regarding the volumetric allocation of water between countries.

<sup>8</sup> A benefit-sharing normative framework, in this case, refers to standards of appropriate behaviour relating to the joint identification of benefits that result from the use and access to the shared resource i.e. hydropower projects providing electricity to one country, and royalties/payment to another.

local level? Alternatively still, can a shared water “ethos” be constructed at a regional level within a hydropolitical complex, where similar interests converge on a normative trajectory in ways that are unique to specific basins?

## **1.2. RESEARCH QUESTION AND SUB-QUESTIONS**

The primary research question of this investigation asks **to what extent has regional norm convergence (i.e. lateral state-to-state and state-to-basin-to-region) occurred in the Orange-Senqu River basin and the Nile Equatorial Lakes sub-basin (NELSB). Is the Hydropolitical Complex (HPC) a useful conceptual lens through which to view normative convergence, and can it explain sub-national normative configurations? Similarly, posing a question of state-to-state norm convergence requires an analysis of a parallel top-down process. To what extent has the global norm set of transboundary water co-operation been socialised (top-down) in the regional governance of two transboundary rivers i.e. the Nile and Orange-Senqu Rivers, and domestically, in the affected riparian states?** How do local norms affect the success to which these norms are internalised? In other words, to what degree does/can global norm socialisation aid in the changing of interests (and thereby, state policy) as identities are reconstructed, and in what ways do global/external norms face local resistance or manipulation due to longstanding domestic norms and interests? Are the relationships between norms, existing at different levels of scale, antagonistic and competitive, or can they co-exist in a harmonious way? Alternatively, have global water norms failed to be socialised at the regional and domestic levels? As Conca (2006: 71) argues, an uneven landscape exists comprising of multiple normative orientations and institutional developments.

Drawing from the author’s current research in African hydropolitics, this dissertation attempts to approach the water conflict discourse within International Relations by critically engaging with various Constructivist perspectives to include an analysis of the effect of norms and norm development on regional approaches to water governance.

The aim of this investigation is therefore to contribute to the International Relations, Political Science and Hydropolitics literature by also integrating and critically

engaging with the HPC, as one conceptual lens through which to view the multi-level water security environment and one which emphasises the interconnectedness between national, basin-level and regional levels of scale through a state-level analysis. Using a Constructivist ontology, the author attempts to emphasise the HPC's strengths and weaknesses in both furthering and hindering an understanding of transboundary water resources. Whilst state-centric or system level analyses, such as the HPC, may lend themselves to basin-wide co-operative strategies due to the manner in which water is prioritised as a strategic resource within a basin and beyond a basin to the regional level, they display a limited utility in explaining *sub-national* configurations and the socially constructed nature of key concepts such as pivotal basin/state and impacted basin/state.

The following sub-questions become integral to the primary research question described above:

**Table 1: RESEARCH SUB-QUESTIONS**

<b>In the case of top-down global norm diffusion</b>
• <b>WHAT:</b> What factors determine how this norm set is translated in various ways?
• <b>HOW:</b> How does the global norm set of transboundary co-operation, once constructed, emerge and become socialised in various regional, basin, national and sub-national contexts?
• <b>WHY:</b> Once emerged, why is the norm set incorporated into regional/basin/national policy and/or behaviour?
• <b>WHO:</b> For whom and by who is the norm set created?
<b>In the case of lateral norm convergence from state-to-state or state-to-basin</b>
• <b>WHAT:</b> What factors in the regional/basin/sub-basin configuration account for a powerful norm set at these levels of scale?
• <b>HOW:</b> How do norms converge regionally or within a basin? Is the HPC a useful conceptual lens to view multi-level normative causal pathways?
• <b>WHY:</b> Once emerged, why is the regional norm set incorporated into regional/basin/state policy and/or behaviour?
• <b>WHO:</b> For whom and by who is the norm set created?
<b>In the case of bottom-up (local to national) norm convergence</b>
• <b>WHAT:</b> What factors determine the success to which they influence state policy and behaviour or their inability to do so?
• <b>HOW:</b> How do local (culturally-specific) norms affect national-level water governance?
• <b>WHY:</b> Why do external norms face local resistance due to longstanding domestic norms?
• <b>WHO:</b> For whom and by who is the norm set created?
<b>In the case of norm dynamism/contestation</b>
• <b>WHAT:</b> What are the relationships between various levels of norms? Are they antagonistic and competitive or can they co-exist in a harmonious way? What are the asymmetric power relations at play?
• <b>HOW:</b> Which norms become dominant and how?
• <b>WHY:</b> Why do some win out over others?
• <b>WHO:</b> Whose interests are accepted and whose interests are redefined?

### 1.3. THESIS STATEMENT AND HYPOTHESES

This study hypothesises that at the basin-wide level, regional norm convergence is possible, and is occurring in both case studies analysed, although to varying degrees as a result of different causal factors and different historical, socio-political and cultural contexts. While, as Conca argues, top-down norm diffusion is less likely, regional basin-wide convergence is determined by each party's perception of the benefits it can secure from co-operation (Sadoff and Grey, 2005: 1). Convergence towards a co-operative agenda is facilitated by several factors, and includes several drivers as well as barriers to regional convergence. The manner in which these are managed ultimately determines the degree of convergence experienced. It is important to note that the basket of drivers and barriers will be unique to each transboundary basin. Drivers to normative convergence act as catalysts to the development of a "community of interests" by explicitly steering state and/or basin behaviour towards a multilateral co-operative agenda that the majority of agents buy into (e.g. policy alignment/harmonisation, conceptualising a benefit-sharing paradigm, trust and confidence building). They may also actively facilitate this process by enabling agents (e.g. technical co-operation, capacity building, sustainable knowledge transfer policies); or alternatively, implicitly shaping the normative context (e.g. congruent norm sets and norm localisation).

These drivers facilitate normative convergence in different ways due to the various ways in which norms are diffused. Williams (2007; 2009: 398) reminds us of the importance of distinguishing between an instrumental commitment to a norm<sup>9</sup>; an institutionalised commitment to a norm<sup>10</sup>; and the internalisation of a norm to such a degree that it is viewed as a constitutive element in local identities and interests of socialised norm recipients. Barriers to achieving normative convergence include but are not limited to: skills flight and the lack of sustainable knowledge transfer, a lack of trust, a lack of (or varied) capacity (human resources), and weak, unsustainable institutions.

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<sup>9</sup> Instrumental commitment to a norm occurs where actors undertake cost/benefit calculations and publicly commit to a norm only to the extent that it helps them achieve some other more fundamental, and usually, national objective, such as economic development (Williams, 2009).

<sup>10</sup> Institutionalised commitment to a norm occurs where a particular identity group establishes institutions based on values and principles embodied in the norm and which will raise the costs of norm-breaking behaviour (ibid.).

Based on the three groupings of sub-questions, the following hypotheses are formulated:

**Table 2: RESEARCH HYPOTHESES**

RESEARCH QUESTION	HYPOTHESIS
<b>In the case of top-down global norm diffusion</b>	
<b>WHAT:</b> What factors determine how this norm set is translated in various ways?	<b>Orange-Senqu:</b> Context and congruence <b>NELSB:</b> Context and localisation as well as internal and external threats to the sovereignty of African states
<b>HOW:</b> How does the global norm set of transboundary co-operation, once constructed internationally, emerge and become socialised in various regional, basin, national and sub-national contexts?	<b>Orange-Senqu:</b> Through regional and basin co-operative mechanisms (Revised SADC Protocol, ORASECOM Agreement); indirect norm diffusion to the regional then basin levels. UN Convention not ratified by all SADC countries (except SA and Namibia) but indirect adoption through Revised SADC Protocol <b>NELSB:</b> Through institutional frameworks of NBI, EAC, World Bank (WB) conditionalities; and specifically, through indirect norm diffusion through NBI operational frameworks
<b>WHY:</b> Once emerged, why is the norm set incorporated into regional/basin/national policy and/or behaviour?	<b>Orange-Senqu:</b> Instrumental commitment to global norms because of the 'legitimizing effect' it has. <b>NELSB:</b> Instrumental commitment to global norms to orchestrate global credibility and to maintain relationships with global donors
<b>WHO:</b> For whom and by who is the norm set created?	<b>Orange-Senqu:</b> By pioneering European states, for global coverage. However, grafting allows norms to be reframed to suit specific audiences. <b>NELSB:</b> Global frameworks, international donors (WB and China), and imperatives formulated by the AU, AMCOW and NEPAD have contributed to the creation of the norm set, applicable to the greater Nile and not confined to the NELSB countries.
<b>In the case of lateral norm convergence from state-to-state or state-to-basin</b>	
<b>WHAT:</b> What factors in the regional/basin/sub-basin configuration account for a powerful norm set at these levels of scale?	<b>Orange-Senqu:</b> Largely a result of near-simultaneous transitional nature of national institutional and legal frameworks since the 1990s, capacity building, benefit-sharing, trust-building and technical co-operation. Barriers do exist that have affected the process: lack of capacity, skills flight, and inadequate sustainable knowledge transfer policies <b>NELSB:</b> NBI, external donors such as the WB, trust and confidence building, policy alignment and progression towards benefit-sharing
<b>HOW:</b> How do norms converge regionally or within a basin? Is the HPC a useful conceptual lens to view multi-level normative causal pathways?	<b>Orange-Senqu:</b> Through institutional mechanisms (SADC); normative fit allows for easier socialisation of regional norms at the national level. Limitation to HPC in conceptualising sub-national configurations, too state-centric and static a lens. <b>NELSB:</b> Shift in balance of power, local actor instrumentality and agency.
<b>WHY:</b> Once emerged, why is the regional norm set incorporated into regional/basin/state policy and/or behaviour?	<b>Orange-Senqu:</b> Commitment to regional normative convergence has become institutionalised, which may raise the costs of norm-breaking behaviour. <b>NELSB:</b> Advocating strongly for the establishment of a multilateral treaty agreement governing all ten Nile riparian states, opposing pre-existing colonial treaties, in some instance, citing the Nyerere Doctrine, and forming sub-basin institutional arrangements that articulate interests specific to these countries such as economic development
<b>WHO:</b> For whom and by who is the norm set created?	<b>Orange-Senqu:</b> Multiple actors contribute to norm creation: Member States, key individuals; hegemon (South Africa); SADC institutional mechanisms (SADC WD, SAD PF etc.) donors; for Member States and their national constituencies. Power asymmetries greatly affect this dynamic. <b>NELSB:</b> Regional norms are often created by non-NELSB countries, particularly hegemonic states such as Egypt. However, in the past decade NELSB countries have given greater voice to their interests with the help of institutions e.g. LVBC, LVFO, NBI. Donors (WB and China) also help set the regional normative framework.

<b>In the case of bottom-up (local to national) norm convergence</b>	
<b>WHAT:</b> What factors determine the success to which they influence state policy and behaviour or their inability to do so?	<p><b>Orange-Senqu:</b> The degree to which local actors have well articulated interests and are able to voice them; local actor presence at organisational platforms; local actor capacity and awareness of political processes and impact of water reform and development projects on impacted peoples; instrumental commitment to local norms by national norm entrepreneurs to legitimise predetermined decisions made by national government.</p> <p><b>NELSB:</b> The degree to which institutions are sensitive to cultural diversity by actively exploring ways in which to integrate this into internal and external processes</p>
<b>HOW:</b> How do local (culturally-specific) norms affect national-level water governance?	<p><b>Orange-Senqu:</b> Very little evidence of culturally-specific norms affecting national-level water governance unless its resistance; local norms also can be reframed to help further national interests.</p> <p><b>NELSB:</b> Diversity of cultures makes it difficult to track normative development from the local level to the national level</p>
<b>WHY:</b> Why do external norms face local resistance due to longstanding domestic norms?	<p><b>Orange-Senqu:</b> Inadequate implementation of the new water law in some areas; incompatibility due to jurisdictional overlaps between new norms (brought about by reform processes) and longstanding practices</p> <p><b>NELSB:</b> Result of the contradictory nature of external norms and incompatibility of interests</p>
<b>WHO:</b> For whom and by who is the norm set created?	<p><b>Orange-Senqu:</b> Wide range of actors have contributed to the creation of local norms that are context-specific: based on sources such as socio-cultural beliefs, entrenched apartheid and colonial legacies.</p> <p><b>NELSB:</b> Due to the heterogeneity of the region/basin/sub-basin, a wide range of local norms exist that create norms that are context-specific. The role and influence of the donor community, particularly the WB, in crafting the NBI institutional structure and objectives has been met with concern by many local actors.</p>
<b>In the case of norm dynamism/contestation</b>	
<b>WHAT:</b> What are the relationships between various levels of norms? Are they antagonistic and competitive or can they co-exist in a harmonious way? What are the asymmetric power relations at play?	<p><b>Orange-Senqu:</b> May at times be antagonistic, they are in most instances able to co-exist. Precursors of external norms have had their own history of domestic development that predates their arrival at the international level, allowing them to be congruent with pre-existing normative frameworks already in place or emerging.</p> <p><b>NELSB:</b> More contentious than in the Orange-Senqu. Normative power battle mirrors the power asymmetries and the change thereof in the past decade.</p>
<b>HOW:</b> Which norms become dominant and how?	<p><b>Orange-Senqu:</b> Sovereignty is still a primary element, as are power asymmetries, but also the instrumentality of local actors to form a regional community.</p> <p><b>NELSB:</b> The process of normative reconciliation and convergence, in this regard, will be a long process and involves the complex task of analysing the different needs of the water users in each riparian state and how they can be amicably met.</p>
<b>WHY:</b> Why do some win out over others?	<p><b>Orange-Senqu:</b> As a result of how we value water and who participates in its governance; norms also need to have a legitimating quality.</p> <p><b>NELSB:</b> Legitimizing quality; shift in power asymmetries; and sub-basin identity creation through the articulation of joint interests in the NELSB.</p>
<b>WHO:</b> Whose interests are accepted and whose interests are redefined?	<p><b>Orange-Senqu:</b> Relationships between norms at global, regional and national levels are not always antagonistic, and are even complementary. However, until power asymmetries are recognised, and the playing field levelled, local level interests will be disadvantaged in multi-level normative frameworks.</p> <p><b>NELSB:</b> The normative framework once reflected the status quo entrenched under colonialism, with Egyptian interests defined and met in historic agreements, but the NELSB countries have begun to organise themselves and articulate their interests in a joint manner due to the regulative and constitutive nature of sub-basin norms.</p>

## 1.4. OBJECTIVES OF STUDY

The purpose of this study is reflected in four main facets: the description, analysis, comparison and prognosis on the impact of norms on transboundary water governance in Africa; all of which stem from the problem statement. The research objectives can thus be summarised as follows:

- To describe and examine processes of emergence, and socialisation of the global norm set of transboundary co-operation of water resources, or lack thereof, within frames of securitisation vs. desecuritisation as well as its influence, or non-influence, on the domestic structures of riparian water policy in the Orange-Senqu River and Nile River basins.
- To examine the domestic political milieu of riparian states. Notwithstanding their varying degrees of water demand, Orange-Senqu and NELSB riparians present fairly different political identities, each containing existing constellations of norms, which have affected the ways in which they have responded to the influence of these norms, how the norm is translated at the local level and to what extent it is incorporated into state policy. **In so doing, this thesis will explore the interface between these international norms and regional/domestic norms in an attempt to understand which norms gain acceptance and why.**
- To examine lateral normative convergence at the regional level from state to state as well as from the national to basin to regional levels.
- To review policy alignment and harmonisation as an indicator of normative convergence but also to explore socio-political processes as drivers and barriers to this convergence.
- To test the applicability of the HPC as a suitable conceptual lens to understanding multi-level normative convergence in transboundary water governance.
- To conceptualise multi-level normative convergence as it exists in the Orange-Senqu and Nile River basins using examples of norm sets at various levels of scale.

## **1.5. SIGNIFICANCE OF STUDY: “Looking Beyond Borders”**

### **1.5.1. BRIDGING THE THEORETICAL GAP: Beyond the Borders of Discourse**

The theoretical significance of this investigation stems from the need for more nuanced theorisation in transboundary water governance analyses, including more water literature explicitly conceptualised in non-Realist or critical theory approaches of IR. Since Du Plessis made this claim in 2000, little progress has been made that goes beyond Realist theoretical frameworks or implicit adoptions of this, with few exceptions (Furlong, 2006, 2008). Even Warner and Zeitoun (responding to Furlong’s 2008 article), who provide a compelling argument of the significance of IR frameworks to understanding transboundary water issues, concede that “...the number of serious studies applying IR frameworks to transboundary water issues remains limited” (Warner and Zeitoun, 2008: 803).

Allan refers to the evolution of almost identical concepts in different academic disciplines, all of which are relevant to hydropolitics, but none of which have been integrated or harmonised in any useful way (Allan, 2001: 191-192). Scholars of hydropolitics have, however, used the two rival theoretical traditions i.e. the dominant school of rationalism vs. the marginal school of reflectivism to argue for or against the existence of water conflict (Du Plessis, 2000: 11-22; Meissner, 2000; 2004; Turton, 2000a), albeit concealed under policy analysis and issues of security. Moreover, the hydropolitical discourse has been reactionary and has therefore, developed in parallel lineage with the great debates of International Relations (IR) (Du Plessis, 2000: 16).

Contemporary hydropolitical discourse is predominantly situated within the mainstream (and particularly Realist), rationalism of IR theory, in as Du Plessis cites, a “subliminal” and “axiomatic” fashion (ibid: 10). Since these theories demarcate the discursive parameters, many scholars, writing from a mainstream perspective, have thereby subconsciously defined what can and cannot be talked about in hydropolitical discourse (ibid: 24-25). Thus, a discursive elite and hegemonic theories or perspectives are produced (Du Plessis, 2000; Meissner, 2004: 24). Other hydropolitical analysts have referred to this phenomenon as ‘sanctioned discourse,’ that is, hegemonic discourse which delegitimises other types of discourse (Allan, 2001: 182). This implicit theorisation as Furlong describes it, in turn, has influenced the subject matter that is researched e.g. a state-centric approach



with, as Meissner elaborates, a focus on agential-power with little priority given to the role of non-state actors and transnational/regional initiatives as well as the significant role that norms play in determining state behaviours and thus transforming political landscapes (Furlong, 2006, 2008; Meissner, 2004). Similarly, Agnew (1994: 53-80), refers to this prioritisation of the state or state as actor model, as the ‘territorial trap,’ based on three theoretical pillars: the reification of sovereignty as complete state control over a fixed unit of territorial space; the severing of domestic and foreign politics; and the state as prior to and a container of society.

Warner and Zeitoun, in response to these claims (as put forth by Furlong’s [re]-assertion of the implicit theorisation problematique and the unfortunate situation in which hydro-IR finds itself - stuck in the territoriality trap) argue that despite the fact that there are relatively few studies that use critical perspectives, a notable body of critical and Constructivist scholarship has been overlooked in her analysis (Warner and Zeitoun, 2008: 803). Warner and Zeitoun cite several examples including discussions by critical water academics at Bradford University, such as Berkoff (2003) on imputed ‘water consensus,’ and the development of a ‘Framework of Hydro-hegemony’ by Zeitoun and Warner at the loosely constituted London Water Research Group that applies critical and Realist IR theory to hydropolitics by unravelling the layered nature of hegemonic struggles.

Warner and Zeitoun, do however, agree that Furlong’s criticism of hydro-IR being stuck in a ‘territoriality trap’ has justification when referring to the analysis of regional hydrosecurity complexes, such as the HPC, which tend to over-emphasise the role of the state, and focus on sovereignty as complete control of a state over territory (Warner and Zeitoun, 2008: 805). This investigation uses this assertion as a primary theoretical basis, and questions the degree to which the HPC is useful in addressing regional water security issues and multi-level normative frameworks in water governance within or beyond the state level.

The type of Constructivism employed in this study belongs to the modernist grouping where scholars combine an ontological position critical of methodological individualism with a loosely causal epistemology (Checkel, 2001: 554). Analytically, they prioritise the role of norms in social life, demonstrating that norms matter in a constitutive, interest-shaping way.

It is important to emphasise, however, that while this study will use Constructivism as its broad theoretical umbrella, an attempt is made to root it in research on social construction processes and norm influences in transboundary governance in Africa. As such, components of mid-level theories will also be used. Two key points are noteworthy here to justify this multi-theoretical approach. Firstly, macro-level theorising has provided good explanations of the way norms produce social order and facilitate stability (Finnemore and Sikkink, 1998: 894). According to Katzenstein (1996: 3), norms channel and regularise behaviour by limiting the range of choice. Similarly, as Wendt (1995) argues, international structure is determined by the international distribution of ideas since shared ideas, expectations and beliefs about appropriate behaviour are what give the world structure, order and stability. The problem for Constructivists, however, is much the same as other theoretical frameworks in IR, that is, the macrotheoretical equipment of Constructivism is better at explaining stability than change (Finnemore and Sikkink, 1998: 888). According to Finnemore and Sikkink, claims that actors conform to “logics of appropriateness” do not say much about how standards of appropriateness might change. This static approach to international politics becomes problematic particularly due to the era of global transformation in which we find ourselves today (ibid.). Moreover, since norms are not static and rigid entities but rather dynamic social phenomena, the global norm set of transboundary co-operation has also seen great change and flexibility over time. As a result, its impact has varied.

Additionally, the extensive body of research on norms shows a close relationship between norms and rationality, however, theoretical treatment of this relationship has been vague because scholars (up until the revolutionary research conducted by Finnemore and Sikkink) tended to polarise the two. Finnemore and Sikkink argue that the opposition of norms and rationality is not useful in explaining many of the most politically salient processes evident in empirical research i.e. strategic social construction, in which actors strategise rationally to reconfigure preferences, identities or social contexts. This is particularly relevant in norm emergence affecting regional water resource management and state behaviour, when international interest groups i.e. environmental NGO's, driven by an environmental-conservationist bias impose international environmental norms upon regimes, involving costs that are incurred by one set of (relatively poor) national actors,

while the rules are set – and the benefits enjoyed – by other (often, relatively rich) extra-national groups. “Rationality cannot be separated from any politically significant episode of normative influence or normative change, just as the normative context conditions any episode of rational choice” (ibid, 1998: 888). Norms and rationality are therefore inextricably interconnected and it is with this view in mind that this study critically engages with Neo-Realist theories i.e. Regional Security Complex Theory (RSCT), and the HPC, in an attempt to situate Constructivist threads. These theories will later be described in greater detail in the theoretical framework and where relevant, several of their components will be adapted to this study when plotting the normative framework of case studies. However, it is also illustrated that these Neo-Realist perspectives are limited in their ability to provide an integrated understanding of normative frameworks due to their focus on state-centric notions of sovereignty with less emphasis placed on the increasingly important role of non-state actors within and beyond the state and the influence they have on state policy, normative frameworks and therefore, behaviour.

### **1.5.2. GEOGRAPHICAL FOCUS OF RESEARCH**

The choice of the Orange-Senqu River basin in southern Africa (see Map 2) and the NELSB, a sub-section of the Greater Nile (see Map 3) as case studies, rests firstly, on the need to analyse regional normative convergence in two African regions; East Africa and the Greater Nile region, and the Southern African Development Community (SADC), as a means to compare and contrast any similarities and/or differences that may exist as a result of regional dynamics. Secondly, while the definition of each case study area is based on the resource i.e. the river, and therefore includes the geographical grouping of states surrounding the resource, these particular cases were also chosen for the unique socio-political communities they have formed. Both case studies are therefore *lived* social spaces i.e. the sum of social practices and discourses that exist within the biophysical space. This space is then given direction by regionalising state and non-state actors including both riparian states, as well as actors physically existing beyond the river basin and/or region, but which form part of its social space of normative influence (e.g. China in the NELSB). As such, the use of a Constructivist theoretical framework allows this investigation to free itself from the constraints of the bounded and territorialised nature of water, and move into

a fluid multi-level space where norms provide impetus for political will and action. The latter justification for the selection of case studies presents useful insights on where water is/should be managed and how i.e. the river basin versus the river community and the national versus the transnational.

The use of two vastly different river basins as case studies is also significant for several other practical reasons. Firstly, normative processes follow different causal pathways in the Orange-Senqu River basin than they do in the NELSB. This is as a result of biophysical, socio-political and historical differences. Biophysically, the Nile River is longer and the river basin is therefore larger. Secondly, Nile River basin management involves many more state actors than does the Orange-Senqu River, flowing through ten riparian states i.e. Egypt, Sudan, Ethiopia, Kenya, Eritrea, Democratic Republic of Congo, Tanzania, Burundi, Rwanda, and Uganda (Abraham, 2004: 15; NBI, 2007; Waterbury, 2002: 1-6; Wolf, 1998: 1). This has resulted in a myriad local cultures and ethnic groups with a wide range of local norms and customs. The varying historical socio-political and legal backgrounds, institutional development, levels of stakeholder participation, regional economic development, and riparian relations, to mention a few, have also determined the level of institutional development and co-operation in these basins. This has affected the level of trust of external norms and as such, the degree to which they have been successfully institutionalised.

In the Orange-Senqu River basin, for instance, there is a comparatively high level of collaboration not only between states, but also between sovereign states and non-state entities (Meissner, 2000: 27). Technical co-operation is particularly dominant in the basin (*ibid.*). Additionally, in parallel with technical collaboration, political institutions and agreements have also been enacted (*ibid.*). Yet, whilst collaboration in the Orange-Senqu River basin has been predominantly of a technical nature (as opposed to political), multilateral collaboration makes for easier socialisation of environmental norms of transboundary co-operation since the mechanisms and organisational platforms which foster and facilitate norm diffusion are already in place. In contrast, Nile River basin governance has been embroiled in bilateral agreements/treaties and unilateral action for longer than its southern counterpart. Political instability, tense co-riparian relations and a general lack of trust as a result of cleavages brought about by colonial treaties, has led to

greater resistance to the transboundary co-operation norm set in the Nile River basin than it has in the management of the Orange-Senqu River, with some scholars going so far as to argue that a community of riparians does not exist in the Nile Basin (Waterbury, 2002). This is largely as a result of the contestation between the global norms of equitable and reasonable utilisation and historic rights.

These case studies will first be analysed individually for the value they add to a study of normative convergence due to the unique ways in which norms have influenced contexts and vice versa. In chapter six, they will then be reviewed together in a comparative summation of case-specific normative convergence, which eventually constructs the multi-level normative framework.

Secondly, when norm development is analysed in an African context, it is usually approached from the point of analysing international/external norms and tracking the ways in which they have been accepted in the African context. As Amitav Acharya argues, conventional “Constructivist scholarship on norms tends to focus on “hard” cases of moral transformation in which “good” global norms prevail over the “bad” local beliefs and practices” (Acharya, 2004: 239; Checkel, 1999). While these types of analyses are useful in understanding global norm dynamics, they uncover little about the local response to such norms, the interface between these and regionally constructed, and locally contrived cultural norms, and the dynamics between the co-existence and/or contestation between these levels.

Finally, the ways in which the Orange-Senqu River basin and the NELSB are perceived in African hydropolitics offer interesting leads for an analysis on normative convergence in African hydropolitics. The Orange-Senqu River basin is considered to be the most institutionally developed river basin in the SADC region and is regarded by many as the role model for transboundary river basin management. A normative framework is perceived to be institutionalised in this context. The NELSB has been perceived as the relative laggard in institutional development due to the power asymmetries in the broader Nile Basin. In the past decade however, NELSB countries have seen greater political and economic stability and a steady move towards multilateral co-operative agendas. The normative framework in this sub-basin is therefore burgeoning. It is for these reasons, the Orange-Senqu’s perceived “leader” role, and the NELSB’s changing role from “laggard” to

“independent” that these study areas were prioritised above any other cases in their respective regions, for their abilities (although varied) to influence the normative environment in their respective regions.

Moreover, the Orange-Senqu River basin is considered to be a ‘closed’ river i.e. there is no more utilisable outflow of water available which may lead to inferences that water has become securitised<sup>11</sup> in the region (Turton, 2003a: 79). This situation has, however, not (yet) occurred in southern Africa. Instead, the Orange-Senqu River has the most comprehensive history of successful water regime creation in the entire SADC region due to a high dependence on the resource-base for long-term economic growth by virtually all riparian states. Scholars have argued that a frame of desecuritisation is emerging, that is, water resource management is placed within a political frame where it can be debated, rather than in a security frame where security specialists deal with it in a highly secretive and non-transparent manner (ibid.). “The most likely outcome under these [politicised] conditions is a positive-sum configuration, which is more favourable to regional peace” (ibid: 79). Arguably, political framing (desecuritisation) of water has facilitated a smoother socialisation process of the global transboundary co-operation norm set by encouraging debate and the dissemination of knowledge at the state level and within epistemic communities. Alternatively, the domestic context could be more conducive to the socialisation of global principles since versions of these principles (such as equitable utilisation, co-operative governance, communication, and so forth) have existed in historical agreements that predate global agreements. In essence, the domestic context allows for ‘normative fit’ with global principles.

## **1.6. RESEARCH METHODOLOGY**

This study adopts a qualitative approach to analysing two case studies; the NELSB as a sub-set of the Nile River basin, and Orange-Senqu River basin, in terms of the role that norms play in determining state behaviour and riparian relations. It will be proven that not only do different states (and therefore different regions i.e. SADC and NELSB regions)

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<sup>11</sup> *Securitisation* is defined as a situation where low politics issues, such as water resource management, is associated with the high politics issues of national survival, potentially resulting in a rapid spiral of conflict that would be difficult to predict or manage (Turton, 2003a: 79).

react differently to the same global norms but the mechanisms by which norms are socialised within states differ, which localises and transforms the norm into something unique to a specific context. As such, it is hypothesised that global norms become translated differently depending on domestic configurations. Moreover, an uneven landscape exists comprising of multiple normative orientations and institutional developments with norm convergence occurring from the top-down, laterally, as well as from the bottom-up. It is therefore imperative to understand domestic processes in order to understand the political effects of global/regional ideational structures. This investigation is particularly interested in local variations in socialisation processes and effects, while not ignoring the strong overall regional impact of ideational phenomena. For this, a comparative analysis based on two case studies was necessary. Moreover, in cases where norm contestation occurs, a multi-levelled analysis is imperative to understanding which norms gain acceptance and why.

The methodological approach employed can be divided into two phases: 1). Theoretical i.e. literature research and 2). field research. The literature phase was largely based on a textual analysis conducted through a mixed-method conceptual lens. A descriptive and explanatory application of this theoretical approach in the case studies was then undertaken. A literary attempt was made to trace the development of the global norm set of transboundary co-operation in the NELSB and the Orange-Senqu River basin, as well as review regional norm convergence.

Several of these norms have been codified in international law. From several Constructivist points of view, therefore, adherence to international law is one important indicator of the socialisation of international norms. Sources of international law used in this investigation include international, regional and basin-wide treaties; customary international law; “the general principles of law recognised by civilised nations” and (as “subsidiary means”) judicial decisions and “teachings of the most highly qualified publicists of the various nations” as stipulated in Article 38 of the Statute of the International Court of Justice (ICJ).<sup>12</sup>

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<sup>12</sup> Examples of “teachings of the most highly qualified publicists of various nations” in transboundary water governance and international water law, include the 1966 Helsinki Rules, developed by the ILC, and although not legally binding, these rules have considerable influence in determining the equitable apportionment of water from international river basins. Additionally, the 1992 Dublin Principles formed the basis for the

A crucial indicator of international norm effects used in this investigation is the United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (the UN Convention), adopted in 1997 to mitigate the impending water crisis by using legal means to resolve transboundary watercourse disputes. However, the UN Convention is not yet in force, and therefore, no legally-binding mechanism exists at the international level to ensure compliance and conformance to global norms. As such, using international water law as a sole indicator of norm effects would not explain acceptance, compliance or resistance to norms at a local level. Process-tracing research is therefore necessary to ascertain the extent of socialisation of normative principles in terms of implementation, compliance and reception as well as its effectiveness. This translates into the need to include policy alignment and harmonisation as an indicator of normative convergence, but also to review the incremental development of behavioural convergence through concepts of benefit-sharing in order to explore socio-political processes as drivers and barriers to this convergence.

A second category of important indicators used in this study are legal acts, policies and other multilateral agreements of international and regional organisations/institutions. International and regional organisations teach states new norms of behaviour as well as help disseminate them (Finnemore and Sikkink, 2001: 401).

The second phase of data collection involved field research in the Orange-Senqu River basin (extensive fieldwork included visits to all four riparian states: South Africa, Namibia, Botswana, and Lesotho) and the NELSB (countries visited included Uganda and Rwanda), and employed a mixed-method data collection strategy consisting of semi-structured interviews, informal discussions, email correspondence, and participatory approaches such as workshops, focus groups, closed meetings and participant observation techniques to determine the relationships between global, regional and domestic norms. These methods form the bulk of process-tracing research on implementation, compliance and effectiveness of global principles amidst existing domestic and regional norms. Here

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IWRM concept, and comprises of four guiding principles for the management of international freshwater resources: 1). Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment; 2). Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels; 3). Women play a central part in the provision, management and safeguarding of water; and 4). Water has an economic value in all its competing uses and should be recognised as an economic good.



too, the tracing of norms and norm development in (re)defining identities was significant as this illustrated the degree to which individuals identify with particular norms. The interview and focus group sources can be found in Appendix two, informal discussion participants in Appendix three, email correspondence in Appendix four, list of SADC Water Division participants in policy harmonisation discussion in Appendix five, and a list of closed meeting participants in Appendix six (Appendix seven includes the proceedings of the closed meeting).

Additionally, the majority of participants consulted i.e. interview, workshop and focus group participations, informal discussants, email responders etc. can be classified as members of the epistemic community. Comprising of technical experts, academics, researchers, policy and decision-makers, and other government officials, this community drives the transboundary water governance discourse in Africa, as a result of the technical nature in which water resources are viewed and managed. Since this investigation sought to sketch a realistic picture of normative convergence at the regional level, as well as the power asymmetries that come into play in multi-level transboundary governance, a deliberate, self-selecting sample of individuals was chosen to reflect the dominance of scientific and political voices in determining the normative environment. While there is a danger in this approach producing data that affirms this investigation's main hypothesis of regional normative convergence, due to participants' vested interests in regional co-operation at the political level, the chosen theoretical framework's prioritisation of shared understandings and collective expectations of appropriate behaviour accepts the preponderance of the epistemic community voice(s). The important actors that determine the normative transboundary governance environment at the regional level are precisely those individuals who make up this community, and consequently, those interviewed. That said however, it is important to note that the epistemic community does not represent an entirely homogenous grouping ideationally, sharing similar perspectives on everything i.e. co-operation is good, conflict is bad. Indeed, differences in understandings do exist, and this was closely observed, as it provides insights into norm resistance and or norm manipulation, localisation and transformation. In an attempt to triangulate the results from the research interviews, perspectives were also obtained to give insight into local and international contexts. As such, local advocacy coalition representatives and activists,

farmers, entrepreneurs were also consulted to provide insights on the challenges of bottom-up norm convergence. Similarly, international policy advisors and experts were also interviewed for their perspectives on the origin and nature of the global norm set of transboundary water co-operation, its applicability at other levels of scale, and appropriateness to advancing regional normative convergence.

Finally, the respective river basins were examined in detail within their real-life contexts. As case studies are usually multi-dimensional analyses a number of actors, mechanisms, institutional procedures and causes were identified within the study's domain. As such, a single unit of analysis does not confine this study. For instance, the role of non-state interest groups exist on the sub-national, basin, regional and international levels, states on international, national and basin levels, while transnational bodies blur the lines between national, regional and global levels of analysis. This multi-layered approach to the levels of analysis is challenging and presents a complex but more holistic and integrated picture to the impact of norms. Their interplay may be cohesive and harmonious, but may also be disjointed and conflictual. In short, not only do variations in norm effects exist due to variations in domestic (nature of states) and regional structural contexts (political, cultural, ethnic, historical co-operation or lack thereof), but also norm effects differ as a result of the variations in the interplay of norm diffusion and/or contestation.

## **1.7. DEFINITIONS**

### **1.7.1. THE GLOBAL NORM SET OF TRANSBOUNDARY CO-OPERATION**

The principles of transboundary co-operation, as an 'emerging' global norm set, arguably date back to the 1960s and 1970s when the United Nations (UN) responded to the need for clearer rules governing transboundary waters by requesting the International Law Commission (ILC) to codify and progressively develop the rules applicable to the development and management of international watercourses. These rules (referred to today as the 1966 Helsinki Rules) formed the foundation for the 1997 UN Convention. A broader global environmental agenda, propelled by the North (particularly Scandinavian states) therefore, emerged in the 1970s, appearing most significantly at the 1972 UN Stockholm Conference (UN, 1972). The UN then pursued transboundary water issues again at the 1977 Mar del Plata Conference, where the Action Plan adopted by the participants

contained 11 resolutions and 102 recommendations (UN, 1977). From then on, water became enveloped in a general concern for the environment, losing its relatively distinctive status as a separate area of global concern. Yet, in recent years, water has regained its importance on the international agenda within the frames of either securitisation or desecuritisation.

The 1997 UN Convention offers much value (if incomplete and at times misguided) as a legal framework as well as an indicator of norm diffusion since it shows which countries have committed themselves in principle to abiding by the normative principles of transboundary co-operation such as equitable utilisation and the no harm doctrine. The UN Convention is codified international water law although, since it is not yet in force, acts only as a framework agreement.<sup>13</sup>

The Convention was passed by the UN General Assembly on 21 May 1997 (UN, 1997a) by a 103 vote with three against (Turkey, China and Burundi), 27 abstentions and 33 Member States absent (Eckstein, 2002: 81; Thompson, 2006: 373; UN, 1997b). By the end of the signature period (20 May 2000), the Convention acquired eight ratifications, and an additional ten had signed the Convention (Eckstein, 2002: 81; Thompson, 2006: 373).<sup>14</sup> As of December 2009, there are 16 signatories and 18 parties to the Convention (UN, 2009).

The UN Watercourses Convention serves as a framework of universal principles to guide the more detailed development of basin-specific agreements (Hiddema and Erasmus, 2007; UN, 1997a, 1997b). Moreover, it not only specifies guidelines for the content of basin-specific accords, "...but also for the process by which such accords should be negotiated and the standing to be accorded to states within a shared river or lake basin" (Conca *et al.*, 2006: 4). Additionally, it has the objective of helping to prevent and/or

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<sup>13</sup> The Convention will only come into force on the 19<sup>th</sup> day after the 35<sup>th</sup> instrument of ratification, acceptance, approval or accession with the Secretary-General of the UN (UN, 1997a: Article 36.1)

<sup>14</sup> Many states that voted against the text of the Convention, or abstained, argued that the document was not yet ready for a vote. Additionally, the numbers voting for the Convention underpin a voting pattern that manifests the complexity of the subject matter, as well as the fragility of the coalition favouring the Convention (Eckstein, 2002: 81). States adopted positions that reflected their national interests and riparian positionality (Eckstein, 2002; Thompson, 2006). Upstream states support rules that give them control of the water that originate in their territory (e.g. Ethiopia), while downstream states accept the doctrines of prior appropriation or vested rights, and in some cases, absolute territorial integrity, embracing a stance that would give them unaltered flow of the water that enter their territories (Eckstein, 2002; Thompson, 2006).

resolve conflicts over international water resources and promoting sustainable development and the protection of water supplies (Eckstein, 2002: 81).

In this study, the global norm set of transboundary co-operation will incorporate the principles listed below:

1. Participation of riparian states - Article 4 (UN, 1997a) stipulates that every riparian state is entitled to participate in negotiations surrounding an international watercourse, and to consult on any lesser agreements affecting that state.
2. Equitable (and reasonable) utilisation – an ambiguous rule referring to equal sharing, although a review of the standards for equitable utilisation demonstrates that while equal access is guaranteed, equal shares are not (ibid: Article 5).
3. No harm - defined as the requirement that watercourse nations, in using an international watercourse, to take all “appropriate measures” to prevent the causing of significant harm to other watercourse nations (ibid: Article 7).
4. Inter-riparian co-operation and information exchange - Article 8 obliges states to co-operate, on the basis of “sovereign equality, territorial integrity, mutual benefit and good faith” while Article 9 calls for regular exchanges of information and data between riparians. Similarly, information exchange and consultation with the other parties on the effects of any “planned measures” is also stipulated (ibid: Article 11).
5. Prior notification – defined as the requirement to make other riparian states aware that a planned measure “might change the course or volume” of water resources, “so that if they might threaten the rights of riparian owners of the adjoining sovereignty a claim may be lodged...and thus the interests on both sides will be safeguarded,” (ibid: Article 12), and
6. Ecosystem protection - imposes on states an obligation to “protect and preserve the ecosystems” (ibid: Article 20) of international watercourses and to “prevent, reduce and control the pollution of an international watercourse that may cause significant harm to other watercourse states or to their environment, including harm to human health or safety, to the use of the waters for any beneficial

purpose or to the living resources of the watercourse” (ibid: Article 21). Articles 22 and 23 elaborate further on environmental concerns, obliging governments to prevent the introduction of alien species or new species and protect and preserve the marine environment.

7. Dispute resolution – guidelines are outlined for dispute resolution procedures that include an obligation to resolve disputes peacefully, an endorsement of arbitration and mediation, and procedures for the creation and workings of fact-finding commissions (ibid: Article 33).

The most contentious issues on the UN Convention were those raised in Articles 5, 6 and 7, the main reason for objection (including those who voted for the Convention) being that the text failed to establish a balance between the rights and obligations of upper and lower riparian states (Eckstein, 2002). During the negotiations of the UN Convention, there was strong contestation on what the exact relationship between the no-harm obligation and the equitable and reasonable principles is (McCaffrey, 2001a, 2001b). This clash is largely as a result of upstream riparians traditionally favouring the doctrine of absolute territorial sovereignty over resources located in their jurisdiction, while lower riparian states favoured the principles of prior appropriation which posits that current users of water have precedence over future or planned uses (Eckstein, 2002).

Moreover, scholars disagree on whether these above-mentioned guidelines are in fact principles (Conca, 2006; Wolf, 1999) or the codification of existing norms (McCaffrey and Sinjela, 1998). According to McCaffrey and Sinjela (1998: 106), the important elements of the UN Convention such as equitable utilisation, ‘no harm,’ and prior notification are codifications of existing norms; whereas Wolf (Wolf, 1999) argues that these principles have only been explicitly invoked in a handful of water negotiations or treaties. Similarly, Conca *et al.* (2006: 280-281) avoid the use of the term ‘norm’ because it connotes a logic of appropriateness, characterised by norm convergence i.e. whether governments are converging on common principles for governing shared river basins in the form of a global regime. Conca *et al.* (2006: 281) argue that unidirectional progression toward a global regime for international rivers is not occurring because the rate at which international agreements are being reached has not increased. Instead, a more complex pattern of principled evolution is at play (ibid: 265). The authors produce evidence of

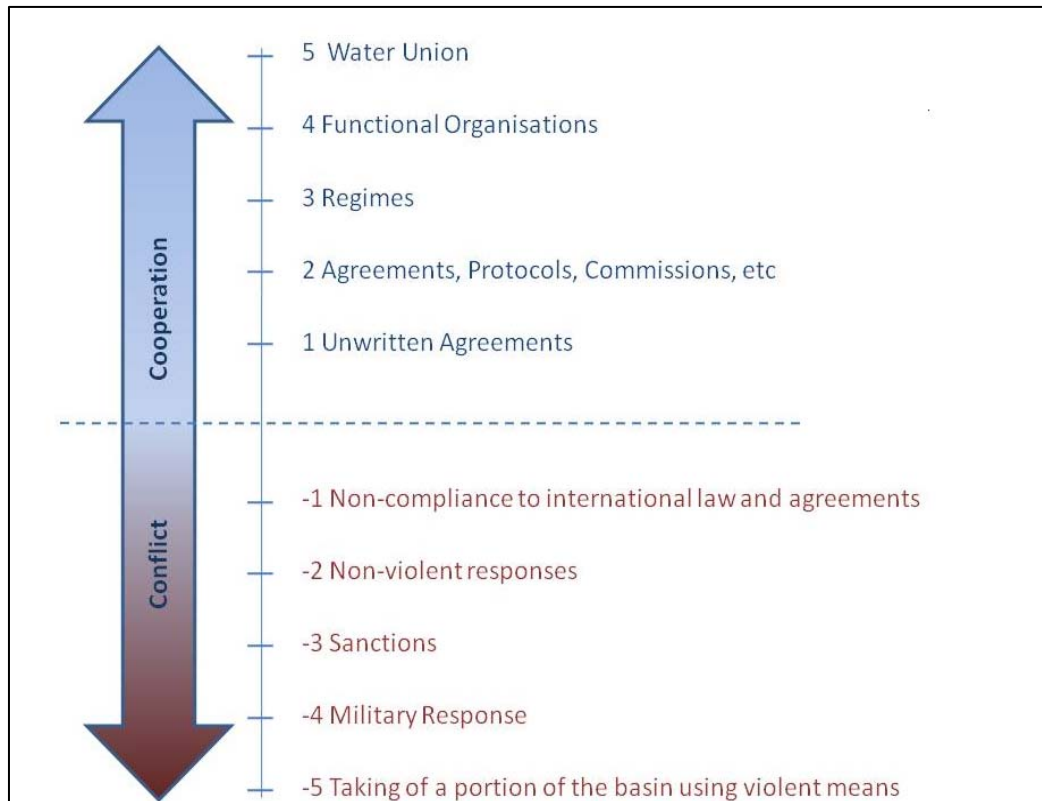
convergence on two different normative frameworks (one stressing shared river protection, the other stressing the state's rights to water). Some key principles appear to be subject to a global normative pull and take on deeper meaning over time, but simultaneously, many others do not. Normative dynamism exists, but is not at all unidirectional. This will be elaborated in greater detail in chapter three, but it is noteworthy for conceptualisation purposes to note the classification debate between norms and principles. This investigation found that external norms *do* get diffused and socialised in ways that are unique to particular contexts. These context-specific processes allow for norm localisation and translation, and norms may “look different” to what they were initially. Norms also may follow different development tracks whilst evidence of their influence may be quite different to preconceived perceptions that spring from restrictive theoretical frameworks. Other externally produced norms will also be referred to in this study such as the subsidiarity principle and historic rights.

### **1.7.2. THE CONFLICT-CO-OPERATION PROBLEMATIQUE**

Although not explicitly indicated in most analyses, most literary contributions to the hydropolitical discourse subscribe to the Neo-Realist notion of an anarchical or ‘governless’ international system, in which state behaviour is not only the product of state attributes themselves, but also of the structure of the international system within which these interactions take place (Du Plessis, 2000: 20-21). But it is also believed, under a Neo-Liberal institutionalist perspective, that co-operation and collaboration are possible (and necessary or even inevitable) under conditions of anarchy through the establishment of formal co-operative regimes/institutions. This problematique between peace, stability and progress is a fragile and very important one, because the emphasis is on the potential for ‘water wars’ based on the threat water-related contingencies pose to security (ibid.). These approaches prioritise the inevitability of either water conflict or water co-operation (in the form of ideal multilateral collaborations). As such, a linear continuum between conflict and co-operation is often conceptualised and the formation of institutions and regimes ranging from informal to formal are the rungs by which to measure success i.e. co-operation (see Figure 1).

This study therefore makes the argument that the conflict-co-operation problematique is one in which degrees of conflict and co-operation regarding transboundary waters can occur simultaneously. The type of co-operative strategy negotiated should therefore be unique to a particular context.

**Figure 1: The Conventional Co-operation-Conflict Continuum of Water (Adapted from Meissner, 2000: 26)**



Moreover, no systematic analysis has been undertaken of the principled content of that co-operation; proving a linear continuum less useful in explaining how informal agreements may, for instance, render a more co-operative management strategy in certain contexts than more formalised agreements.

## **1.8. CHAPTER OUTLINE**

Following chapter one's introduction of the problem statement, research question, purpose, theoretical approach and research methodology as well as a conceptual demarcation of this study, chapter two aims to develop a theoretical framework on which

the analyses of the case studies may be built. This entails a brief description of the hydropolitical discourse and its linkages to IR theory and an analysis of positivist and post-positivist theories and their applicability or inapplicability to the impact of norms on regional water resource management. Additionally, a bridge-building exercise is attempted to narrow the gap between the two incommensurable traditions of rationalism and reflectivism, followed by greater theoretical elaboration on norms and norm development with a focus on the socialisation of global norms at a local and regional level. Chapter three's purpose is threefold. Firstly, it aims to further elaborate upon theoretical concepts introduced in chapter two, with a review of perspectives on norm convergence. Secondly, chapter three will pave the way theoretically for a closer look at domestic and regional political contexts by introducing the HPC as a conceptual lens through which to view norm convergence. Thirdly, it plots out the method used to analyse norm convergence in the proceeding case study chapters, using three main tracks: global norm convergence from the top-down, regional norm convergence (involving lateral processes of state-to-state and state-to-basin-to-region), and bottom-up (local to national) norm convergence. The fourth track is more an outcome of the co-existence of these three tracks combined i.e. norm dynamism/contestation. The subsequent chapters (chapters four and five) will apply the theoretical framework to the practical/field research completed in the analyses of the two case studies. Additionally, these chapters critically engage with the HPC in an attempt to test its applicability at all levels of scale. The limitation to its utility is evident in sub-national configurations, ambiguity of terminology when socio-political contexts are dynamic, and the limitations of a state-centric view of sovereignty as complete control over state territory. This is then followed by a concluding chapter that aims to conceptualise the development tracks of norms in the two case study areas.



## **CHAPTER 2**

### **TOWARDS A CONSTRUCTIVIST SYNTHESIS**

#### **2.1. INTRODUCTION**

The purpose of this chapter is to draw linkages between the hydropolitical discourse, norms research and various theoretical perspectives of International Relations. The attempt is to develop a theoretical framework that seeks to systematically analyse the impact of the global norm set of transboundary co-operation and the relationship between various normative levels in multi-levelled water governance. In so doing, this chapter takes the following structural path: an overview of the hydropolitical discourse and its theoretical foci; an outline of the development of International Relations theory in relation to the hydropolitical discourse; a discussion of mainstream, positivist theories and their assumptions and how they link to International Relations theory; and a discussion of selected reflectivist theories, their assumptions and how (or if) they relate to hydropolitics. Finally, a bridge-building exercise is attempted to narrow the gap between these two incommensurable traditions, followed by greater elaboration on norms and norm development.

#### **2.2. AN OVERVIEW OF THE HYDROPOLITICAL DISCOURSE AND ITS THEORETICAL FOCI**

Conceptions of security after the Cold War have acquired wider meanings than protection from a military threat and have broadened to include a greater focus on natural resources. Hydropolitics has therefore emerged as an issue of practical and scholarly concern that extends beyond issues of water use, to economics, development, security, human rights, and joint co-operation. Thus the hydropolitical discourse covers a diverse spectrum of issues. It is therefore important to review past discourse and its theoretical foci and examine how this relates to the broader realm of International Relations theory before

attempting to demarcate this study along more specific lines. Anton Du Plessis describes several theoretical foci, which are relevant in this study (Du Plessis, 2000: 12-15).

The first theoretical tenet is a focus on the environment, ecology, and related ideas that humanity is fast depleting its natural resources, and this premise dates back to the nineteenth century (ibid: 12). In more recent times, however, there has been a resurgence of *ecocentrism* and *ecocentric* issues. As a result, green politics, environmentalism and environmental multilateralism have emerged as three very important political forces internationally (ibid). The second focus includes the emphasis on global ecology as it relates to development. This theoretical focus rests on the claim that development is inherently anti-ecological since it undermines sustainable practices (ibid: 13). Furthermore, the main argument here involves the danger of development entrenching the power of the powerful (ibid.)

The third theoretical focus exists within the realm of security studies i.e. the concern of security (ibid). This concern extends more broadly to environmental security, and more specifically, to water security (ibid.). This focus, and its theoretical conceptualisations, is inextricably linked to the war-peace and conflict-co-operation problematique if one considers water to be a potential source or cause of (violent) conflict. The underlying logic, although not new, has become more prevalent since the Cold War, resulting in the emergence of a new strategic imperative labelled as “environmental security” (ibid: 13). This concept addresses the environmental factors that underlie potentially violent conflicts, and the impact of global environmental degradation on the well-being of societies and economies (Porter, 1998: 215). Additionally, this development is in part borne from the ‘new’ security paradigm that has expanded the security agenda to include non-military (‘low politics’) threats, and also non-state, security stakeholders at all levels of society (Du Plessis, 2000: 13). It is therefore also linked to common security i.e. a shared interest in survival (Butfoy, 1997). It is with this theoretical foundation in mind that this study attempts to elevate water resource management out of a strict water conflict vs. water co-operation analysis overly consumed with whether or not water conflict will erupt, but rather how behaviour and policy is determined i.e. how it is that agents (both state and non-state actors) get to be positioned, which normative frameworks are created and how.

Arguments about global dangers are however understood very differently by the South and particularly Africa, which is often regarded as a main source of these ‘new threats’ (Dalby, 1998: 183). In part, this concern originates from the environmental security debate, which also involves sustainable development as a formulation that can allow injustice and environmental degradation to continue as part of the ideologically renewed process of development (Du Plessis, 2000). Thus, from the South’s perspective, the ‘discourses of danger’ that define the environmental security discourse are often perceived as hegemonic or imperialist attempts to reassert domination of the South by northern superpowers, albeit in the name of protecting the planet (Dalby, 1998: 183-185).

As a logical extension of (in)security, the fourth theoretical focus rests on the relationship between environmental change, scarce natural resources and conflict (Du Plessis, 2000: 14). Relevant here is the notion that scarcities of critical environmental resources such as water are powerfully contributing to widespread violence in certain areas of the world (ibid.). More specifically, Homer-Dixon (1994) who is regarded as the intellectual founding father of this theoretical focus, argues that resource depletion, resource degradation, and resource scarcity (induced by issues of supply and demand, as well as structural scarcity) contribute to mass violence. Additionally however, the focus here is not solely on a preoccupation with conflict but also includes the preconditions for peace. Therefore, as Du Plessis (2000: 15) argues, it involves conflict termination, containment, management and resolution, as well as strategic approaches to peace. Scholars have therefore debated whether growing water stresses create co-operative or conflictual incentives (Homer-Dixon, 1991, 1994; Postel and Wolf, 2001) and whether existing agreements are effective mechanisms of shared governance (Bernauer, 1997, 2002).

The fifth theoretical focus in the discourse comprises of normative dimensions and it involves issues of value such as settled norms (e.g. sovereignty); nascent norms (e.g. intervention and political space); ethical concerns (e.g. the distribution of and access to scarce resources); as well as human rights (Du Plessis, 2000: 15). According to Conca, Wu and Mei (2006: 264), no systematic analysis has been undertaken of the principles underpinning shared river co-operation. “Scholars have paid far more attention to the presence or absence of formalised co-operation than to the principled content of that co-

operation or the direction in which principles are trending” (Conca, *et al.*, 2006: 264). In other words, not enough attention has been placed on the influence of norms in influencing behaviour; socialisation processes of global, regional and domestic norms; norm contestation; describing and analysing whether socialisation processes are top-down or bottom-up, or whether they even exist at all. Conca *et al.* (2006: 264) posit that shared rivers provide a useful domain in which to examine precisely this: the evolution of principled co-operation. “Theoretically, the often-asymmetric bargaining context between upstream and downstream states offers strong tests of claims about norm diffusion and progressive legalisation. Empirically, shared river governance provides an unusual opportunity to link previously separate levels of analysis: the effort to cultivate a body of global principles and the many basin-specific co-operative agreements among smaller groups of countries” (ibid: 264).

The sixth theoretical focus, international and domestic water law, also forms part of the ‘principled’ discourse as a basis for order, justice, co-operation and governance (Du Plessis, 2000). Scholarship on the law of international rivers, however, has treated global, basin-specific and local levels as conceptually disconnected and analytically distinct (Conca, *et al.*, 2006: 265). IR scholars are on the one end of the spectrum, concentrating on the basin-specific level, and producing a large body of research on co-operation and conflict among co-riparian states (Beach, *et al.*, 2000). The central focus for IR scholars is therefore to predict the possibility or the inevitability of international co-operation or conflict rather than the principled content of co-operation (Conca, *et al.*, 2006: 265). In terms of the variables shaping co-operation-conflict, Conca *et al.* (2006: 265) ascertain that IR research could easily be divided into two main categories: the basin-level distribution of power (Bernauer, 1997; Frey, 1993; Turton, 2001a, 2008b; Turton and Ashton, 2008; Wolf, 1997); and the effects of specific state characteristics e.g. regime type (Hamner, 2002), the level of international economic interdependence (Durth, 1996) or the level of domestic water scarcity (Frey, 1993; Gleditsch and Hamner, 2001; Lowi, 1993; Wolf, 1997). According to Conca *et al.* (2006: 265), this bargaining-driven research contains an inherent assumption that the principled content of co-operation could result from existing patterns of power and interest, making the presence/absence of co-operation (rather than normative orientation) a dependent variable. Legal scholarship, on the other side of the spectrum, has

placed more emphasis on the evolution of legal principles for shared river basins, analysing decisions of the International Court of Justice (ICJ) and other precedent-setting treaties or globally articulated frameworks of legal principles such as SADC's 1995 Protocol on Shared Watercourses, and the 1997 UN Convention (Conca, *et al.*, 2006: 265-266). This polarisation articulates a need to merge both IR and legal scholarship to investigate how principled content - both hard and soft law – affect the conflict-co-operation problematique of transboundary water governance.

### **2.3. SWIMMING UPSTREAM AND DOWNSTREAM THE HYDROPOLITICAL DISCOURSE**

As previously mentioned, the hydropolitical discourse has rarely consciously adopted non-Realist theorising, but rather, many scholars of hydropolitics have written from a-theoretical or deliberately non-theoretical perspectives (Allan, 1999b; Gleick, 1993; Homer-Dixon, 1994; Ohlsson, 1995; Payne, 1996). However, as Du Plessis (2000) argues, the hydropolitical discourse does seem to have charted itself *subliminally* through two main theoretical traditions of IR i.e. the dominant tradition of rationalism and the marginal tradition of reflectivism albeit concealed under policy analysis and issues of security. These two rival overarching traditions can subsequently be divided into sub-divisions; rationalist theories comprising of Realism (and Neo-Realism) and institutionalist theories (Liberal and Neo-Liberal); while reflectivist theories comprise of feminist theory, critical theory, and postmodernism (Du Plessis, 2000: 22).

The great debate between rationalism (Neo-Realist/Neo-Liberal synthesis) and reflectivism rests on incommensurability. For instance, processes and institutions are given a behavioural conception by rationalism, whereas reflectivism explains interests and identities. According to Du Plessis,

...among rationalists and reflectivists, there is an absence of repressive tolerance in the form of a similar self-understanding of the relationship among positions. There is also a reciprocal lack of recognition with regard to legitimate parallel enterprises, since these are believed to be linked to contending social agendas and projects. Rationalists and reflectivists see each other as harmful, and at times, almost 'evil'. According to reflectivists, mainstream theories are co-responsible for upholding a repressive order (Du Plessis, 2000: 17).

IR and subsequently, the hydropolitical discourse, have therefore, accepted an unchallenged set of positivist assumptions (Meissner, 2004: 19) despite a slow and incremental increase in the use of alternative theoretical perspectives. In many respects, the absolute acceptance of this positivist epistemology has suffocated debate over the characteristics of the world and how it can be explained.

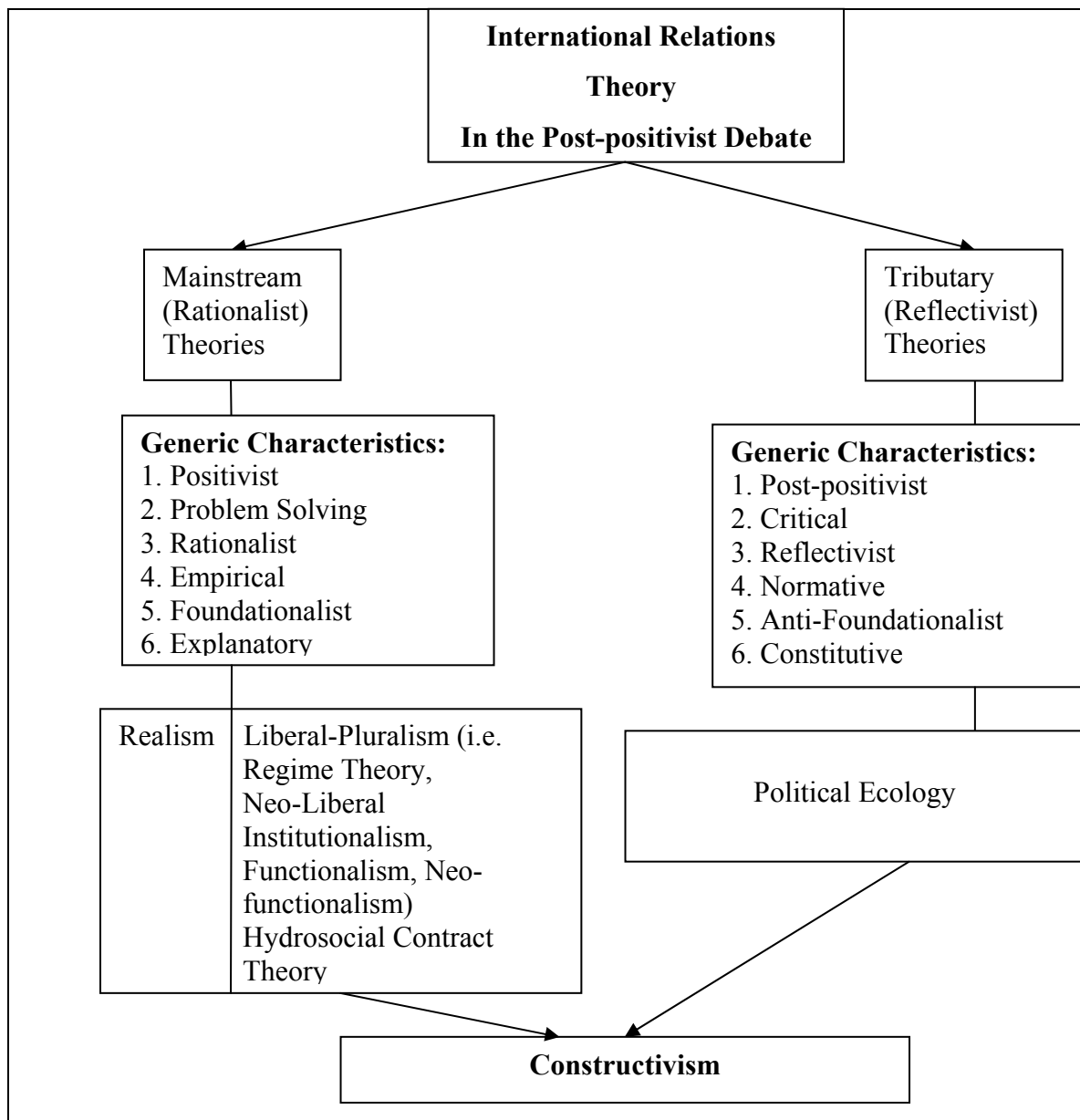
Therefore, the temporal progression and development of IR (from one great debate to another) has a tendency to organise itself through “a constant oscillation between grand debates and periods in-between where the previous contestants meet” (Waever, 1996: 175). The discipline of IR has long awaited the arrival of a new rival perspective, since reflectivism has become de-radicalised and reconceptualised; indicating a move towards linkage principles (Waever, 1997). Du Plessis and Meissner argue that in fact, reflectivism is now no longer the dissident perspective, nor is it the “other” perspective (Du Plessis, 2000: 17-18; Meissner, 2004: 20).

This is a key aspect of this study, that is, to explore how both these general perspectives can reach some sort of middle ground. Meissner (2004) has attempted to do exactly this by theoretically merging the two theoretical approaches through social Constructivism as indicated in Figure 2. This study aims to elaborate on Meissner’s social Constructivist approach, with a focus on the impact of norms and norm development on transboundary water governance. Waever reiterates this perspective arguing that the culmination of these associational principles is the increasing marginalisation of extreme rationalism (formal rational choice) and anti-IR approaches (de-constructivists), as well as the emergence of a middle ground where neo-institutionalists from the rationalist side come together with the Constructivists from the reflectivist side (Waever, 1997: 22-25).

Indeed it might be argued that the rise of Constructivism has propelled IR theory development forward due to its bridge-building capabilities. On the IR theory spectrum, Smith reiterates that certain forms of Constructivism fall:

...precisely at the intersection between the two sets of approaches...that is between both rationalist and reflectivist approaches. It does this because it deals with the same features of world politics that are central to both the Neo-Realist and the Neo-Liberal components of rationalism, and yet is centrally concerned with both the meanings actors give to their actions and the identity of these actors, each of which is a central theme of reflectivist approaches (Smith, 1997: 183).

**Figure 2: International Relations Theory in the Post-positivist Debate (Adapted from Meissner, 2004: 22)**



In this regard, it represents a ‘synthesis’ between rationalism and reflectivism (Kubáľková, Onuf and Kowert, 1998; Smith, 1997). As Meissner argues, Constructivism deals with the effect of the ideational on the material, and can therefore be seen as a bridge between rationalism and reflectivism because it deals with normative aspects (imported from reflectivism) that have an impact on the real world (as espoused by rationalism) (Meissner, 2004: 20; Smith, 1999: 682-683).

### 2.3.1. MAINSTREAM THEORIES

Rationalism includes a spectrum of similar and also vastly different theories. However, they do share a number of generic characteristics. They are firstly 'scientific' (or positivist) and offer rational and explanatory renditions of International Relations (Du Plessis, 2000: 18-19). According to Meissner and Du Plessis, explanatory theories are those that view the world as 'external' (and existing objectively) to the theories that explain world politics (Du Plessis, 2000: 19; Meissner, 2004: 21). In other words, subject and object must be separated in order to theorise properly. Furthermore, since rationalism "assumes that images in the human mind can represent reality through observation," it also assumes that theorists *are able to* separate themselves from the world "in order to "see" it clearly and formulate statements that correspond to the world as it truly is" (Du Plessis, 2000: 19). Therefore, some feature of the world i.e. war, peace, political boundaries are judged to be either true or false. There is no attempt to explain how these concepts came into being (how they were constructed) but merely why they exist (if they do) and how valid they are in explaining something. They are therefore positivist, rational, foundationalist and explanatory as well as what Cox refers to as problem-solving: theory that takes the world as it finds it, including the prevailing social and power relationships and institutions, and uses them as a basis or foundation for further action (Cox and Sinclair, 1996: 88).

Realism and Neo-Realism explain the inevitability of conflict and competition between states since these theories emphasise the insecure and anarchical nature of the international environment. It is however also assumed that there can be co-operation under anarchy, and that states can minimise international anarchy by constructing rules and institutions for their coexistence (Burchill, 1996). Liberal institutionalism, for example, emphasises the benefits of transnational co-operation. Akin to Neo-Realism, Neo-Liberal institutionalists also regard the state as a legitimate representation of society. They too accept the structural conditions of anarchy, but emphasise the gains to be realised from co-operation between states (Dunne, 1997a).

To summarise therefore, rationalism takes the identities and interests of actors as a 'given' (Du Plessis, 2000:19). It furthermore ignores major features of a *globalised* political world system, and argues that the state is the primary actor in world politics. Co-



operation and conflict are prioritised, and actors are viewed as rational, value maximisers (Smith, 1997: 169-171, 184).

Having briefly outlined the rational course, it is therefore no wonder that the hydropolitical discourse is charted predominantly via this route. If one is to consider conflict and security issues as primary components of war, it seems logical that the securitisation of water resources be state-centric. Sovereignty and territorial integrity, as collaterals, are also emphasised in rationalist undertakings (Du Plessis, 2000: 20). And while pluralism is not excluded, since non-state actors are regarded as key stakeholders in the hydropolitical discourse, most contributions speak from the vantage-point of state actors and none explicitly represent the alternative non-state view (ibid.).

### **2.3.2. TRIBUTARY THEORIES**

According to Du Plessis, if rational choice theories such as Neo-Realism and Neo-Liberalism are mainstream, then reflectivist theories are tributaries (in keeping with the water theme) of contemporary theorising along which the hydropolitical discourse is charted (Du Plessis, 2000: 22-23). While the reflectivist spectrum is vast, these theories are united by their rejection of state-centric Realist and Neo-Realist conceptions of war and peace, Neo-Liberal institutional approaches to co-operation in anarchy, as well as the positivist assumptions that have dominated the study of International Relations (ibid.).

Tributary theories have a self-reflective nature and are an assemblage of post-positivist theories. These include normative theory, feminist theory, critical theory, postmodernism and historical sociology (Linklater, 2000: 15; Meissner, 2004: 23; Smith, 1997: 168). Critical conceptions are based on the assumption that theory is always created for someone and for some purpose, and that theory cannot be divorced from a standpoint in time and space (Cox and Sinclair, 1996). Tributary theories therefore question the apolitical nature of positivist theorising, and are concerned with hidden aspects such as the social and political purposes of knowledge and the dissemination thereof, the interests and agendas of the observer/researcher – and how all of this affects the images actors construct of the world (Burchill, 1996).

Now while post-positivist theories do not add up to one theory of reflectivism, several commonalities are noteworthy to be mentioned. As stated aptly by Du Plessis, “the

meta-theoretical stance of reflexivity, as International Relations theory, involves three core elements: a self-awareness regarding the underlying premises of ‘own’ theorising; the recognition of the inherently politico-normative dimension of paradigms and the normal science traditions they generate; and that reasoned judgements can be made about the merits of contending paradigms in the absence of objective standards” (Du Plessis, 2000: 23). Essentially, this outlines the most fundamental difference between post-positivist theories and positivist theories – those for whom knowledge is socially constructed, and those for whom it is not (Cox and Sjolander, 1994; Du Plessis, 2000).

With the exception of a few hydropolitics scholars, reflectivist discourse is, to a significant extent, marginalised and at times silent. Swatuk and Vale, do however, go against the grain when they question the water capture effect of the Homer-Dixon thesis. They persuasively do this by deconstructing the discourse by identifying critical problems within it as well as the policy decisions that it advocates (which they claim are racist, modernist, statist, capitalist, liberalist, technicist/militarist, exclusive and supportive of the status quo). As such, they propose a strategy for subverting this discourse as a pre-requisite for reconstructing it, which entails a paradigm shift of thinking, language, focus and practice (Du Plessis, 2000; Swatuk and Vale, 2000). The significance of their argumentation is twofold. Firstly, it is implicitly argued that the water domain is essentially a product of the theoretical foci of the prevailing hydropolitical discourse itself, and that consequently, ‘water-theory’ is in fact constitutive of the reality it aims to explain (Du Plessis, 2000). Secondly, it is explicitly argued that the discursive elite i.e. those who are in dominant policy-making positions, and who determine the nature, form and content of the prevailing hydropolitical discourse, act as gatekeepers in order to dominate, legitimise and sanction the prevailing discourse (ibid.). This in turn leads to the creation of a dominant paradigm for the hydropolitical discourse.

## **2.4. IR THEORY’S APPLICATION TO THE HYDROPOLITICAL DISCOURSE**

In the following section, a selection of theoretical traditions and theories will be outlined and the degree to which they are state-centric and concerned with normative

issues will be reviewed. These theories are 1). Realism (or more specifically, Regional Security Complex Theory (RSCT) and the HPC); 2). Conventional Liberal-pluralist perspectives such as Neo-liberal Institutionalism and (Neo)-Functionalist Regime theory and; 3). Political Ecology. Following a discussion of each theory's basic tenets and relevance to the impact of norms and norm development on joint management of water resources, Constructivism will be outlined as a possible middle ground and bridge-building perspective.

#### **2.4.1. THE REALIST PERSPECTIVE**

Realism is added to the discussion because it still is the dominant theoretical perspective in International Relations today and is therefore regarded as the orthodoxy (Halliday, 1994: 11; Nye, 1993: 3). While, for the purpose of this discussion, realism is described as a singular theoretical perspective (because they share several basic assumptions), on the contrary, it contains an array of competing theories that disagree on core issues (Meissner, 2004: 25; Walt, 1997: 932). Moreover, realism is added to this discussion not to refute it as a viable theoretical framework for this study, but rather to show its complimentary if incomplete nature to norm development and hydropolitics.

The shared assumptions that Realist theories hold include statism, self-help and survival (Meissner, 2004: 25). Firstly, the state is regarded as the primary actor and unit of analysis, is rational and unitary, and therefore interstate relations become the focus of Realist analyses (Du Plessis, 2000; Dunne, 1997b). According to Viotti and Kauppi (1999: 6) non-state entities are secondary because governments representing states are the only institutions that can formulate, implement and enforce laws. Realist analyses are therefore overly state-centric and do not directly include non-state actors or normative issues (Lynn-Jones, 1999).

Secondly, Realists assume that sovereignty takes precedence and that it must first be established before civil society can function (Meissner, 2004: 25). Power therefore flows in a one-dimensional path from state to civil society (ibid.). This is problematic for an analysis of regional and transboundary water resource management, particularly because of the contentious nature of managing transboundary rivers. As previously mentioned, the overarching tension between the compartmentalisation of states who claim

sovereign rights over resources in their territory vs. the indivisible/uninterrupted continuum of water, complicates the realm of hydropolitics. Moreover, the fact that Realists divorce the domestic sphere from the international realm is also problematic for an analysis of global norm development moving from the international domain into regional, national and sub-national spheres.

Thirdly, Realists contend that power is used by states to further national interests (which are viewed as fixed and static variables) and achieve goals (Brown, 1997: 34). Akin to arguments made by Finnemore (1996: 27), this study postulates not that norms matter and interests do not, nor is it that norms are more important than interests. The argument here is that norms shape interests, which are by nature socially constructed. Additionally, while Realist assumptions of states pursuing national interests is not disputed, what is ignored is how other non-state actors also pursue their interests i.e. norm entrepreneurs use organisational platforms to convince a critical mass of state leaders to embrace new norms.

Fourthly, Realists believe that the international system is inherently anarchical and that states seek to maximise their power in order to provide security within this anarchical system (Brown, 1997; Lynn-Jones, 1999: 55; Meissner, 2004: 25-26). Each state is therefore obligated to protect its physical, political and cultural identity from other states (Dougherty and Pfaltzgraff, 1990; Meissner, 2004: 26; Morgenthau, 1974: 4). Due to realism's state centric approach to IR, the theoretical framework is too narrow to solely explain the phenomena of international norm development in hydropolitics.

#### **a). Security Complex Theory (SCT) / Regional Security Complex Theory (RSCT) – A Neo-Realist/Constructivist hybrid**

The securitisation of water resources, particularly in water scarce regions of the world has led several scholars (Buzan and Waever, 2003; Schulz, 1995; Turton, 2003a, 2003b, 2003c, 2003d, 2008a, 2008b) to analyse hydropolitics within a SCT framework. A leading contributor to this body of literature, Barry Buzan (1991), first introduced the idea of SCT in his early work entitled "People, States and Fear." Here, Buzan argued that since security is a relational phenomenon, it became clear that the national security of any given state is embedded within an international pattern of security interdependence (ibid: 187). Therefore, comprehensive security analysis necessitated more attention to how the regional

level of political interaction mediates the interplay between states and the international system as a whole (ibid: 188). Moreover, by concentrating on regional sub-systems, two important levels of analysis between system and the state are possible (ibid: 188). The first is the sub-system itself, whereas the second is the pattern of relationships among the various units. Consequently, Buzan, Waever and de Wilde (1998: 201) define a security complex as “a set of units whose processes of securitisation, desecuritisation, or both, are so interlinked that their security problems cannot reasonably be analysed or resolved apart from one another.” Some scholars argue that while securitisation of water is not necessarily a desirable outcome of water resource management (Turton, 2001a, 2001b; Wester and Warner, 2002), the concept does help to understand political linkages between states in shared international river basins (Turton, 2001a: 1).

Security complexes thus emphasise the interdependence of both rivalries and shared interests, threats and vulnerabilities, which are inherently greater over shorter distances thus assuming greater priority (ibid: 2). In short, security complexes are generated by the interaction of anarchy and geography, where the political structure of anarchy confronts all states with a security dilemma, but this is almost always mediated by the effects of geography (Buzan, 1991: 191).

In a later work by Buzan and Waever entitled “Regions and Powers” these editors/authors advance their earlier analysis of regional security complexes (RSC) into a regional security complex theory (RSCT), arguing that regionalisation has been the result of particular global dynamics and that the operational autonomy of regions has been triggered by the advent of ‘non-military actors’, thereby emphasising the centrality of territoriality in the study of security dynamics (Buzan and Waever, 2003: 18-19). Here, the authors attempt to advance the Neo-Realist framework by problematising its ideational grid and incorporating into it elements of Wendtian Constructivism, for example, a conceptualisation of power; particularly, the agents of power (ibid.). They try to combine this, in their Neo-Realist framework, with their re-evaluation of the notion of polarity. The authors make the interesting observation that whilst regions do not display an actor quality (with the exception of the EU), it is the projection of power and the extent of its reach (both materially and ideationally), which defines polarisation in international interactions (ibid.).

In this regard, Buzan and Waever unpack the main elements of their RSCT. Firstly, regions are the appropriate levels of analysis of security studies. Secondly, regions provide a useful organisation of and structure for empirical studies. And finally, regions provide analytical scenarios for testing possible developments in the future. Therefore, RSCT sketches a global map of regional security complexes, whose patterns of amity and enmity are dependent upon both proximity and specific roles (enemy, rival, friend).

Most critiques of RSCT find the marriage between Constructivism and Neo-Realism problematic. On the one hand RSCT acknowledges that security should be defined from the bottom-up by local (i.e. regional) actors and that “security is what states make of it.” (Buzan and Waever, 2003: 49) Yet on the other hand, the fact that the state is still the central unit of analysis makes analysing non-state-centric situations superfluous.

Additionally, in a typically state-centric Neo-Realist vein, the RSCT tends not to stray from traditional security issues i.e. territoriality and territorial proximity as defining features of regions (Hoogensen, 2005: 271). Thus, deterritorialised security issues such as economic security, which are often times raised from globalist perspectives, cannot override territorial security considerations when speaking of regions (ibid.). Furthermore, even in a supposedly weak regional security complex, or proto-complex such as southern Africa, as defined by Buzan and Waever, South Africa, the regional power, has projected its security interests further than the boundaries of southern Africa by becoming involved in peacekeeping and mediation in Burundi, Liberia, Sao Tome and Haiti (Hammerstad, 2005: 74). While this is not necessarily a problem for RSCT, since it does allow for great powers to act outside of their region, the combination, however, of the introspective nature of threat perceptions in the region and the regional power’s interest beyond the region, results in a weak complex, where the domestic level of analysis is dominant (ibid.). And finally, the focus of state behaviour and interests undermines the important role that norms play in influencing behaviour, redefining interests, and contributing to a normative ‘community of interests.’ There is therefore, a need to reflect on the increasingly important constitutive role that non-state actors, ideas, norms and values play within security complexes.

Buzan and Waever’s analysis of Sub-Saharan Africa as a weak security complex is yet another contested area of their research. RSCT tends to rely on strong institutions

present in states and according to the authors, this region has never obtained a strong foothold, and the dynamics of sub-state entities are strongly pronounced (Buzan and Waever, 2003: 223, 247). Non-state security threats such as AIDS and population growth are brushed over and presented as a set of state interactions with external power penetration or overlay<sup>15</sup> (Hoogensen, 2005: 272). According to Hoogensen, the African example suffers as a result (ibid: 172). For example, Buzan and Waever state that “with such a poorly developed political apparatus, and with such fragmented civil societies, Africa is incapable of giving adequate voice to its own security agenda” (Buzan and Waever, 2003: 252). Thus, Africa’s security needs should be expressed by ‘others’ given that Africa is incapable, as a region, of expressing those needs itself. In short, it has no ability to express security needs from the bottom-up. Hoogensen raises two pertinent questions; is it not likely that a security agenda is expressed in Africa, but that this agenda is not ‘heard’ by the dominant security discourses? And is it not also possible that, if we remove the preoccupation with state boundaries, a wide variety of ‘unheard’ security articulations within a variety of regions (from Africa to the Arctic) will become audible? (Hoogensen, 2005: 172). Development of these kinds of points would have better helped RSCT establish the importance of the region as a unit of analysis beyond the state.

#### **b). The Hydropolitical Complex (HPC)**

The HPC will only briefly be described in this chapter for the purpose of placing it within the broader IR theory framework; however, it will be elaborated in much greater detail in chapter three where the argument will be made for limited norm convergence within the complex. Using the work by Buzan (1991), Buzan *et al.*, (Buzan and Waever, 2003; Buzan, *et al.*, 1998) and Schulz (1995) as a point of departure, a conceptual model was developed that factors in the hydropolitical dimension of international relations, particularly as it pertains to the southern African region (Turton, 2003a, 2003d; Turton, 2005a: 16). The rationale for this, according to Turton (2005: 16), is based on the fact that international rivers provide permanent linkages between different states within the Southern African Regional Security Complex as originally defined by Buzan (1991: 210).

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<sup>15</sup> *Overlay* is the condition that prevails when the direct presence of external powers in a region is strong enough to suppress the normal operation of security dynamics among local states (Buzan, 1991: 198). E.g. European colonialism in the Third World

These linkages are so interconnected that they cannot be understood only in terms of geography, and a study that focuses purely on the river basin level misses this complex reality. However, while Turton's HPC and Schultz's Hydropolitical Security Complex, particularly that of the Tigris-Euphrates Security Complex, are both deviants of Buzan's Regional Security Complex, Turton's HPC is where interstate relations around water converge on a normative trajectory that moves towards amity. In contrast, Shultz's Hydropolitical Security Complex is when norms diverge and the trajectory is one of enmity instead.

#### **2.4.2. THE LIBERAL-PLURALIST PERSPECTIVE**

Conventional liberal-pluralism is a theoretical umbrella term in International Relations that is theoretically discernible from, and contrasted to, realism (Stone, 1994). Moreover, it comprises of a number of theories i.e. Regime Theory, Liberal Internationalism, Idealism, Liberal Institutionalism, Neo-Liberal Internationalism, Neo-Idealism, Functionalism, Neo-Functionalism, to mention but a few. It therefore does not constitute a unified theoretical approach and can most justifiably be referred to as a paradigm (Dunne, 1997a; Viotti and Kauppi, 1999). Generally speaking the liberal-pluralist perspective of world politics rests on the foundation of liberal ideas and values outlined below.

Firstly, the liberal-pluralist perspective postulates that states are not the only or the most important actors in international relations. Instead, non-state actors such as interest groups and individuals can also exhibit varying degrees of autonomy (Meissner, 2004; Stone, 1994). These non-state actors, it is argued, play increasingly prominent roles in influencing governments on the determination of national interests (Viotti and Kauppi, 1999: 199). Secondly, liberal-pluralists contend that a highly complex, interdependent and interconnected system exists between actors (Heywood, 1997).

Thirdly, liberal-pluralists prioritise autonomy over sovereignty as a settled norm, to accommodate a range of non-state actors (Meissner, 2004). Fourthly, they argue that states are permeable and not solid, unitary actors (Heywood, 1997; Meissner, 2004). Each state is composed differently in terms of types of government, constituencies etc, and these characteristics can change over time (Meissner, 2004; Stone, 1994). States therefore



consist of citizens, interest groups, local authorities and government departments, all of whom constantly compete with one another (Meissner, 2004). In this regard, if states are viewed as unitary actors, then there can be no variety or analysis of sub-national and transnational actors who are able to influence the state (Viotti and Kauppi, 1999: 200). Fifthly, liberal-pluralists believe that domestic and international politics cannot be separated in reality nor in analyses thereof, since the realms are interdependent (Meissner, 2004). And finally, they assume that co-operation in the international system is natural because the current international system is perceived as liberal (Meissner, 2004; Stone, 1994).

Liberal-pluralism in the broader context, offers a more useful explanation of the effect of global environmental multilateralism and state sovereignty on regional water resource management than does realism because it acknowledges the plurality of the state. But while it increases the scope of international water politics by attributing agency to non-state actors (by arguing that institutions can change state behaviour), very few liberal-pluralist perspectives attempt to link non-state actors with identity and interest creation (Smith, 1997). Additionally, liberal-pluralists hold international institutions as benevolent forces, when in fact, they may act in pursuit of rational self-interest which may be at odds with those for peace and/or co-operation. Alternatively (and arguably, particular to environmental institutions), they may be hollow, ostentatious institutions created merely as lip service to the environmental problematique i.e. to be seen as global good citizens conforming to the norm set of transboundary co-operation, with no desire to reform domestic policy. Additionally, Realists argue that liberalist arguments can be grounded in realism - and raw economic and military power still trumps socio-cultural and other broader notions of power.

It is now noteworthy to review two examples of liberal-pluralist theories to evaluate their applicability for norm development on regional water resource management.

#### **a). Neo-Liberal Institutionalism**

Neo-Liberal institutionalism in IR comprises of those theories that regard international institutions as the primary actors in coordinating and fostering international co-operation. Neo-Liberal institutionalists begin on a very similar theoretical starting block

as Realists, except, where Realists assume that states focus on relative gains and the potential for conflict, Neo-Liberal institutionalists assume that states concentrate on absolute gains and the prospects for co-operation. These scholars argue that the potential for conflict is overstated by Realists and suggest that there are countervailing forces, such as repeated interactions, that propel states toward co-operation.

Regarding co-operative or collaborative responses to water-related (in)security and water-induced conflict, Neo-Liberal Institutionalism seems to be a strong candidate for theoretical frameworks. It emphasises the notion of regime development, which is based on stakeholder decision-making and has a discrete legalistic-institutional foundation (Du Plessis, 2000: 21). The concept of ‘good governance’ is therefore prioritised, again highlighting the centrality of the state, but also adding liberal-democratic capitalistic values as collateral (Mochebelele, 2000 cited in Du Plessis, 2000: 21-22). The key participants in this respect are mostly collectivities representing the state as a political entity, as well as epistemic communities governed by technical experts in the water field (Du Plessis, 2000: 22) which are in turn funded by governments.

Additionally, Neo-Liberal Institutionalism, as previously mentioned of all liberal-pluralist perspectives, regards international institutions as benevolent forces created by morally good principles. In other words, Neo-Liberal Institutionalism assumes away too much regarding the make-up of institutions and multilateralism than this study can afford.

#### **b). (Neo-) Functionalist Regime Theory**

While regime theory will also not form part of this study’s theoretical framework, it is worth briefly describing its importance to the water discourse, as well as to offer a justification for why its’ utility as a theoretical framework for this study is limited. Whilst literature in the area of regime theory is not focussed on transboundary water governance, Turton argues that there is plenty that can be applied to hydropolitics in international river basins. According to Turton (2003d), who uses regime theory extensively in his research, the role of regimes in building confidence between riparian states and thereby reducing insecurity in the face of increasing water deficit is a significant contribution to explaining successful water resource management and co-operation. The significant role of crisis is particularly pertinent here, with the avoidance of crisis becoming a major security

concern, potentially leading to regime creation (Alcamo, 2000: 164). Thus, Turton uses regime theory to analyse desecuritisation processes (and thereby co-operation) to the same degree that he uses SCT and RSCT to analyse securitisation (and thereby conflict).

One basic tenet of regime theory is that regimes (defined as a set of implicit and explicit principles, norms, rules, and procedures around which actors' expectations converge in a particular issue-area i.e. human rights, nuclear non-proliferation, environmental concerns) provide for transparent state behaviour and a degree of stability in an anarchical international system (Krasner, 1983). Another central principle of regime theory is that the chances of successful regime formation are higher the more limited and well defined the issue is (Gupta, 1993 Junne and van der Wurff, 1993: 13). Now while Turton argues that this makes it very relevant to the international dimension of the SADC water sector (Turton, 2003d: 97) due to the alignment of riparian states' interests i.e. water management as an issue-area due to interdependence of Orange-Senqu River basin states on each other for economic development<sup>16</sup>, this does not prove to be as relevant to the Nile River basin. Advancing the collective action characteristic of what Elinor Ostrom (1991) terms 'common property resources' (CPRs), Waterbury (2002) presents the case that non-co-operation is perhaps more likely than co-operation due to disparate national interests and rivalry. Waterbury clarifies that rivalry is asymmetrical. In other words, transboundary watercourses "...do not constitute common pool resources that can be exploited jointly and simultaneously by the riparians in the basin" (ibid: 23). He goes on to argue that this is not a doomsday (water war) prediction however, due to the regional dynamics i.e. the chronic instability and 'political ineptitude' of major stakeholders Ethiopia, the Sudan and Uganda combine with the intrinsic hydraulic difficulty of permanently excluding Egypt from access to water and compelling it to secure its Nile water uses by a multilateral legal framework (Williams, 2002: 1191). Instead, Waterbury argues that non-co-operation or perhaps, non-multilateral action poses no 'tragedy of the commons' problem requiring emergency resuscitation because no crisis of that degree exists (Waterbury, 2002: 166). This argument of regime formation differs to that presented

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<sup>16</sup> This is due to the fact that three of the four Orange-Senqu River riparian states are water-stressed and have already in fact, reached their limitations of their readily available water resources. Therefore, they now need to develop increasingly sophisticated interbasin transfers of water to sustain their economic growth, thereby creating a greater degree of economic interdependence to what we see in the Nile.

by Young (1994) i.e. the view that a crisis or shock might precipitate a formation of regimes. Yet another explanation to the formation of regimes, however, is the one offered by Haas (1994) and Adler and Haas (1992). They are not overly concerned with interests and dramatic events but argue instead, that a regime can originate out of communities of shared knowledge i.e. epistemic communities. The emphasis is on how these experts play an important role in the articulation of complex problems, such as water management issues or pollution control.

While this investigation does not aim to refute the role regimes play or undermine its importance in acting as socialising agents, regime theory says little about how norms become legitimised and internalised in regime environments. Moreover, a moral judgement that regimes facilitate and foster co-operation does not add to the depth of this study since it lays out a unidirectional path with co-operation as the ideal like all other liberal-pluralist perspectives. Since this study purports that norms are dynamic variables, so too would socialising agents such as regimes have to change, and therefore a theory such as this, which regard regimes as static monolithic entities, proves insufficient as an overarching theoretical framework. Also, although norms do feature in a secondary capacity, this theory is too narrow to explain how actors go about lobbying and advocating for the embracing of new norms. In other words, the agential nature of norms is not discussed in great detail or they can in fact, affect the identities states.

### **2.4.3. POLITICAL ECOLOGY**

Political Ecology is the only reflectivist theory reviewed in this study, due in large part to the under-representation of reflectivist applications to transboundary water governance. As espoused by Atkinson (1991), Political Ecology is a normative theory that offers an alternative perspective to Neo-Liberalism (Atkinson, 1991; Toke, 2000: 1-2). Worldwide environmental degradation has led to the upsurge in normative issues related to the physical environment, for example, justice to non-human beings and an environmental ethic (Meissner, 2004). Simply put, Political Ecology, as a normative approach, looks at what *ought* to be rather than at what is (Viotti and Kauppi, 1999: 5), and is therefore, evaluative and prescriptive in nature (Meissner, 2004).

Additionally, Political Ecology has several basic assumptions that make it depart from mainstream positivist theories. First, theorists of Political Ecology reject the notion that only the state-system or other global political structures can respond effectively to environmental problems (Meissner, 2004: 38). Furthermore, they expand this argumentation by arguing for global-scale political transformation rather than institutional tinkering, such as the establishment of regimes (Paterson, 2001: 277). Second, it is assumed that increased economic development through industrialisation is detrimental to the natural environment (Heywood, 1997: 59).

Third, Political Ecology theorising states that ‘limits to growth’ run parallel to rapid economic and population expansion. “These aspects are straining the earth’s resources and carrying capacity that will soon reach its limits” (Meissner, 2004: 38). In this regard, there is a definite limit to the amount of growth a society can experience (Paterson, 2001). Fourth, political ecologists argue that development is essentially ‘anti-ecological’ as it destabilises sustainable practices. These practices create inequality by turning common spaces into private property (Paterson, 2001: 284). Fifth, theorists of Political Ecology reject sustainable development since it is yet another way for the “ruling elite to co-opt environmentalism” (ibid: 282-285). Sixth, political ecologists also assume that humans have become separated and indeed alienated from nature, through economic processes such as capitalist consumerism and a division of labour (Atkinson, 1991; Turton, 1999a). They therefore advocate for a change in political and social institutions in order to diffuse the social tensions that result from the currently existing inegalitarian social relations (Atkinson, 1991; Meissner, 2004).

Seventh, political ecologists are anti-anthropocentric, meaning that they reject anthropocentrism, which contends that the well-being and needs of humans have precedence over nature’s interests and needs (Heywood, 1997). Being anti-anthropocentric is therefore a type of ecocentrism, which places nature first in ethical and philosophical considerations of human activity. Eighth, ecocentrism counteracts the anthropocentrism of state action (Meissner, 2004). It acknowledges human as well as non-human interests (Toke, 2000), and assumes a holistic approach (Meissner, 2004). Ninth, it is also argued that political power should not be centralised at the state level, but rather decentralised within the state and centralised at the regional and global levels (ibid: 39). Lastly, political

ecologists emphasise the important role of non-state actors, and regard interest groups, such as NGOs with an environmental agenda, as critically important in affecting a reversal of the ecological crisis facing humanity (Meissner, 2004; Turton, 1999a).

The relationship between Political Ecology theory and hydropolitics is relevant for this study because it recommends that societies become self-regulating (Atkinson, 1991; Meissner, 2004; Turton, 1999a). A self-regulating society can only be realised if it is 'simpler' in its functions and the relationship between humans and nature more transparent (Atkinson, 1991: 180-181). This could be achieved if the population of a given political entity are allowed to question the decisions that are made by political decision-makers (Turton, 1999a). Political Ecology is, however, a very narrow explanatory tool since a). It does not say much about how norm entrepreneurs convince policy-makers to embrace new norms or how norms develop and affect behaviour and interests, b). It does not explain the importance of global norms as entities that may or may not determine interests in environmental issues and c). It does not propose an alternative to the state system it renounces (Meissner, 2004: 40). Most importantly, it prescribes a normative judgement on that which it analyses, with a bias towards environmentalism. This links back to the applicability of the global norms set. Political ecologists may be able to provide us a normative framework to assess the suitability of contending norms, but the criteria used to determine "good" norms from "bad" norms is in itself normative, and may mask or prejudice the existing landscape of norms and their interaction in time and space.

## **2.5. AN OVERVIEW OF CONSTRUCTIVISM**

In order to bridge the divide between mainstream and tributary perspectives and to accommodate the complexities of ideational contents such as norm development in regional water resource management, Constructivism is used as the umbrella theoretical framework to analyse what Keck and Sikkink have described as "[s]ociological traditions that focus on complex interactions among actors, on the intersubjective construction of frames of meaning" (Keck and Sikkink, 1998: 4). According to Finnemore and Sikkink, Constructivists focus on the role of ideas, norms, knowledge, culture, and argument in politics, stressing in particular the role of collectively held or "intersubjective" ideas and understandings on social life" (Finnemore and Sikkink, 2001: 392). According to

Bernstein, the reflectivist/Constructivist agenda in IR arose from the dissatisfaction that mainstream views “seemed to forget that international institutions are not simply a vehicle through which states co-operate, but that the co-operation they enable is for some purpose or goal” (Bernstein, 2001: x). Since this study aims to focus on the international ideational contents of regional water policy, this is an important theoretical pillar. Phrased in ‘Constructivist’ language, one could then say that this study aims to examine how regional water resource management has been socially constructed in a specific political process over time and why it has been constructed the way it has.

It is however noteworthy to reiterate that due to Constructivism’s difficulty in explaining change, this study will draw from other theoretical perspectives, and where necessary, fill in the gaps where current theory fails to. In spite of this shortcoming, Constructivism does attempt to understand social relations by explaining the construction of the socio-political world by human practice (Meissner, 2004: 40). In this regard it is successful in its bridge-building properties between mainstream, positivist approaches and post-positivist approaches. Simply put, the Constructivist approach applied in this study emphasises the importance of normative as well as material structures (indeed the impact of the ideational on the material), the role of identity in shaping political action, and also the complementary constitutive relationship between agents and structures.

It is also imperative to mention that Constructivism comprises a wide range of perspectives that differ in many ways. Indeed, some scholars argue that Constructivism as a single theoretical approach does not exist (Teti and Hynek, 2006: 14). Other authors have categorised Constructivism into different classifications i.e. conventional/classical, neo-classical, naturalist, post-modernist etc. This study will adopt Meissner’s three-pronged classification system drawn from Reus-Smit’s analysis i.e. systemic, unit-level and holistic Constructivism (Reus-Smit, 2001: 219; Meissner, 2004: 41). While systemic Constructivism follows a Neo-Realist path of adopting a ‘third image’ perspective, focusing on unitary state actors, unit-level Constructivism is the opposite, focusing instead on the relationship between domestic social and legal norms (Meissner, 2004: 41). Holistic Constructivism, however, aims to bridge the two realms and will therefore be used as an explanatory tool in this study.

Other scholars make the distinction between transnational and societal Constructivism, contending that transnational Constructivism (with its roots in sociological institutionalism as used by Finnemore) focuses on the influence of internationally shared norms (that is, norms that are shared by international society or by subsets of that society, such as regional or function-specific international organisations) (Boekle, Rittberger and Wagner, 1999: 3). Indicators for transnational Constructivism may therefore include international law, resolutions of international organisations and final acts of international conferences (ibid.). In contrast, societal or domestic Constructivism emphasises the importance of norms that are shared *within* domestic society (ibid.). The effect of such norms can be investigated through indicators such as constitutional and legal order, party programs and election platforms, parliamentary debates, and public opinion data (ibid.).

Additionally, Constructivists treat actors as social entities whose identities are constituted by the social environment in which they act; view the interests of actors as endogenous to social interaction and as a consequence of identity; and regard society as a constitutive realm that determines actor identity (Du Plessis, 2000: 26). In this respect the ideas of Alexander Wendt are of particular significance. His basic position is that human beings are purposeful actors (thus departing slightly from Boekle, Rittberger and Wagner's critique of value maximising actors) whose actions reproduce and transform society, and that society is made up of social relationships which structure the interaction between human beings (Wendt, 1992: 393-395). Since the world is pre-organised and pre-structured, it shapes and moulds actors, but actors are also international agents who act in this world and who re-create or transform the structures it contains. Using this logic, Wendt's reformulations are apt. Instead of focusing on structures or agents, he prioritises the interrelationship between them; rather than theorising on material facts and eternal imperatives, he emphasises practices, processes and the social creation of meaning; and he puts the Neo-Realist picture into motion by historicising it and moving it closer to actions, thought and human life.

Therefore, it deserves to be reiterated that Constructivism is indeed 'constructed' differently from scholar to scholar. Wendt's (1995) version of classical Constructivism, on the one hand, attempts to locate state identities in the overarching cultural structure of the states-system. His version of Constructivism does not dispute the Neo-Realist claim that



states are self-organising units to which it is possible to attribute identities and interests. On the other hand, more radical Constructivists dispute the epistemological assumptions underpinning this particular approach (Kratochwil, 2000: 73-101). Kratochwil, for instance, criticises this very notion of Wendt's Social Theory argument, claiming that because it relies on (at least to some degree) a version of 'scientific realism', it is overly reliant on already problematic foundationalist notions such as the emphasis on the state as the main actor (ibid: 78). Kratochwil's critique is very useful today, especially with the upsurge of non-state actors active in decision-making processes in the international system. Despite these differences, most Constructivists do however adopt what Mark Hoffman (1991) has called a 'minimal foundationalism'. This implies that, while accepting the contingent nature of knowledge and acknowledging the importance of particular historical and cultural contexts, most Constructivists argue that consensual standards (i.e. generally accepted norms and values) must govern the derivation of plausible interpretations of social reality (Hoffman, 1991: 170). Simply put, the existence of norms, the construction of new norms and the development/revision of old ones are what influences our (states' and non-states') interpretation of social reality and thus dictate how we act. It is from this point henceforth that this study develops its Constructivist argumentation, and more particularly, the impact of global norm construction and development on regional water resource management.

Constructivism's main assumption is that there is no objective reality. A major critique presented by Boekle, *et al.* (1999: 4) of Neo-Realist and Neo-Liberalist perspectives is their critique of the concept of utility maximising, which forms the basis of rationalist argumentation. According to the rationalist perspective, ideas, values or norms can only operate as instruments for asserting and justifying given interests (ibid.). In contrast, Constructivist strands elevate these to independent variables (ibid.). Through this theoretical lens, norms guide the actions of actors (ibid.). The assumption of the independent influence of norms is therefore, juxtaposed with the concept of the self-regarding, rational, utility-maximising actor that Neo-Realism and Neo-Liberalism advocate. In contrast, actors take decisions on the basis of norms and rules which are created and influenced by subjective factors, historical-cultural experience and institutional involvement (Schaber and Ulbert 1994: 142, cited in Boekle, *et al.*, 1999: 4).

According to this view, in contrast to the two ‘neos’ (Neo-Realism and Neo-Liberalism), Constructivism does not portray world politics and the international system in which it operates as fixed, material structures, but rather as socially constructed, in which factors such as norms, culture, rules and identity play a defining role (Onuf, 1989). The rules of the system are therefore produced by the interactions of states and they in turn shape state practice.

Moreover, Constructivist strands also differ from mainstream theories in its views on the development of norms and the path they take in this regard. Mainstream theories link the impact of norms predominantly with the variables “power” or “interests” (Boekle, *et al.*, 1999: 8). In Neo-Realist explanations, for instance, norms only affect actor behaviour when compliance with them is either enforced by powerful actors, or when they are complied with by weaker actors who fear sanctions (Krasner, 1993). In other words, norm acceptance is a function of hegemonic interests or coercive force. From this perspective, it is not norms per se, but the power behind them, that results in norm-compliant behaviour (Boekle, *et al.*, 1999: 8).

In contrast, Boekle *et al.* (1999) argue that Constructivist norms do not occur as a result of actors’ interests, but rather precede (and define) them. The effect of norms on behaviour is therefore, not only regulative (i.e. “constraints” or “incentives” that increase or reduce the cost of certain modes of behaviour) (ibid: 8). Norms are also constitutive, i.e. “norms legitimise goals and thus define actors’ interests” (Klotz, 1995: 26). In other words, by legitimising certain goals, norms act as “motives” (ibid: 26). And in turn, as “motives”, norms help to establish the goals, which states should legitimately attempt to meet (Boekle, *et al.*, 1999: 8). By taking on this character, norms provide states with the scope to define their interests in accordance with the goals that have been assigned as legitimate (ibid).

### **2.5.1. NORM CONSTRUCTION AND THE ‘LOGIC OF APPROPRIATENESS’**

As previously mentioned, Constructivism emphasises the independent influence of norms in defining and influencing actors’ behaviour. For Constructivists such as Boekle, Rittberger and Wagner, the ‘logic of appropriateness’ is apt in this regard. These authors stipulate that contrary to a rationalist perspective, where actors anticipate the consequences of their actions in order to choose the alternative which will maximise their self-regarding

utility, a 'logic of appropriateness' takes socially shared, value-based expectations of behaviour as its foundational point of reference (Boekle, *et al.*, 1999: 4). The logic of appropriateness states that behaviour is therefore, intentional but not wilful. Rather, it involves fulfilling the obligations of a role in a situation defined by a norm (March and Olsen, 1989).

The intersubjectively shared nature of norms deserves to be highlighted since this is essentially how new norms arise. If and when enough actors, both state and non-state, have a shared belief and act on it, then it becomes a norm. Moreover, due to the increasingly interdependent, pluralist and multilateralist nature of the international system, actors are becoming more obliged to obey international norms, particularly those surrounding human rights and the environment.

As previously mentioned, much of the theoretical tools and equipment of Constructivism are better at explaining stability than change. According to Finnemore and Sikkink, claims that actors conform to 'logics of appropriateness,' do not adequately address how these logics might change (Finnemore and Sikkink, 1998: 888). Thus, while the 'logic of appropriateness' sheds light on how norms are constructed and adhered to, it explains very little of how it is reconstructed, or which logics are more important than others and why. As argued by Boekle *et. al* (1999: 6), "A much-stated criticism of... [Constructivism] is the fact that an actor is frequently confronted with many value-based expectations of behaviour, with the result that a distinction between relevant and irrelevant expectations of behaviour is made difficult or becomes arbitrary." In the Constructivist view therefore, the strength of a norm depends on two properties: on its *commonality* (i.e. the amount of actors in a social system who share a value-based expectation of behaviour), and on its *specificity* (i.e. the degree to which a norm distinguishes appropriate from inappropriate behaviour) (Boekle, *et al.*, 1999: 6-7). This study, however will illustrate that these two properties are too limiting. In addition to commonality, *who* the actors are who persuade of appropriate behaviour is also important; as is the power they hold. In addition to specificity, the degree to which a norm is congruent with pre-existing norms, is also critically important to its ability to become socialised. Additionally, Finnemore and Sikkink (1998: 905-909) list several other conditions under which a given norm is likely to be influential:

1. Legitimation: when the legitimacy of a given state's elite is endangered (ibid: 905),
2. Prominence: when the state holding the norm is viewed as successful (ibid: 906),
3. Intrinsic Qualities: the characteristics of certain norms may make them more likely to be influential. They may include those characteristics that are congruent with capitalism and liberalism: i) universalism; ii) individualism; iii) voluntaristic authority; iv) rational progress; and v) world citizenship (ibid: 906-908),
4. Adjacency Claims/Path Dependence: when the norm fits, or can be portrayed to fit, into existing normative frameworks (ibid: 908)
5. World Time Context: when an exogenous shock (e.g. war, depression, [or independence and the abolition of apartheid]) discredits the existing constellation of norms (ibid: 909).

### **2.5.2. NORM EMERGENCE, NORM ENTREPRENEURS AND FRAMING**

This study relies on as well as critiques the three-stage norm cycle model developed in a seminal article by Finnemore and Sikkink (1998), in which they suggest that norm effects depend on three evolutionary stages of norms. The first step in Finnemore and Sikkink's norm life cycle is norm emergence. Within this step, the authors argue that norm entrepreneurs working from organisational platforms present new ideas as potential norms and persuade of their moral appropriateness. Norm entrepreneurs are therefore agents who have distinct notions about appropriate behaviour in their community (Finnemore and Sikkink, 1998: 895-896), and are able to articulate them. Furthermore, they must compete with the existing constellation of norms in order for their ideas to gain acceptance as norms (ibid: 897).

Elgstrom, writing on the construction of new norms regarding gender and development in EU foreign aid policy, explains how norms change interests and therefore behaviour. Her theoretical argumentation on how norms change shared understandings of reality is noteworthy for this study as well (Elgstrom, 2000: 459). Elgstrom argues that while collectively shared understandings of reality are hard to change, it is possible to

change them. Constructivism's importance here is tremendous in that it emphasises the role of agency, the capacity of actors to redefine interests and preferences (ibid.). As previously mentioned, different types of actors (e.g. intergovernmental organisations (IGOs), non-governmental organisations (NGOs) and transnational advocacy networks) can exert 'moral influence' on state interests and contribute to major changes in norms and behaviour (Elgstrom, 2000: 459). Indeed, Finnemore and Sikkink reiterate this point by highlighting how international organisations, in particular, use expertise and information to change the behaviour of other states (Finnemore and Sikkink, 1998: 899). Constructivism thus proposes that socially constructed variables hold the status of basic causal variables that shape preferences and outcomes: moral persuasion leads to norm spread, causing changes in preferences and interests that result in behavioural change (ibid.). There is, therefore, a need to identify:

- Who the norm entrepreneurs of a global norm are globally/regionally. Additionally, there is also a need to identify who their target audiences are,
- Within a specific domestic environment, the make-up of the norm entrepreneurs or advocacy coalitions which try to push domestic norm-based change through the state and how they do so.

Due to the technical manner in which transboundary water resource management is carried out today, norm entrepreneurs exist largely in the epistemic community, both domestically and internationally. An epistemic community is created by a dense network of activists, policy makers, academics, and entrepreneurs, who are influential in setting the agenda and defining the interests related to water resource management. Moreover, due to the highly technical nature of water engineering, hydrology, and other environmental, ecological and soil and land management sciences, this network comprises of an exclusive club of experts who dominate the production and application of knowledge (Swatuk, 2005b: 163). Often, their conservationist or technical interests take precedence over that of local actors (farmers, pastoralists etc) in that they are present at organisational platforms to convince policy-makers to embrace global environmental norms while local actors are not (ibid). The epistemic community is also knowledgeable of political and technical processes, and are therefore able to articulate their interests in this manner.

Additionally, several scholars posit that in the early stages of norm emergence, entrepreneurs largely rely on persuasion and framing (Elgstrom, 2000; Finnemore and Sikkink, 1998). They largely rely on persuasion to get the norms they advocate on the agenda and to convince major actors to pay attention to the issue (Elgstrom, 2000: 460). They draw attention to issues or even create issues by using language that names, interprets, and dramatises them, that is the process of framing (Finnemore and Sikkink, 1998: 897).

“The construction of cognitive frames is an essential component of norm entrepreneurs’ political strategies, since, when they are successful; the new frames resonate with broader public understandings and are adopted as new ways of talking about and understanding issues” (Finnemore and Sikkink, 1998: 897). Similarly, Payne (2001: 39) claims that a frame is a device used to “fix meanings, organise experience, alert others that their interests and possibly their identities are at stake, and propose solutions to ongoing problems.” The relationship between frames and norm diffusion is that while frames provide an interpretative understanding of a situation, norms indicate the most appropriate behaviour for that situation (or the ‘oughtness’ of what one should do) (Yanacopulos, 2004: 720).

For instance, in a securitised frame, national security concerns become associated with the management of transboundary river basins (Schulz, 1995), water resource management structures remain stunted, and hydrological data becomes classified as secret and thereby removed from the public domain. A desecuritised frame, on the other hand, allows all interested parties to collect, store, and access basin-wide data (Turton, 2003a: 79). Some norm entrepreneurs have therefore attempted to frame water resource management within a desecuritised domain in an attempt to advocate the normative appropriateness of transboundary co-operation and to persuade against perceptions of insecurity.

### **2.5.3. SOCIALISATION**

The second stage of the cycle is a norm cascade. Multiple agents now begin to accept the appropriateness of the behaviour for which the new norm calls through the process of socialisation. However, as implied earlier, socialisation should not be perceived

as a one-way process to which the actor being socialised only accepts beliefs and practices from the world and does not contribute preconceptions of his own (Boekle, *et al.*, 1999: 9). Instead, the socialising actor may reflect on what it internalises during the socialisation process and even alter its content (Schimmelfennig, 1994: 339 cited in Boekle, *et al.*, 1999: 9). As such, socialisation is a constantly evolving, and continuous process, as individuals constantly need to learn new expectations of behaviour or reinterpret the one that they have already internalised (Parsons, 1951: 208).

Furthermore, Boekle *et al.* make a sound distinction between the process of an individual's socialisation into his social environment and the socialisation process of government decision-makers (or rather the socialisation of states) (Boekle, *et al.*, 1999). During the socialisation process of states, two analytically distinct socialisation processes run simultaneously. Since foreign policy decision-makers have to operate at both the international system and the domestic system, they face two different groups of socialising agents and, consequently, undergo two different socialisation processes (*ibid.*: 9). Transnational socialisation refers to the process whereby government decision-makers internalise international norms, i.e. norms that are shared by states, while societal or domestic socialisation describes the process whereby government decision-makers internalise domestic norms, i.e. norms that are shared by the citizens of their state (*ibid.*).

#### **a). Transnational Socialisation**

States are the constitutive units of international society and consequently, of transboundary water resource management, and are therefore considered to be the most important socialising agents (*ibid.*). While international organisations are not constitutive units of international society, they do play important roles as socialising agencies in that they represent associations of states (*ibid.*). Moreover, they are essential as socialising agencies because they express “value communities” made up of states (*ibid.*). As Boekle *et al.* (1999: 9) argue, “States acknowledge the expectations of appropriate behaviour formulated by international organisations as standards of appropriate behaviour if they regard themselves as part of the value community of the member states and seek recognition as an equal member by the other member states” (*ibid.*: 9). And since international organisations are regarded as incubators for value communities, they also

function as “norm teachers” who, as previously indicated in chapter one, teach states new norms of behaviour and help disseminate them (Finnemore and Sikkink, 1998; Finnemore and Sikkink, 2001: 401; Keck and Sikkink, 1998: 34).

In addition to states and international organisations, transnational advocacy coalitions also play an important role in transnational socialisation processes by diffusing and imparting norms, aiming at the widest possible dissemination and acceptance (Boekle, *et al.*, 1999: 9). Transnational advocacy coalitions also act as norm entrepreneurs in that they develop existing norms by verifying compliance (Finnemore and Sikkink, 1998: 896-897) as well as help establish new norms (Keck and Sikkink, 1998). This is particularly the case with environmental advocacy groups i.e. NGOs such as Greenpeace and Habitat for Humanity.

States acknowledge the norms of international society as standards of appropriate behaviour because their identity as states depends on their membership in international society (Schimmelfennig 1994: 344 cited in Boekle, *et al.*, 1999). For instance, states are only considered sovereign upon the recognition of such by other states (Biersteker and Weber, 1996: 3, 11-14; Thomson, 1995). In short, states are constantly concerned with legitimacy or their reputation as recognised (i.e. norm-compliant) members of international society i.e. as ‘good’ global citizens (Finnemore and Sikkink, 1998).

Additionally, domestic contexts also affect the degree to which international norms are accepted. Cortell and Davis (1996), have pioneered research on the domestic salience or legitimacy of an international norm, and have sought to conceptualise a framework for measuring domestic salience. They present two national-level factors that are imperative to the success of socialisation processes and provide explanations for important cross-national variations in compliance with and interpretation of international norms (Cortell and Davis, 1996, 2000). These are 1). the domestic salience or legitimacy of the norm, and 2). the structural context within which the domestic policy debate transpires (*ibid.*). Several scholars share this opinion. Risse-Kappen (1994) argues, for instance, that the ability of transnational actors to promote norms and influence state policy is dependent on domestic structures understood in terms of state-societal relations, while Checkel (1999) reiterates that the effects of global norms are fostered by domestic structures as well as a norm’s congruence with domestic political culture. This argument helps to explain the variations in



norm diffusion among riparian states, and similarly, how “internationally promulgated norms clash with pre-existing national understandings” (Cortell and Davis, 2005: 3).

Additionally, while contemporary international norms literature has emphasised the role of persuasion and social learning among political leaders in the process of socialisation, in environmental affairs, it is typically not sufficient for political leaders to be persuaded of the appropriateness of a norm for it to alter the behaviour of a particular state (Cass, 2005). The norm must be thoroughly integrated into domestic political discourse and eventually be incorporated into the foreign and domestic policies, laws and practices of the state (*ibid.*). As Flockhart (2006: 93) argues, a failure to institutionalise the norm set in national law indicates norm failure at the state level. While national leaders play a fundamental role in this process, in most cases the norm must be accepted by enough domestic actors for it to significantly alter national behaviour (Cass, 2005). Flockhart (2006: 93) advances this argument by differentiating between norm adoption at the state level and norm adoption at the national level, that is, when a significant proportion of the political elite (defined as those individuals who occupy key roles within state structures) adopt the norms set vs. when a significant proportion of the population conforms with the institutionalised norm set.

This differentiation between ‘political elites’ and ‘the people’ is a critical distinction in understanding differences in global norm socialisation where there are apparent similarities in degrees of domestic salience at a state level i.e. institutionalisation of normative principles into national law and practice of all riparian states. Flockhart (2006: 98-99) divides the domestic level into what she refers to as “we-concepts,” which indicates that the domestic context operates within these two distinct political cultures; a ‘state culture’ at the elite level and the widely accepted ‘political culture’ at the mass level. The author is careful to qualify that this does not necessarily imply that these two concepts in the form of ‘state’ and ‘nation’ will always be separate, but suggests that this might be the case where the two domestic levels have different ideas on what constitutes norm appropriate behaviour. This aids in understanding differences in seemingly similar socialisation processes. Simply put, domestic salience of the transboundary co-operation norm set may seemingly be effective in both South Africa and Namibia at the state level, but when the domestic context is unpacked in both riparians, differences occur between

state/elite and nation/people norm acceptance ratios. In other words, even though successful norm adoption may occur at a state level by political elites, the norm may not be internalised and accepted at a national level, which would be indicated by persistent failure in a significant proportion of the population to conform to the institutionalised norm set (ibid: 93). The reasons for this vary. It may be as a result of a lack of awareness of the existence of the norm at the nation/people level, a lack of public participation at political fora where these norms are debated and accepted, the resistance due to incompatibility with pre-existing local norms, or that the norms are too vague to be applicable on the ground.

In addition to considering the domestic landscape into which the norms are diffused, the method by which norms become socialised is also likely to have a significant impact on the success of the socialisation process. In a broad sense, socialisation methods include three strategies for socialisation. The first is persuasion, which encourages norm conforming behaviour through a social process of interaction and communication that changes attitudes without the use of either material or mental coercion (Finnemore and Sikkink, 1998, 2001; Flockhart, 2004). Norm entrepreneurs use this strategy along with framing to get the norms they advocate on the agenda and to convince major actors to pay attention to the issue (Elgstrom, 2000: 460). They draw attention to issues or even create issues by using language that names, interprets, and dramatises them, that is the process of framing (Finnemore and Sikkink, 1998: 897).

The second strategy used is social influence and/or sanctioning, which elicits norm conforming behaviour through the distribution of social rewards and punishments (Flockhart, 2006: 97). The importance of power asymmetries is critically important in this regard. Once norm entrepreneurs persuade state leaders to accept the appropriateness of an international norm, state leaders then become socialising agents in their own right, but use social influence in attempts to get a significant proportion of the population to accept the norm (ibid.). Additionally, mechanisms of coercion through which values and norms are internalised are not the only manifestations of the role of power in relation to norm convergence. Power also enters via a social theory of international politics, as dominant normative understandings and discourses that help to construct subjectivity (Adler and Bernstein, 2005; Guzzini, 2005), institutionalise practices, and construct and transform social structures (Adler, 2005: 178). In other words, power takes on an “epistemic

authority, the ability to socially construct dominant understandings and discourses” (Adler, 2005: 178). And very importantly, according to Mattern (2005), power also enters in the discursive ability of agents during a crisis situation, to force other agents to change for the sake of restoring their mutual ‘we-feeling’. The latter point is particularly pertinent in the presence of regional hegemons who are able to use their discursive ability to create a sense of regionalism, as in the case of South Africa.

A third (alternative) causal pathway to norm convergence is that of complex social learning, which varies from the rationalist strategies mentioned above. According to Checkel (2001: 561), complex social learning is a process whereby agent interests and identities are shaped through and during interaction. This idea resonates with Adler’s understanding of institutionalisation, which is based on ‘cognitive evolution,’ defined as a “collective learning process that consists of the expansion in time and space of the background knowledge that constitutes practices and, thus, also in the expansion of ‘communities of practice’ – the material representation of background knowledge in like-minded groups of individuals who practice the same practice” (Adler, 2005: 176).

It is imperative to note that socialisation is not an outcome nor does it have to be successful (Schimmelfennig, 2000: 112). The fact that it may not be a smooth process is a significant point for this investigation since it would be improbable to expect an easy transition from international norms to the domestic level, even when there is apparent conformity with the new norm. Pockets of resistance of varying strengths and oppositional capacities to the new norm should always be expected. This is evident in the example of the Nile River basin where no Nile riparian state has since signed or ratified the UN Convention on the Law of the Non-Navigational Uses of International Watercourses with only Kenya and Sudan voting for the Convention (Ramoeli, 2002). Instead, various states have resisted the acceptance of one or several principles found in the UN Convention. That said, however, there has been a broad-based and gradual indications of norm compliant behaviour in the Nile River basin. It is therefore evident that normative convergence is a slow and incremental process of change.

### **b). Societal/Domestic Socialisation**

Not only do domestic political contexts affect the internalisation of global norms, so too do domestic norms impact on domestic political processes. In a Constructivist vein, Boekle *et al.* (1999: 10) list three reasons why the behaviour of (foreign policy) decision-makers is influenced by domestic norms: 1). decision-makers have already internalised domestic norms through processes of political socialisation to which all the citizens of a state are subject; 2). before representing their state in international society, politicians typically have had national political careers for a period of time whereby they have internalised more specific domestic expectations of appropriate behaviour; and 3). decision-makers conform to domestic norms because this corresponds with the way they see themselves as representatives of their society in the international environment. “If a government does not comply with the societal expectations of behaviour addressed to it, it runs the risk of losing its recognition by [domestic] society as its legitimate representative” (ibid: 10).

Foreign policy decision-makers and the state which they represent are therefore subject to both transnational and societal/domestic socialisation processes. On the one hand, they have to comply with international norms; while on the other hand, the nation state expects its representatives to satisfy domestic norms at the international level (ibid: 11). If however, a situation arises where global and domestic norms contradict each other then a Constructivist prediction is just as impossible as when these norms are completely absent on both levels or do not reveal sufficient commonality and/or specificity for them to be regarded as significant (ibid.). Boekle *et al.* (1999: 11), attribute this potential dilemma to the fact that Constructivism does not offer any criteria for evaluating whether decision-makers are influenced more by global norms or by domestic norms. “If there are conflicting societal and international norms, a Constructivist explanation is indeterminate because in such situations, decision-makers are free to choose the norm which best justifies their behaviour. Theoretically, therefore, it cannot be ruled out that actions are in fact guided by an interest with no normative base and are justified only *ex post* by recourse to a norm which matches the behavioural option chosen” (ibid: 11).

#### **2.5.4. NORM INTERNALISATION**

The final stage in the cycle is internalisation. Here, the new norm becomes taken for granted, and conformance with its dictates is no longer (or at least rarely) questioned. If socialisation is successful, the actor internalises the expectations of behaviour i.e. beliefs and practices, imparted by its social environment (Finnemore and Sikkink, 1998: 904-905; Schimmelfennig, 2000; Boekle, *et al.* 1999). The actor does this by acknowledging the institutionalised modes of thought and behaviour as correct, and makes them ‘its own,’ thus aligning its existing interests and preferences with them (Schimmelfennig, 1994 cited Boekle, *et al.* 1999). This does not, however, mean that internalisation is devoid of deviant desires or behavioural preferences, but rather that internal sanctioning mechanisms are sufficiently effective to prevent deviant preferences from evolving into norm-violating actions (Axelrod, 1986; Schimmelfennig, 2000: 112). Indeed internalisation exists on a continuum of degrees, going from “...a situation in which the actor has to rely heavily on the effectiveness of internal sanctioning mechanisms to a situation in which such mechanisms are not needed because the social beliefs and practices are unchallenged” (Schimmelfennig, 2000: 112). To reiterate, not only do different states react differently to the same global norm but different ‘parts of the state’ (elite, epistemic community, public etc.) may react differently to the norm. Similarly, the mechanisms by which norms are internalised within states and the combination of conditions under which global norms are influential, vary greatly from state to state.

#### **2.5.5. CONSTRUCTIVISM AND HYDROPOLITICS**

What is the relevance then of Constructivism to hydropolitics and transboundary water resource management? Firstly, since Constructivism is not completely state-centric, it allows for the construction of a truly multi-actor model, including both state and non-state entities. Additionally, this allows for a “derritorialised” understanding of water resources, and therefore frees analyses from Agnew’s territorial trap. Water resources need not be viewed and researched as bounded by sovereignty and state authority, but can exist within a transnational normative sphere albeit influenced by global norms of global capitalism and water privatisation, global norms of human rights, regional norms of economic and democratic development, or national norms of reform. This view provides a

more holistic account of the power asymmetries at play, some of which are state-related, but many of which are not. Secondly, norms may constrain state action, thereby demonstrating that normative social structures could lead to changes in policy preferences. Thirdly, an inclusion of the international, regional, national as well as sub-national levels is needed in this analysis of norms. This amalgamation of levels is useful in understanding how global norms get domesticated and internalised regionally and domestically, as well as how norms, developed at other levels of scale, interact with each other and international norms. Fourthly, the inter-subjective nature of norms is best captured by Constructivist approaches that highlight ontological inter-subjectivity (of reality), as well as epistemological inter-subjectivity (of knowledge). Indeed, the range of truths that are produced in multi-level water governance, regarding what is morally acceptable, or the most appropriate way of behaving, reflects various collective understandings.

As previously noted, scholars have argued for “a need and an opportunity for conciliatory, extra-paradigmatic theorising and bridge-building” (Du Plessis, 2000: 12). It is because of this need that this investigation attempts to adopt a Constructivist perspective to include an analysis of “inside the state” as well as a review of non-state actors in order to understand how interests and identities are shaped regarding shared water. This is achieved by critically engaging with the HPC to analyse an ideational structure and how it interfaces with regional and domestic hydropolitical structures.

# CHAPTER 3

## NORM CONVERGENCE AND THE HYDROPOLITICAL COMPLEX

### 3.1. INTRODUCTION

Normative literature on transboundary river basin management within the field of hydropolitics has recently undergone major development, with extensive empirical research conducted by Ken Conca and his team at Maryland University in the United States. Conca *et al.* have produced evidence that refutes claims made of the emergence of an international regime for the management of transboundary river basins that is based on a converging set of core normative elements, via a global-framework ( which they define as top-down norm dissemination) or a basin-cumulative path (which they define as bottom-up norm aggregation) (Conca, 2006: 106; Conca and Wu, 2002; Conca, *et al.*, 2006; Conca, *et al.*, 2003). The core message is that there is no evidence of normative deepening, but there is some evidence of convergence around specific issue-clusters that do not challenge the notion of state sovereignty in regime negotiation. Moreover, a history of inter-state co-operation tends to mitigate future conflict. Therefore, a good indicator for gauging whether a river basin is “at risk” (Wolf, Yoffe and Giordano, 2003) is ascertaining whether there has been a history of inter-state co-operation in that basin, reflected in regimes, treaties or negotiated agreements. Using these findings as a point of departure, this chapter aims to compare the Maryland School with work conducted by Ashton, Earle, Malzbender, Moloi, Patrick and Turton (2005) and Turton, Meissner, Mampane and Seremo (2004) on HPCs, in an attempt to reveal methodologically that indeed, lateral norm convergence from state to state, and from state-to-basin-to-region is evident in southern Africa, when using the Hydropolitical Complex (HPC) as a conceptual lens. However, the HPC is limited in its utility in that its state-centric focus on sovereignty as complete control of a state over territory renders it too weak a conceptual lens for viewing sub-national configurations.

### 3.2. THE MARYLAND SCHOOL

The Maryland School has made a valuable contribution to the field of hydropolitics focusing on the principled content of international river basin management, by using empirical datasets to investigate whether a co-operative international approach to the management of water is emerging. In other words, these scholars have attempted to examine the relationship between basin-specific politics and global principled developments and subsequently, whether norm diffusion of the global norm set of transboundary co-operation has taken place and been socialised at the basin level. The dataset compiled and analysed comprised of basin-specific interstate agreements for the period 1980–2000 (Conca, 2006; Conca, *et al.*, 2006: 264-265). Through coding methods, content was analysed using the global norm set of transboundary co-operation, or as referred to by the Maryland School, emerging principles of international water law, as the yardstick (Conca, *et al.*, 2006: 265). Central goals for the study included 1). determining whether governments are converging on common principles, norms and values, when they articulate a governing framework for a shared basin, and 2). examining whether any such convergence follows a parallel trajectory to the trends in soft international water law (Conca, 2006; Conca *et al.* 2006: 265).

Several core datasets were pooled together to compile a single analytical dataset, such as the Systematic Index of International Water Resources Treaties, Declarations, Acts and Cases by Basin (FAO, 1978), the Transboundary Freshwater Dispute Database (TFDD) at Oregon State University and the FAOLEX legal database (Conca, 2006; Conca, *et al.*, 2006). Conca notes that, currently, there are more than 150 basin-specific treaties that set out the rights and responsibilities of riparian states sharing a specific international river basin (Conca, 2006: 28; Turton, 2005a: 7; Turton, 2008b: 28). By analysing these basin-specific treaties, a set of protonorms<sup>17</sup> were compiled. These include the global norm set of transboundary co-operation, norms of water privatisation/marketisation, technological norms of integrated water resource management constructed by water policy experts, norms of human rights, and the preservation of local cultures and ecosystems.

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<sup>17</sup> According to Conca, a protonorm is defined as a norm that has become sufficiently recognisable and well established, so as to become available for application to watershed governance in basins and watersheds that are beyond the direct reach of the agreement concerned (Conca, 2006: 30).



Two main claims on norm convergence were therefore tested in the Maryland study:

- Top-down norm dissemination from the international level – convergence on the global norm set of transboundary co-operation across individual basin-specific treaties, which involve highly varied political, economic and ecological landscapes, could be read as significant evidence of a global normative pull i.e. top-down process of norm dissemination (Conca, 2006; Conca, *et al.*, 2006).
- Bottom-up norm aggregation – alternatively, the causal relationship could be the opposite to the first claim, meaning that the global framework simply reflects accumulated practice in the basin-specific treaties. Simply put, it may be the case that a bottom-up process of aggregation and lateral diffusion of norms is at play (Conca, 2006; Conca, *et al.*, 2006).

The third claim summarised their findings:

- Norm contestation – no link between these two levels i.e. that basin-specific accords reflect a rival set of norms (Conca, 2006; Conca, *et al.*, 2006).

### **3.2.1. CLAIM 1: TOP-DOWN NORM DISSEMINATION**

According to Conca and his team, top-down norm dissemination rests on the premise that a set of principles formulated at the global level would be adopted at the basin level (Conca, 2006: 103-104; Conca *et al.*, 2006). Evidence of this process occurring would be reflected in basin-specific treaties that provide greater depth, breadth and specificity of these global principles in basin-specific agreements as opposed to mere acceptance at a global level (i.e. signing an international agreement). Using the TFDD and FAOLEX as primary sources of data, Conca *et al.* extracted sixty-two river management agreements worldwide, which they then subjected to a rigorous statistical analysis with reference to the eight core principles of the 1997 UN Watercourses Convention in terms of breadth, depth and specificity (ibid: 107). As introduced in chapter one, the eight core principles are (ibid: 110-111):

- Equitable use.
- Avoidance of significant harm to other riparian states.
- Sovereign equality and territorial integrity.

- Information exchange.
- Consultation with other riparian states.
- Prior notification.
- Environmental protection.
- Peaceful resolution of disputes.

Statistical analysis of the dataset revealed that several of the eight core normative elements seem to be emerging, but each was coalescing around different river basin configurations in different ways (Conca, 2006: 106-120; Turton, 2005a: 8; Turton, 2008a, 2008b; Turton and Ashton, 2008). On the one hand there was a distinct correlation around the issue of openness and transparency, such as the commitment to information exchange, prior notification and the peaceful resolution of disputes. Of noteworthy importance, none of these indicators correlated with the core principles relating to the state's right to water. Similarly, indicators such as specific water allocation formulae, or whether domestic waters were exempt from the provisions of the agreement, coalesced with that of equitable use. From this assessment, the Maryland scholars concluded that one sub-set of the dataset under investigation is rooted in principles of openness and sustainability, whereas a second distinct sub-set is rooted in the state's right to water (Conca, 2006: 116). It is noteworthy to mention, that according to Conca (2006), emergence of these principles does not reflect deepening and consequently, norm diffusion, of the norm set of transboundary co-operation.

Considering that the UN Watercourses Convention dates only to 1997 and as such is still a relatively new framework, Conca, *et al.* (2006: 280) qualify that it is still possible for these principles to diffuse to the basin level. However, the principled content of the convention emerged and evolved over a period of roughly a few decades prior to this and was formalised as early as 1991 in the ILC articles (Conca *et al.*, 2006: 280). If global norm diffusion was taking place and exerting a significant normative pull on basin-level agreements, the expected result would be diffusion and deepening of the global norm set of transboundary co-operation in the 1990s, relative to the 1980s, in terms of becoming more widespread over time, and deepening in the sense of greater specificity of the responsibilities or obligations created for states (*ibid.*).

Conca *et al.* (2006: 281), therefore found little evidence that the ILC process and the UN Watercourses Convention has exerted a direct, tangible, unidirectional pull on the principled content of basin agreements. What is apparent instead is that most of the core principles appear as well established early in the study period as they are by its end i.e. no evidence of deepening of principles within basin-level agreements. Only one principle, that of consultation, showed signs of deepening, which indicated that forming a permanent basin commission became the predominant specific mechanism for regular consultation. The relative specificity or intrusiveness of the other principles did not change over time (ibid.).

### **3.2.2. CLAIM 2: BOTTOM-UP NORM AGGREGATION**

In terms of bottom-up norm aggregation, Conca *et al.*, argue that evidence of this claim would be reflected in a notable increase of new international basins subscribing to normative elements present in other international basins and one would see a marked increase in basin-specific agreements. In other words, norm aggregation would take place horizontally by spilling over from one basin to another, and thereby form a unified global normative approach/framework. However, these scholars found relatively few international basins as being the subject of significant water-related agreements in the past two decades. Moreover, short-term fluctuations notwithstanding, they found that the rate at which international agreements were reached was not increasing over time. Agreements that did emerge, however, were concentrated in basins with a prior history of river co-operation, but that this tendency to co-operate was not spreading to new basins (ibid: 280). Additionally, few agreements include most riparians, and less still include all riparian states.

The interpretations of the Maryland School are that there is a strong tendency for co-operation to be concentrated in international river basins where a prior-history of co-operation already exists (Conca, 2006: 118). However, there is no strong evidence of the diffusion of these norms. More significantly, most of these norms seemed to be well established already at the beginning of the study period, suggesting that they did not evolve more over time. Additionally, Conca argues that, while the 1997 UN Convention goes well beyond merely codifying existing principles at the basin-level, some of the core themes i.e. universal participation, equitable use and the avoidance of significant harm, appear only

sporadically in specific basin-level agreements (ibid: 119). There is, therefore not sufficient compelling evidence to convince the Maryland School that a common normative structure is emerging in the sphere of inter-state co-operation, and according to their findings, there is no evidence to suggest that international legal principles are taking on greater depth, or even moving in an identifiable direction (ibid: 121).

### **3.2.3. CLAIM 3 (FINDINGS): NORM CONTESTATION AND DYNAMISM**

The Maryland School's main finding was therefore not a unidirectional progression toward a global regime for international rivers but, rather, a more complex and dynamic pattern of principled evolution (Conca, 2006; Conca *et al.*, 2006: 281). However, as previously mentioned, statistical coalescence in terms of correlations were found on two different normative frameworks (one stressing shared river protection, the other stressing the state's rights to water) (ibid.). Moreover, these authors argue that an uneven normative evolutionary process is occurring where some key principles appear to be subject to a global normative pull and take on deeper meaning, become more widespread and show signs of progressive development over time, such as the principles of environmental protection, consultation and peaceful resolution of disputes; but many others do not, such as that of equitable utilisation. Additionally, "periods of momentum are reversed, and the meaning of principles may be rendered more shallow and vague over time rather than deeper and more precise" (Conca, *et al.*, 2006: 281). The no harm principle, for example, enjoyed a modest increase in the 1990s, yet it remains poorly specified, and ambiguous in basin-specific agreements. These and other nonlinearities make the term "norm diffusion" a poor metaphor, according to the Maryland School.

### **3.3. CRITIQUE OF THE MARYLAND SCHOOL**

While the findings by the Maryland School have proved highly significant in advancing the discourse on the principled content of co-operative management by making it the dependent variable, rather than simply the probability of agreement formation (Conca, *et al.*, 2006: 281), several points of critique are noteworthy, particularly as they pertain to the method used.

The sixty-two agreements used for analysis by the Maryland School covered thirty-six international river basins, or roughly one-seventh of the global total of international river basins. Only one-quarter, or sixteen of these sixty-two agreements, are the first agreements for the particular river basin (Turton, 2005a: 7; Turton, 2008b: 28). The remaining forty-six agreements used were not first-time agreements, indicating that there was evidence of prior agreement in the same river basin (*ibid.*). This suggests that at least three-quarters of the agreements analysed occurred in basins with a previous co-operative history between riparian states (*ibid.*). According to Conca (2006: 107), it therefore does not appear that the idea of creating an instrument of shared governance by means of a regime is rapidly diffusing aggregately to new, previously uncovered basins. In other words, there is no evidence that norms are being diffused aggregately via horizontal trajectories (bottom-up) to other basins.

In his critique of Conca's empirical findings that regimes are not emerging via a basin-cumulative path, Turton makes the case that the dataset used to achieve that result, might have been too small to generate truly conclusive findings (Turton, 2005a: 8; Turton, 2008b: 63). Firstly, of the total sixty-two agreements, forty-six are bilateral agreements ( $\frac{3}{4}$ ) while sixteen ( $\frac{1}{4}$ ) contain three or more parties (Conca, 2006: 108). Significantly, two-thirds of the bilateral agreements are in basins where there are more than three riparian states (Turton, 2005a: 8), that is to say, some riparian states have been (deliberately) excluded from a particular agreement.<sup>18</sup> In this regard, multilateral agreements are over-represented in the dataset (*ibid.*). Two-thirds of the world's international river basins are bilateral (176 of the 263 known basins or 67%), yet more than three-quarters of the agreements written during the study period from 1980-2000 (forty-nine of sixty-two or 79%) were in multilateral basins (having three or more riparian states within their

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<sup>18</sup> Turton refers to this phenomenon as Pyke's Law, which states that "the effort required to reach any agreement increases by the cube of the number of parties involved" (Turton, 2004: 251; Turton, 2008b: 29). Pyke's Law is therefore used to demonstrate that the complexity of negotiations increases exponentially as the number of riparian states increases, and as such, the probability of reaching a multilateral agreement is substantially lower than reaching a bilateral agreement (Turton, 2005a: 8; Turton, 2008b: 29). Upon consultation with the originator of Pyke's Law, Mr. Peter Pyke, it was concluded that this law was reinterpreted and differs from its original purpose which was to say that "The inertia of a group goes up by the square of the number of participants." The problem is thus that agreements are there, but the problem is getting visible action from groups of people (Pyke, (2008) e-mail correspondence: Appendix 4).

hydrological configuration) (ibid.). This indicates that due to the temporal frame, more multilateral basins were analysed than was realistically proportionate.

Secondly, within these multilateral basins, a bilateral regime is more common (ibid.). However, according to Turton, within the Southern African Hydropolitical Complex (SAHPC), this fact does not hold true, which casts doubt on the Maryland School's conclusion that no bottom-up cumulative norm diffusion (state to state and state to basin) is possible. For example, in the six southern African "Basins at Risk" as defined by Wolf *et al.* (2003) (i.e. Orange-Senqu, Limpopo, Incomati<sup>19</sup>, Kunene, Okavango, Zambezi), multilateral basin-wide regimes now exist in *all* of the basins. Even in the most complex basin in the region due to the multiplicity of riparian states and stakeholders involved - the Zambezi - the ZAMCOM Agreement, was signed (by Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, and Zimbabwe) on 13 July 2004. However, while ZAMCOM exists, it has not yet entered into force because two-thirds of the signatories, which is seven of the eight basin states, have not ratified the agreement. Upon the ratification by five states, the agreement can only then enter into force. According to Conca *et al.* (2006: 281) the presence of an agreement tells us nothing about its capacity to 'swim upstream' normatively against the prevailing distribution of power and interests, and therefore provides little evidence of cumulative bottom-up norm diffusion.

If this is indeed the case, then the presence of codified principles and norms as reviewed by the Maryland School, would also appear superfluous. One then needs to look for normative influence and spread beyond basin agreements, and in other socio-political fora, other than legal texts. For instance, several other frameworks exist of which the Zambezi basin and its riparian states form part, indicating that merely analysing one agreement and its content is too narrow an analytical tool to measure bottom-up norm diffusion. The SADC Water Protocol, for instance, can be regarded as being "...a surrogate regime in the case of the Zambezi, mitigating against conflict potential and providing the necessary legal recourse when needed" (Turton, 2005a: 37) since it was being negotiated

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<sup>19</sup> The original spelling of *Incomati* was *Inkomati*, referring to the entire basin. While some official documents still use the original spelling, the 2002 Tripartite Interim Agreement on the Protection and Sustainable Utilisation of the Water Resources of the Incomati and Maputo Watercourses, uses *Incomati* to refer to the basin. The *Nkomati* (in Swaziland), and *Komati* (in South Africa) refer to the Komati River, which is a tributary of the Incomati Basin. In Mozambique, *Incomati* River refers to the main stem of the river that falls within Mozambique.

long before the first SADC Water Protocol came into force. It was then decided that since the SADC Protocol could include all SADC states and not only the eight Zambezi riparians, the ZAMCOM negotiations would be temporarily halted to allow for the Protocol to be drafted. This illustrates that normative convergence has not followed a strictly linear path in southern Africa, but definitely shows signs of normative diffusion and convergence, where convergence penetrates different levels of scale simultaneously (i.e. basin to region or region indirectly to global). The case of the Southern African Hydropolitical Complex (SAHPC) goes contrary to the global trend in the evolution of river management regimes as argued by the Maryland School.

### **3.4. THE HYDROPOLITICAL COMPLEX AS A CONCEPTUAL LENS?**

Turton describes this unique co-operative feature of the SADC region as a SAHPC. As described in chapter two, the HPC is one of two main analytical derivatives of Buzan's Regional Security Complex theory (RSCT) (Buzan, 1991; Buzan and Waever, 2003; Buzan, *et al.*, 1998) as related directly to the field of hydropolitics. According to Buzan, the term "security complex" refers to the interdependence of both shared and competing interests and reflects the shifting patterns of conflict and co-operation over time (Buzan, 1991). Schulz's Hydropolitical Security Complex Theory (HSCT) (Schulz, 1995) and Turton's HPC use the RSCT of Buzan to explain the complex interconnectedness of international rivers and riparian states within a region – using the Tigris-Euphrates Hydropolitical Security Complex and the SAHPC, respectively, as models. However, Turton's HPC differs from Schultz's HSCT in that it aims to explain how interstate relations around water converge on a normative trajectory that moves towards amity. In contrast, a Hydropolitical Security Complex is when norms diverge and the trajectory is one of enmity instead. Schulz (1995) defines his Hydropolitical Security Complex as "...including those states that are geographically part [owners] and technically 'users' of the [shared] river and, as a consequence, consider rivers as a major national security issue." In essence, Turton's HPC views transboundary governance as occurring within a frame of desecuritisation (as in the case of southern African basins today), whereas Schulz's HSCT

views transboundary governance within frames of securitisation (as in the case of the Tigris and Euphrates) (Turton, 2003a: 79).

When water resource management is securitised, national security concerns are closely connected to the management of transboundary river basins (Schulz, 1995), elevating water from an issue of low politics to high politics issues of national survival (Turton, 2003a: 79). This could potentially result in a rapid spiral of conflict that would be difficult to predict or manage if left unattended. According to Turton (2003a: 79), in such conditions, “water resource management structures remain stunted, and hydrological data becomes classified as secret and thereby removed from the public domain.” The converse is true for a frame of desecuritisation where water resource management is addressed in a public political domain, and where information can be accessed, stored, distributed in a transparent manner (Turton, 2003a: 79). In other words, Turton argues that desecuritisation is the normalisation of inter-state interaction, through the institutionalisation of the conflict potential, by removing water resource management from the security domain, and treating it as a technical issue only (Turton, 2003a: 79; Turton, 2003b: 90). Turton therefore refers to the southern African case as a Hydropolitical Complex (HPC) since water resource management is becoming desecuritised while simultaneously remaining strategically important for selected states in the region (Turton, 2003a, 2003b, 2003d, 2008a, 2008b; Turton and Ashton, 2008).

The SAHPC therefore connects riparian states in a series of inter-state arrangements at a level within and beyond the river basin, which reflects the degree to which water issues have become drivers of international relations in their own right (Turton, 2005a: 15). This is based on the premise that whilst water scarcity occurs at the basin level (also known as the watershed), workable solutions are found at a level other than the international river basin, in what is known as the Problemshed (Allan, 1999b; Earle, 2003). This is particularly notable given the finding by Gleditsch *et al.*, (2005) that countries in which endemic water scarcity occurs in a given shared river basin, have substantial long-term incentives for co-operative management of the water resource. As a result, state-level norms converge to form a “logic of appropriateness” unique to that particular HPC.



### 3.4.1. THE SOUTHERN AFRICAN HYDROPOLITICAL COMPLEX (SAHPC)

The HPC is based on four key components: pivotal basins, impacted basins, pivotal states and impacted states.

- **Pivotal States** are states that have a relatively high level of economic development and simultaneously are highly dependent on shared river basins for strategic sources of water supply (Turton, 2003a: 79). This higher level of economic development implies that Pivotal States also have the capacity to project their power outside of their borders (Turton and Ashton, 2008: 315).<sup>20</sup> Within the SAHPC, pivotal states are South Africa, Namibia, Botswana and to a lesser extent Zimbabwe. These four states are also water scarce and are fast approaching the limits of their readily available water resources. And since potential threats to economic security are seen as important national security concerns because economic growth coincides with state preponderance within a given system (Buzan, 1991: 187-190); increasing water scarcity poses the threat of reduced economic growth potential in the near future. This then elevates water from a low politics concern to an issue of high politics (Ashton and Turton, 2005: 9; Turton, 2003a; Turton, 2003b: 88; Turton, 2003d).
- **Pivotal Basins** refer to river basins that are economically important for strategic purposes to any one (or all) of the four pivotal states. Pivotal basins also face basin closure. Tables<sup>21</sup> 3, 4 and 5, illustrate this concept.

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<sup>20</sup> Turton cites that all four Pivotal States have a history of military activities beyond their own sovereign territory. South Africa, for example, was active militarily across many countries in Africa during the Cold War. In the post-Apartheid period, South Africa along with Botswana was involved in Operation Boleas in Lesotho. Moreover, Namibia and Zimbabwe both have had troops in the Democratic Republic of Congo (DRC), engaging in military actions that have not been sanctioned by SADC. Similarly, Zimbabwe also deployed troops inside Mozambique to protect its interests during the Mozambique Civil War.

<sup>21</sup> Projected patterns of water use in the year 2025 were based on population estimates for the year 2000 (STATS-SA, 2007), and adjusted by using the Department of Water Affairs and Forestry's estimates of low (1.1%) and high (2.2%) rates of annual potential population growth (Ashton, Hardwick and Breen, 2008).

**Table 3: Comparison of Year 2000 data and Year 2025 Projected water needs with 2000 and 2025 projected quantities of water available for the three Pivotal Basins as defined by Turton (All volumes provided in millions of cubic meters per year<sup>22</sup> (Data Adapted from Ashton, *et al.*, 2008: 8; DWAF, 2003a, 2003b, 2003c, 2003d, 2003e, 2003f, 2003g, 2003h, 2003i, 2003j, 2003k)**

River Basin	Year 2000 data			Year 2025 Projections		
	Water Available	Water Needs	Shortfall (-)/ Surplus (+)	Water Available	Water Needs	Shortfall (-)/ Surplus (+)
Orange - Senqu	9568	9208	360	10816	11579	-763
Limpopo	2585	2771	-186	3778	3703	75
Incomati	723	972	-249	837	1017	-180
<b>TOTAL</b>	<b>12876</b>	<b>12951</b>	<b>-75</b>	<b>15431</b>	<b>16299</b>	<b>-868</b>

**Table 4: Year 2000 data and Year 2025 projected data for population and water availability (including water transfers) in the South African segments of the three Pivotal Basins as defined by Turton, with values for the Water Crowding Index (WCI) for each basin<sup>23</sup> (Ashton, *et al.*, 2008: 8; DWAF, 2003a, 2003b, 2003c, 2003d, 2003e, 2003f, 2003g, 2003h, 2003i, 2003j, 2003k)**

River Basin	Year 2000 data			Year 2025 Projections		
	Population ('000s)	Available Water (10 <sup>6</sup> m <sup>3</sup> /yr)	WCI	Population [High] ('000s)	Available Water (10 <sup>6</sup> m <sup>3</sup> /yr)	WCI
Orange-Senqu	11 319.0	9 568	1 183	19 502.0	10 816	1 803
Limpopo	10 905.9	2 585	4 219	18 790.4	3 778	4 974
Incomati	1 122.4	723	1 552	1 933.8	837	2 310

<sup>22</sup> Table 3 illustrates the comparison between the water available with current water demands in each of the Pivotal Basins, and reveals the degree to which the available water supplies can meet demands for water. In 2000 already, water demands in the Limpopo and Incomati basins exceeded available supplies, while supplies in the Orange-Senqu were enough to meet the demands at the time. However, the projected (2025) demands outweigh the projected supply in the Orange-Senqu and Incomati basins, with only marginal surplus in the Incomati (Ashton, *et al.*, 2008).

<sup>23</sup> (WCI from) Malin Falkenmark, "The Massive Water Scarcity Now Threatening Africa: Why Isn't It Being Addressed?" *Ambio* 18, no. 2 (1989): 112-118.

Table 4 provides Year 2000 data and Year 2025 projected data for population and available water in the three Pivotal Basins as defined by Turton. The Water Crowding Index (the number of people supported by an assured supply on one million cubic metres of water per year) was used to estimate the degree of severity of any shortfall in the quantity of water available to a basin population as a result of over-crowding (Ashton, *et al.*, 2008). According to Falkenmark (1989), a WCI value of 1 000 (1000 people per million cubic metres of water) represents the reasonable limit of the number of people that water supplies can support. When a WCI exceeds 1000, it is increasingly difficult to provide sufficient water to meet a society's needs, and is a measure of water stress. Interestingly, the WCI for all three basins exceeds 1000 for Year 2000 data and Year 2025 projected data (indicating that chronic water shortages occur) (Ashton, *et al.*, 2008). Additionally a WCI higher than 2 000, indicates that a basin is "beyond the water barrier" and that inadequate water supplies constrain social and economic development (Ashton, *et al.*, 2008).

**Table 5: Year 2000 data and Year 2025 projected data for South African sectoral water needs in the three Pivotal Basins as defined by Turton, and the project increase in each water use sector between 2000 and 2025<sup>24</sup> (Ashton, *et al.*, 2008: 9; DWAF, 2003a, 2003b, 2003c, 2003d, 2003e, 2003f, 2003g, 2003h, 2003i, 2003j, 2003k)**

River Basin		Sectoral Water Needs (10 <sup>6</sup> m <sup>3</sup> /yr)						
		Urban	Rural	Irrigation	Mining & Industry	Power Generation	Forestry	TOTAL
2000	Orange-Senqu	2 238.9	468.8	6 018.3	660.2	181.8	0	9 568.0
	Limpopo	625.6	118.9	1 377.8	214.6	204.2	43.9	2 585.0
	Incomati	57.8	19.5	518.4	22.4	0	104.8	723.0
2025	Orange-Senqu	3 958.7	421.8	5 591.9	594.9	248.8	0	10 816.0
	Limpopo	1 541.4	151.1	1 499.9	279.6	256.9	45.3	3 774.2
	Incomati	141.5	20.1	541.5	23.4	0	109.6	836.2
% Increase/Decrease	Orange-Senqu	76.8	-10.0	-7.1	-9.9	36.8	0	13.0
	Limpopo	146.4	27.1	8.9	30.3	25.8	3.2	46.0
	Incomati	144.6	2.9	4.5	4.6	0	4.6	15.7

The concept of basin closure is therefore a notable characteristic within the SAHPC and could lead to inferences of increased conflict potential. According to Turton, when a shared river basin approaches closure, competition for water intensifies, which become an issue of high politics when impending water scarcity is perceived to pose a threat to the economic development of a state (Turton, 2003a, 2003d). The pivotal basins within the SAHPC include the Orange-Senqu, Incomati and the Limpopo River basins, which link all four of the pivotal states by virtue of their co-riparian status. Significantly, all three of these were “Basins at Risk”(Wolf, 2005: 3-17; Wolf, *et al.*, 1999: 387-427; Wolf, *et al.*, 2003: 28) as defined by Aaron Wolf and his team at the Oregon State University in 1999 (Wolf, *et al.*, 2003: 28-29).

- **Impacted States** are riparian states that have a critical dependence on water from international river basins that are shared with a Pivotal State since their economic development is founded upon this reliance. However, Impacted States are unable to negotiate what they consider to be an equitable allocation of water. In the SAHPC, seven states can be classified as Impacted States: Angola, Lesotho, Malawi,

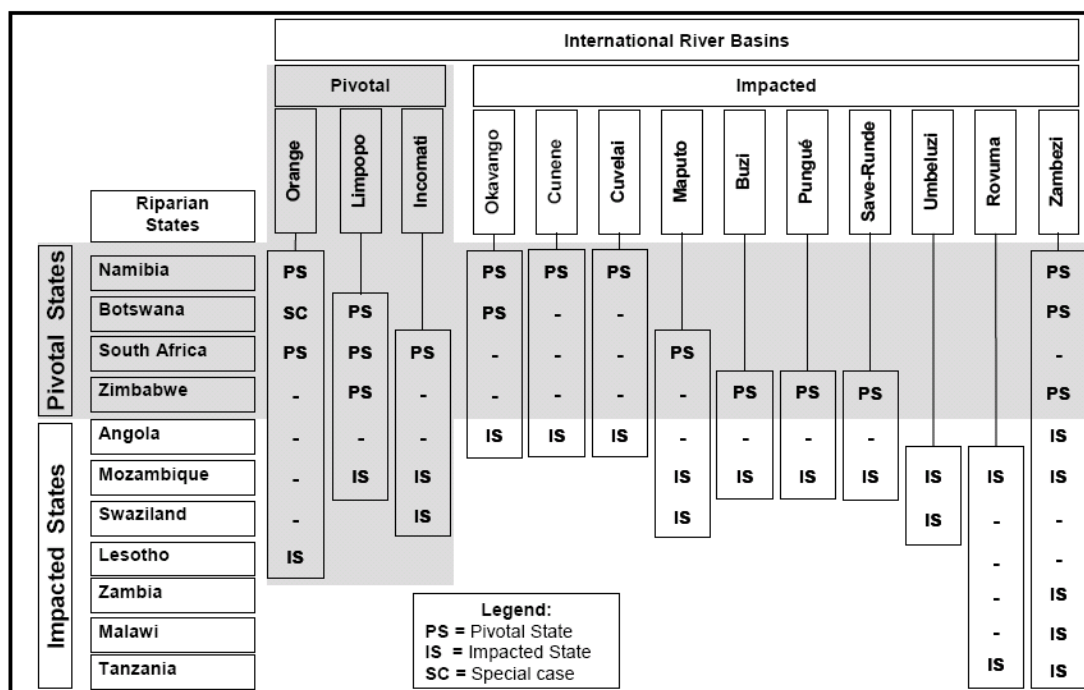
<sup>24</sup> Table 5 illustrates that based Year 2000 data and Year 2025 projected data, water shortages will not be experienced equally by all sectors (Ashton, *et al.*, 2008). The greatest projected increase in water demand is in the urban sector in each basin, ranging from +76.8% in the Orange-Senqu to +146.4% in the Limpopo (Ashton, *et al.*, 2008).

Mozambique, Swaziland, Tanzania and Zambia (Turton, 2005a: 16; Turton, 2003a: 79-80).

- **Impacted Basins** are basins on which a Pivotal State, which is also a co-riparian of it, relies for economic development. Additionally, Impacted States have less freedom of choice in Impacted Basins to develop their water resources in a manner that is deemed to be fair and equitable (Turton, 2005a: 16; Turton, 2003a: 80). In southern Africa, Impacted Basins include the Cunene, Maputo, Okavango, Pungué, Save-Runde and Zambezi basins.

Two key inferences can therefore be made from the above-mentioned components of any HPC (Turton, 2005a: 15). Firstly, according to Turton (2005a), all river basins are not equal with respect to physical attributes such as endogenous water, boundary-demarcating and so forth (Gleditsch, *et al.*, 2005). And secondly, all riparian states are not equal, with some being more dependent on a given river basin for their future economic security than others, or some being more dependent on exogenous water than others (Turton, 2005a: 15). Notably too, some riparian states have greater economic capacity than others (Turton, 2005a: 15).

**Figure 3: Structural Formation of the Southern African Hydropolitical Complex (Turton, 2005a: 17)**



By using the SAHPC as a conceptual lens, one is able to develop an understanding, albeit limited, of the patterns, nature and evolution of principled co-operation in international river basins. Desecuritisation has occurred over several decades in southern Africa as a result of strong technical co-operation between Orange-Senqu riparian states. This has arguably aided interests to converge on a normative trajectory at a regional level to form a regional norm set for transboundary water co-operation. According to Turton (2005a: 17), although southern African hydropolitics has evolved in the post-apartheid era, the underlying drivers are still the same. “The four most economically developed states in the region are also those facing the greatest scarcity of water; they all share international river basins with other states, they are all riparian to the “Basins at Risk”, and they all face significant limitations to their future economic growth prospects as a result of looming water shortages” (ibid.: 17). Figure 3 illustrates the interconnectedness of river basins in which specific states have a strategic interest. The SAHPC is therefore an alternative to narrowly defined river basin perspectives, and therefore, represents the *Problemshed*<sup>25</sup>, rather than the individual watersheds (ibid.). The HPC is however not without weaknesses, and these will be presented in each case study in the ensuing chapters. Particular shortfalls relate to the state-centric nature of HPC analyses and the neglect of non-state actions and supra-state regional entities.

### **3.4.2. THE NILE BASIN HYDROPOLITICAL COMPLEX (NBHPC) – IS THERE SUCH A THING?**

While Turton has not gone so far as to conceptualise a HPC for the Nile River Basin, he builds on Allan’s support of security complexes and identification of a security complex in the Middle East North Africa (MENA) region in which water is a significant resource but a minor element in the complexity of issues over which individual states of the region contend (Allan, 2001: 244). Within the MENA security complex comprising of the Nile, Jordan, and Tigris and Euphrates basins, Allan identifies three distinct but linked sub-complexes which he calls the Levant Sub-Complex, the Gulf Sub-Complex and to a weaker extent, the Mahgreb (Allan, 2001: 245).

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<sup>25</sup> Refer to *Appendix 1: Glossary of Primary Terminology*, for definition.

Allan's main argument in the MENA hydropolitical security complex is there has been no overt link between water security and state security (through a securitisation frame), due to the availability of an alternative supply of water from outside the region - the invisible and politically silent trade in water-rich products such as cereals (ibid.). Allan therefore argues that the international trade in water-rich cereals i.e. "Virtual Water," is one of the invisible but strategically important linkages that drive the hydropolitical dynamics within that complex (ibid.). For not being able to adequately acknowledge this sanctioning process and failing to recognise the conflict-dampening effect of Virtual Water trade as an element of a security complex, Allan (2001) criticises International Relations theorists like Buzan *et al.*, (1998), Lowi (1990) and Homer-Dixon (1994). As such, a central component of Allan's (2001) thesis is that trade in virtual water is an important external linkage into any hydropolitical security complex.

If however, we were to superimpose the HPC conceptual lens onto the MENA region and particularly the Nile River basin based on the four key components (pivotal basins, impacted basins, pivotal states, impacted states) as defined by Turton, it would look something similar to this:

- **Pivotal States** – Egypt has always been the most dependent riparian state on the waters of the Nile. Additionally, according to Waterbury (2002: 4) it has the highest stake in whatever basin-wide regime is created, and has the capability to impose its preferred solution. Egypt also has a relatively high level of economic development and its GDP and GDP per capita far exceeds that of the other Nile riparian states. Additionally, Egypt has also been the regional hegemon with the capacity to project its power outside of its borders. However, as will be discussed in chapter five, the changing power dynamics in the past decade may not have facilitated the replacement of the hegemon, but display a change in riparian relations due to the increase in economic and political stability of the equatorial countries i.e. Uganda, Kenya, Tanzania, Rwanda etc. The concept of pivotal state therefore becomes ambiguous and less helpful when analysing the Nile. Other pivotal states in the MENA hydropolitical security complex include Israel in the Jordan River basin and Turkey in the Tigris-Euphrates River basin. These three countries have stronger and

more diversified economies and have been able to assert their perceived water rights (Allan, 2001: 222).

- **Pivotal Basins** in the MENA region include the Jordan, Tigris-Euphrates and the Nile River basins. The waters of the Jordan (and also the groundwaters of the West Bank) are considered to be of strategic importance for three of its five riparians: Israel, Jordan and Palestine (Beaumont, 2000). While Lebanon and Syria have access to other water sources, Israel, Jordan and Palestine rely mainly on the Jordan River's surface and ground water which is extremely limited in its total availability (Dombrowsky, 1998: 93). The Tigris-Euphrates River basin, shared by Turkey, Syria, Iraq and Iran, is mainly a Turkey-Iraq concern (Allan, 2001) since Turkey is the main contributor in terms of stream-flow (supplying 90% of the Euphrates and roughly half of the Tigris) and is also the main dam builder, while Iraq is the main beneficiary of the Tigris. The Nile River basin is a pivotal basin and its sub-basin's are considered to be strategically important to various riparian states.
- **Impacted States** include Iraq (in the case of the Tigris-Euphrates), Jordan and Palestine (in the case of the Jordan). The Nile is an interesting case because while Ethiopia (in the case of the Nile), is critically dependent on the waters of the Eastern Nile sub-basin it has been historically prohibited from using this water due to long-standing colonial treaties between Egypt, Sudan and Great Britain. In the past decade, however, Ethiopia has begun to reassert its riparian rights in the burgeoning multilateral fora in this region. While equatorial countries on the White Nile were considered neither pivotal nor impacted, their ability to state claims on the waters of the White Nile has similarly increased in the past decade. As such, the countries of the East African Community, particularly Uganda, Kenya, and Tanzania, can be regarded as impacted states in the greater Nile basin, and arguably, pivotal states in the NELSB. The distinction between pivotal and impacted states therefore becomes ambiguous in the case of the Nile.

Allan therefore argues that within the MENA hydropolitical security complex water is a source of co-operation rather than a cause for conflict. His argument rests on the fact that the solution lies beyond the water resources of the region, in the form of virtual water imports. While Turton's two primary inferences (Turton, 2005a: 15) hold true in the

MENA hydropolitical security complex: all river basins are not equal, and all riparian states are not equal, when isolating out the Nile River basin, the concept of hydropolitical complexes becomes less helpful in furthering our understanding of the changing power dynamics, multilateral progress and normative convergence occurring in the basin. For one, the Nile River basin consists of countries that are not part of the MENA region. It is therefore more useful to focus on the Nile River basin and particularly, the NELSB as the most appropriate unit of analysis in which these trends can be evaluated.

### **3.5. NORM CONVERGENCE**

How then is it possible to analyse patterns/evolution of principled content and indeed normative convergence from the global level down, from the local to state to regional level, and laterally, from basin to basin? As noted in chapter two, the causal pathway to convergence, and therefore, compliance with regional regimes is a part function of social sanctioning (coercion) due to inherent power asymmetries at play in transboundary governance; and instrumental calculations (strategic social construction). This causal pathway is based on the assumption that explanations based on norms and identities cannot be separated from a discussion on material and structural factors when it comes to the question of where norms come from and why they are sustained. Indeed, power and interests may not explain everything, but they often account for why certain norms emerge and are sustained to influence policy as opposed to others. However, there is also something to be said for a non-instrumental causal pathway. According to Checkel, this occurs “Where state compliance results from social learning and deliberation that lead to preference change. In this view, the choice mechanism is non-instrumental and the environment...is one of social interaction between agents, where mutual learning and the discovery of new preferences replace unilateral calculation” (Checkel, 2001: 560). Following these causal pathways, this study plots norm convergence through three main tracks: global norm convergence from the top-down through diffusion and localisation; regional norm convergence via lateral tracks on state to state and state to basin to region; and bottom-up norm convergence from the local to national levels.



### 3.5.1. GLOBAL NORM DIFFUSION FROM THE TOP-DOWN

Conca's analysis of top-down norm dissemination (claim 1) rests on the premise that a set of principles formulated at the global level would be adopted at the basin level in basin-specific treaties that provide greater depth, breadth and specificity of these global principles (Conca, 2006: 103-104; Conca *et al.*, 2006). In contrast, top-down norm diffusion in this study refers to processes whereby global norms and norm sets are directly and indirectly integrated into regional and basin-wide legal and institutional frameworks.

Significant to tracking the development of these norms, is an analysis of whose interests are met and whose are redefined when global norms are socialised. This involves an understanding of which power relations are at play.

Additionally, these normative trajectories may not be linear and evidence of their influence must therefore be sought in other areas aside from basin-specific treaties. Moreover, evidence of their influence is not only reflected in the verbatim acceptance of these norms, and as such, global norms may be transformed into something different when localised. Indeed, as Williams (2009: 394) points out, global norms are not automatically accepted as is, in different regional contexts and subsequently, the commitment to them will vary depending on the local context.

Amitav Acharya has described the process of *norm localisation* as a congruence-building process that occurs as a result of the “contestation between emerging transnational norms and pre-existing regional normative and social orders” (Acharya, 2004: 241). Norm localisation also argues that successful norm diffusion depends on the degree to which external norms provide opportunities for localisation or the degree to which they resonate with historically constructed domestic norms (Acharya, 2004: 241; Checkel, 1999: 6; Williams, 2009: 394). Here, Acharya prioritises the agency role of local agents or “insider proponents” (Acharya, 2007: 642). Although external pressures are still significant “in the construction of regional orders...local responses to power may be more important” (ibid: 642). These insider proponents will build congruence between transnational norms and local beliefs and practices through framing (the process where norm entrepreneurs use language that names, interprets and dramatises e.g. securitised water) and grafting<sup>26</sup> (a tactic norm entrepreneurs use to institutionalise a new norm by associating it with a pre-

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<sup>26</sup> Grafting is also referred to as “incremental norm transplantation” (Farrell, 2001).

existing norm in the same issue area, which makes a similar prohibition or injunction. Acharya argues that the process of norm localisation "...may start with a reinterpretation and re-representation of the outside norm, including framing and grafting, but may extend into more complex processes of reconstitution to make an outside norm congruent with a pre-existing local normative order." (Acharya, 2004: 244)

Williams aptly suggests that African international society should, in this sense, be thought of as "a partly autonomous society because it is embedded within a wider, global society of states that influences how African states think about sovereignty, statehood and security" (Williams, 2009: 396). Understanding this degree of autonomy is crucial because regional identities are constructed more from within than without (Acharya, 2007: 630).

### **3.5.2. REGIONAL NORM CONVERGENCE**

In addition to processes of norm convergence from the global level down, norms are also constructed at the regional level and emerge through state-to-state or state-to-basin-to-regional tracks. This type of convergence is based on multilateral co-operative agendas and the movement towards a community of interest around particular issue clusters. Conca's view of norm convergence at the regional level (claim 2 bottom-up norm aggregation or cumulative norm convergence) describes the way in which one basin's normative framework influences another, reflected in an increase of new international basins subscribing to normative elements present in other international basins. This study however, makes no such claim arguing instead, that the uniqueness of each basin renders this evidence less helpful. Rather, the investigation looks at how two different basins construct a regional normative framework, either through state-to-state tracks or state-to-basin-to-region tracks.

### **3.5.3. BOTTOM-UP (LOCAL TO NATIONAL) NORM CONVERGENCE**

While Conca's analysis does not delve into this track, this study argues that local sub-national norms are crucial to the way in which global and regional and basin-wide norms are accepted, localised or resisted. For example, the 'embedded wisdom' based on the sacred and equitable (and sustainable) use of water, inherent in local cultural practices, has had real implications for conservation policies at a national level.

#### **3.5.4. NORM DYNAMISM/CONTESTATION**

Similar to Conca's conclusion of norm dynamism i.e. a more complex and dynamic pattern of principled evolution (Conca, 2006; Conca *et al.*, 2006: 281), norm dynamism in this study refers to the outcome or combination of various normative tracks. While Conca's results focus on "norm fights" or the contestation between various norms and norm sets, the argument made here, is rather one of co-existence and complementarity. This implies that normative frameworks change, and are changed, by various contexts which result in outcomes unique to particular river basins and regions.

#### **3.6. CONCLUSION**

This chapter attempted to elaborate on several key theoretical components, particularly the HPC. As will be described in greater detail in the next chapter, using the HPC as a conceptual lens illustrates that regimes are cumulative and as such, lateral norm convergence is possible and has occurred in southern Africa and the NELSB. The HPC therefore enables one to understand the state-level water security environment and subsequently, emphasises the interconnectedness between national, basin-level and regional levels of scale. However, it is limited in that it does not adequately addresses sub-national configurations. This has repercussions for analyses that seek to address local level normative influence on national, basin and regional levels of scale. These weaknesses will be addressed in detail in proceeding chapters according to their specific application to each case study.

## **CHAPTER 4**

### **CASE STUDY 1: THE ORANGE-SENQU RIVER BASIN**

This chapter provides an overview of the first case study, the Orange-Senqu River basin as a sub-set of the Southern African Hydropolitical Complex (SAHPC) and incorporates results of a textual analysis as well as qualitative interviews, informal discussions, a focus group, closed meetings, and email correspondence, to argue for basin-wide and regional normative convergence of co-operative governance norms. Using the findings of the Maryland School as a point of departure, as well as work conducted by Ashton *et al.*, (2005: 5) and Turton *et al.* (Turton, 2003a, 2003b, 2003c, 2003d, 2008a, 2008b; Turton and Ashton, 2008), defined as the Tswane School (Turton, 2008a, 2008b; Turton and Ashton, 2008) on Hydropolitical Complexes, this chapter aims to reveal methodologically that indeed, regional (state-to-state and state-to-basin-to-region) norm convergence is evident in southern Africa, when using a Hydropolitical Complex (HPC) framework as a lens from which to view regional co-operation regarding water. Despite a non-linear path of norm development proven by the Maryland School, interests have still converged on a normative trajectory due to normative fit with existing constellations of norms.

However, by using a Constructivist approach, this chapter illustrates the HPC's strengths and weaknesses in both helping and hindering an understanding of transboundary water resources. The latter is emphasised by state-centric analyses that may lend themselves to basin-wide co-operative strategies due to the manner in which water is prioritised as a strategic resource within a river basin and beyond, but is also limited in its utility to explain sub-national configurations. In essence, the SAHPC cannot explain bottom-up normative convergence from the local to state level as it ignores sub-national influences.

Moreover, this chapter provides an argument for how state agents prioritise regional co-operative agendas above their unilateral national agendas. Through a process of identifying basin-wide and broader regional benefits, normative behavioural processes of social learning, trust-building, capacity building, sustainable skills transfer as well as causal

processes such as technical co-operation, agents rationally choose to comply with regional co-operative agendas. This is a slow and incremental process of development. Barriers to regional co-operative agenda setting, and therefore regional normative convergence, exist in the form of skills flight and institutional memory loss, and the lack of trust. Oftentimes, these barriers contribute to the formation of weak or vacuous institutions with no clear mandate (or overlapping mandates), or fast-track reform process that are unimplementable. This further proves that socialisation of a norm set is not a smooth process and pockets of resistance are always evident (Schimmelfennig, 2000: 112). In order to adequately address these complexities, a geophysical and socio-economic overview of the basin is first noteworthy in order to better understand the hydropolitical issues which follow in the subsequent section.

#### **4.1. GEOPHYSICAL AND SOCIO-ECONOMIC OVERVIEW OF THE ORANGE-SENQU RIVER BASIN**

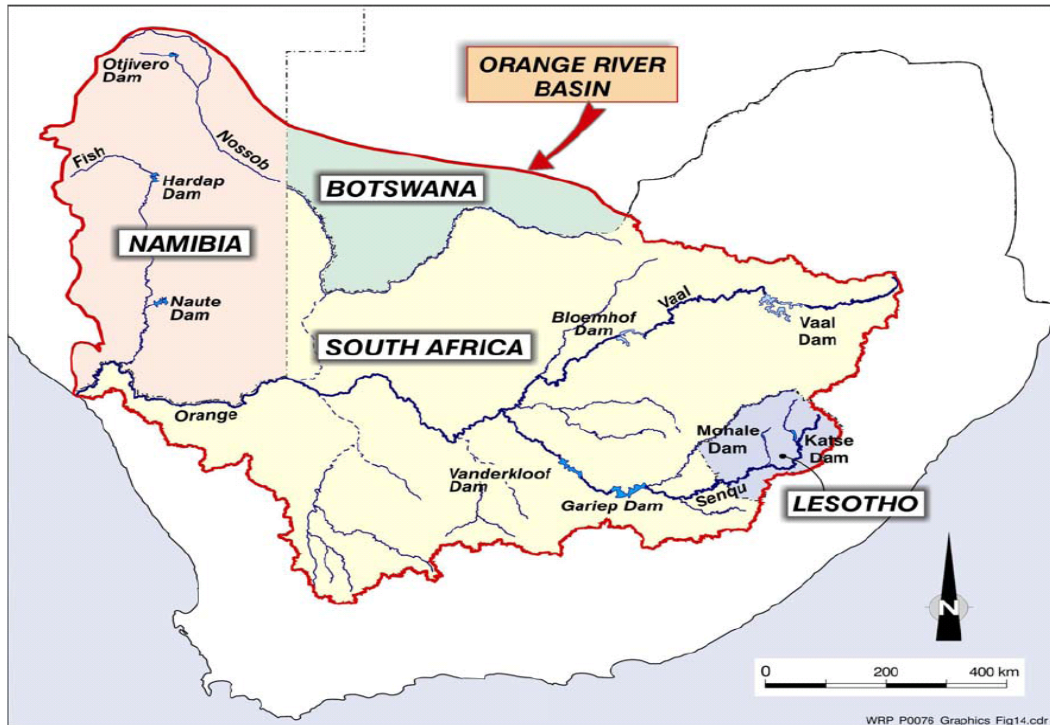
The Orange-Senqu River<sup>27</sup> traverses the borders of Lesotho, South Africa, Botswana and Namibia. It originates in the Lesotho Highlands and flows westward for roughly 2300 km (Heyns, 2003), to its mouth in the Atlantic Ocean (see Map 2). The basin spans a wide range of ecological zones from the mountainous area of the Lesotho Highlands, through the savannah grasslands and rugged hills of South Africa's central plateau to the desert conditions in the western part of the basin falling in Namibia (Bohensky, Reyers, van Jaarsveld and Fabricius, 2004). As such, rainfall also varies from high rainfall in the eastern parts of the basin (over 2000 mm per annum) to Namibia's hyper-arid area where rainfall is less than 50 mm per annum (see Tables 6 and 8).

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<sup>27</sup> The Orange River (also referred to as the Oranjerivier in Afrikaans, the Gariep River and the Senqu River in Lesotho) tributaries include the Caledon, Senqu, Kraai and Vaal rivers, and further downstream the Orange receives water from the Hartbees, and Fish Rivers (and groundwater from the Molopo). The main Orange River tributary, which originates in Lesotho, is known as the Senqu River in Lesotho. The Vaal River is the other main tributary starting on the eastern highveld escarpment in north-east South Africa (Earle, Malzbender, Turton and Manzungu, 2005). In South Africa, the name *Gariep* (meaning *great*) is often used, which originates from the terms *Nu* (meaning *black*) *Gariep* and *Gij'Gariep* (meaning "tawny" or "yellow" as a result of its muddy colour), the pre-colonial Nama (which forms part of the Khoisan linguistic family) names for different parts of the river. This study will use the term Orange-Senqu, as this is the internationally recognised term used in all multilateral agreements regarding the river today.

The Orange-Senqu River basin is also the largest river basin south of the Zambezi River with a catchment area of approximately 0.9 million km<sup>2</sup> (Earle, Malzbender, Turton and Manzungu, 2005: see Table 6) and an estimated natural runoff of 11 300km<sup>3</sup>. However, very little of this total reaches the mouth, estimated to be in the order of 5 500 million m<sup>3</sup>/yr).

**Map 2: The Orange-Senqu River Basin (Tompkins, 2007)**



**Table 6: Physical Characteristics of the Orange-Senqu River Basin (Earle, *et al.*, 2005; Mare, 2007; UNEP, 2005)**

Orange-Senqu River Basin – Major features	
Total Basin Area	896,368 km <sup>2</sup>
Area Rainfall (mm/y)	Average: 330; range > 2000 to < 50
Estimated Natural runoff	11, 300 km <sup>3</sup>
Water Demand	Irrigation – 54%, environmental demands – 10%, urban and industrial use – 2%, evaporation and run-off to the ocean though the mouth and canals – 34% (as supplied from the Gariep and Vanderkloof) (DWAf, 2008); Uses: agriculture, mining, power generation, domestic use
Population	19 million (year 2002)

In a basin-wide study conducted to facilitate the development of an *Integrated Water Resources Management Plan for the Orange-Senqu River Basin*, a summary of current and future water demands was compiled in an attempt to evaluate existing and possible future developments which will influence the availability of water in the basin (Mare, 2007). The report revealed that the large difference between natural runoff and actual runoff reaching the mouth is largely due to extensive water abstraction in the Vaal River basin,<sup>28</sup> most of which is for domestic and industrial purposes in South Africa (ibid.)

Still, irrigated agriculture is the biggest user in the Orange-Senqu River basin (excluding the Vaal River basin and supplied from Gariep and Vanderkloof), accounting for roughly 54% of water use, while 10% goes towards environmental demands contrasting with the 2% that goes to urban and industrial supply, (DWAF, 2008). In addition to the water demands mentioned above, evaporation losses (32%) from the Orange-Senqu River and run-off to the ocean through the mouth and canals (2%) account for 34% of water use, depending upon the flow of water (and consequently the surface area) in the river (ibid.).

The Orange-Senqu is therefore the most developed (and modified) river in the region, comprising of 31 dams having a storage capacity of more than 12 x 106m<sup>3</sup> (twenty-four in South Africa, five in Namibia and two in Lesotho) (Heyns, 2003: 19). The most notable development is the Lesotho Highlands Water Project (LHWP), the largest international inter-basin transfer (IBT) scheme in the world, which transfers water from Lesotho to South Africa's Gauteng Province, watering big cities such as Johannesburg and Pretoria (Basson, van Niekerk and van Rooyen, 1997: 55).

The contributions of the riparian states to the basin in terms of mean annual run-off (MAR), as well as the area of the basin falling within each state vary considerably (see Table 7).

**Table 7: Contributions to the Orange-Senqu River Basin by Country (FAO, 1997; Kranz, Interwies, Vorwerk and von Raggamby, 2005b; Lange, Mungatana and Hassan, 2007)**

Item	Lesotho	South Africa	Botswana	Namibia
Area in Basin (%)	5%	60%	12%	25%
MAR (%)	41%	55%	0%	4%

<sup>28</sup> The Vaal River Catchment is managed as a separate catchment and therefore is excluded from the demand requirements mentioned.

Lesotho's contribution to the Orange-Senqu is significant, providing the basin with 41% of its water, from a mere 5% of total basin area. Moreover, virtually the entire population of Lesotho is resident in the basin (see Map 2 and Table 8), which intricately links its national interests to the Orange-Senqu River Basin<sup>29</sup>. Lesotho is highly dependent on royalties from South Africa for inter-basin water transfer for economic development<sup>30</sup>, and together with garments, the export of water forms the majority of its export revenue.

South Africa has the largest area of the basin within its territory, contributes the most water in terms of MAR and is also the largest user, accounting for between roughly 82% (Earle, *et al.*, 2005) and 97% of annual total use (Lange, *et al.*, 2007). Botswana is an interesting case for while it contributes no streamflow and uses none of the surface water in the basin, it is included as a riparian state due to the ephemeral Nossob and Molopo Rivers, which are suspected to have contributed to surface run-off contributions historically but are now blocked by the Kalahari Desert dunes, and have made no measurable contribution to the Orange-Senqu in living memory (Heyns, 2003: 19). However, it is suspected that Botswana contributes groundwater from the Molopo River and its dependency is related to groundwater aquifers<sup>31</sup>.

Some scholars have argued that Botswana has made use of its legal rights to engage in all the activities of a “normal” riparian state, and by doing so, has created an avenue for potential future water supply access from the Lesotho Highlands Water Project (LHWP), which is technically feasible but too expensive to be realistic at the time of writing (Turton, 2008b: 55). Other policymakers argue that Botswana's interest in the Orange-Senqu might be by way of trying to give support for other key areas<sup>32</sup> such as strategic interests in the Limpopo River basin, on which it is highly dependent (Earle, *et al.*, 2005).

Water availability is therefore a main transboundary issue in the region. Of the four riparian states of the Orange-Senqu River, three are classified among the driest countries in SADC i.e. South Africa, Botswana and Namibia. Moreover, South Africa is highly economically dependent on the Orange-Senqu River, with a staggering 100% of the gross

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<sup>29</sup> Interview with Ashton, P. (2008) Aquatic Ecologist, Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa, 7 July 2008: Appendix 2A.

<sup>29</sup> Lesotho has the lowest GDP of all four riparian states (Refer to Table 8).

<sup>30</sup> Ashton, P. (2008) Interview: Appendix 2A.

<sup>32</sup> Interview with Thamae, L. (2008) Executive Secretary, ORASECOM, Pretoria, South Africa, 17 September 2008: Appendix 2A.



economic product (GDP) of Gauteng Province, the industrial and economic heartland of South Africa (and arguably Africa) being dependent on inter-basin transfers involving the Orange System (Basson, *et al.*, 1997; Turton, 2003a).

Namibia is the most downstream riparian state with a high reliance on the Orange-Senqu for agricultural activity in the south of the country (Kranz, Interwies and Vidaurre, 2005a) even though a relatively small proportion of its population (8.9%) live in the basin's territory. Namibia has an extremely arid hydroclimate, a high level of water stress, and is also unique in that all its perennial rivers are transboundary.<sup>33</sup> These characteristics make it particularly vulnerable to external dynamics regarding the river, and Namibia therefore relies heavily on international water resources to meet internal demand (GEF, 2005; Kranz, *et al.*, 2005a). Specifically, Namibia relies on South Africa for future water storage developments to increase its assurance of supply (Kranz, *et al.*, 2005a: 3). In the southern parts of Namibia, the greatest development potential lies in irrigation, and this subsequently creates the highest demand for water (*ibid.*).

Economic indicators show that while South Africa has by far the highest total GDP, Botswana has the highest GDP per capita out of all four countries (see Table 8). Interestingly, while Lesotho has the lowest GDP, it has the highest GDP growth rate out of all four riparian states, due in large part to royalties paid by South Africa for inter-basin water transfer, the expanding apparel-assembly sector, remittances from miners employed in South Africa and customs duties from the Southern Africa Customs Union for the majority of government revenue<sup>34</sup> (CIA, 2008, 2009).

Increasing population growth, urbanisation, industrialisation as well as the non-maintenance of supply infrastructure such as dams and pipelines (Jacobs and Turton, 2009),<sup>35</sup> combined with the anticipated effects of climate change on river flows are some other geophysical and socio-economic factors placing further constraints on this already completely utilised river facing “closure.”

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<sup>33</sup> See Falkenmark and Widstrand, 1992; and Bohensky *et al.*, 2004 for water stress scale

<sup>34</sup> Although, the government has recently strengthened its tax system to reduce dependency on customs duties.

<sup>35</sup> Interview with Pyke, P. (2008) Chief Engineer: Options Analysis (Central), Department of Water Affairs and Forestry (DWAF), Government of South Africa, Pretoria, South Africa, 9 July 2008: Appendix 2A.

**Table 8: Riparian State Demographic/Socio-Economic Statistics (CIA, 2009; UNDP, 2008)**

Item	Lesotho	South Africa	Botswana	Namibia
<b>Co-ordinates</b>	29 30 S, 28 30 E	29 00 S, 24 00 E	22 00 S, 24 00 E	22 00 S, 17 00 E
<b>Population</b> <sup>36</sup>	2,130,819 (July 2009 est.)	49,052,489 (July 2009 est.)	1,990,876 (July 2009 est.)	2,108,665 (July 2009 est.)
<b>Population Growth rate</b>	0.116% (2009 est.)	0.281% (2009 est.)	1.937% (2009 est.)	0.95% (2009 est.)
<b>% Pop res. in basin</b>	100%	29.8%	2.8%	8.9%
<b>Total Area</b>	30,355km <sup>2</sup>	1,219,912 km <sup>2</sup>	600,370 km <sup>2</sup>	825,418 km <sup>2</sup>
<b>Climate</b>	Temperate; cool to cold, dry winters; hot, wet summers	Mostly semiarid; subtropical along East Coast	Semiarid; warm winters and hot summers	Desert; hot, dry; rainfall sparse and erratic
<b>Terrain</b>	Mostly highland with plateaus, hills, and mountains	Vast interior plateau rimmed by rugged hills and narrow coastal plain	Predominantly flat to gently rolling tableland; Kalahari Desert in southwest	Mostly high plateau. Namib Desert along coast, Kalahari Desert in east
<b>GDP (Purchasing Power Parity)</b>	\$3.293 billion (2008 est.)	\$491 billion (2008 est.)	\$27.06 billion (2008 est.)	\$13.25 billion (2008 est.)
<b>GDP Real Growth Rate</b>	6.8% (2008 est.)	3.1% (2008 est.)	2.9% (2008 est.)	2.9% (2008 est.)
<b>GDP per capita (PPP)</b>	\$1,500 (2008 est.)	\$10,100 (2008 est.)	\$13,900 (2008 est.)	\$6,300 (2008 est.)
<b>Government type</b>	Parliamentary constitutional monarchy	Republic – constitutional democracy	Parliamentary Republic	Republic
<b>HDI Rank in 2006 (published in 2008)</b> <sup>37</sup>	0.465 Rank - 155 (Low)	0.670 Rank- 125 (Medium)	0.664 Rank - 126 (Medium)	0.634 Rank - 129 (Medium)

Institutional capacity, be it in the form of river basin commissions and regional water structures, or whether it is defined as a legal framework in the form of formal treaties and protocols, or technical co-operation in the form of informal working groups and technical task teams or generally warm relations, has been prioritised as the “heart of conflict management” particularly in arid countries (Turton, 2003d, 2008b; Wolf, 2005: 13). Negotiations over the waters of the Orange-Senqu River basin have been ongoing between various combinations of the riparian states since the 1950s, which has resulted in a wide range of bilateral and multilateral inter-state/government-led commissions and

<sup>36</sup> The CIA World Factbook take into account the effects of excess mortality due to AIDS; this can result in lower life expectancy, higher infant mortality, higher death rates, lower population growth rates, and changes in the distribution of population by age and sex than would otherwise be expected.

<sup>37</sup> Human Development Index as included in the United Nations Development Program's Human Development Statistical Update released on December 18, 2008, compiled on the basis of data from 2006. It covers 177 U.N. member countries out of 192 countries.

agreements, project-based organisations, treaties, and technical committees. This co-operative framework has been, to a large extent, determined by the hydropolitical history of riparian relations (Ashton and Turton, 2005) and the domestic context of national regime types. In addition to this, an international policy and legislative framework exists which guides policy formulation at the basin and national levels.

## **4.2. BRIEF HYDROPOLITICAL HISTORY OF THE ORANGE-SENQU AND THE WINDS OF CHANGE**

In this brief overview of southern Africa's political history, it is argued that several key factors have greatly influenced national and regional approaches to transboundary water governance. These include: colonial and apartheid legacies; South Africa's position as regional hegemon, and the subsequent apprehension of neighbouring states to this position; riparian disputes between South Africa and Namibia (border dispute), and SADC intervention (South Africa and Botswana) in Lesotho (Operation Boleas); the origin of SADC; and the post-independence water sector reforms that spread across the region in the 1990s and that continue to this day. These factors, combined with localised military conflicts or civil wars during the last three decades further illustrate the strategic and sensitive nature of water in the region (Ashton and Turton, 2005; Turton, 2003d, 2004; Turton and Earle, 2005).

During the colonial period, the political geography and demarcation of states, as well as the structuring of national water sectors, within the region was a product of colonial legacies (Ashton and Turton, 2005). Arbitrary state borders were set with little consideration of how this might have impacted and/or divided social, cultural and ethnic groupings (*ibid.*). Oftentimes, previously common pool rivers were used to delineate political boundaries, thus politicising the nature of water. The Orange-Senqu River, for example, forms the contiguous border of South Africa and Namibia (Turton, 2005a; Turton, 2008b: 56). In this regard, there has been a century-long dispute over territorial and other ancillary (water-related) rights along the lower Orange River, or stated more specifically, the exact location of the border within the river. This translated into a two-kilometre wide window of uncertainty depending on the size and timing of large and small

flood events (Ashton, 2000b). The dispute had enormous repercussions for officials who had to decide on the positions of prospecting mining leases of offshore minerals such as oil, gas and diamonds, as well as for delineating the catch areas of commercial fisheries (ibid.).

The demarcation, made in 1890, by the British colonial administration, identified it as the high-water level on the northern bank (Ashton, 2000b). This effectively meant that the entire river fell within South African territory, and therefore, deprived Namibia of independent access to the water (Ashton, 2000b; Hangula, 1993: 105; Heyns, 1995: 11). Promises were made to revisit this demarcation, and that the border would be moved to the middle of the river. Several scholars argue that this was an unfulfilled promise tactfully used during the run-up to Namibian independence (Ashton, 2000a, 2000b; Maletsky, 1999; Meissner, 2001).

Despite attempts by both of the original colonial powers and, subsequently, by the South African Government since 1910, the dispute lasted for decades (Ashton, 2000b). Only in 1991, shortly after Namibian independence, did South Africa agree to change the position of the boundary from the northern bank to the centre of the main river channel or the *thalweg*, the universally accepted term concept for border demarcation meaning the deepest continuous line along the watercourse (ibid.). This decision allowed Namibia to claim its fair share of all resources in, and related to (minerals, fisheries, oil), the Orange River (ibid.). The decision has, however, not been without complications. For one, it has resulted in considerable confusion as to the validity of existing alluvial mining leases in the bed of the river, and has denied some local residents on the South African side, the right to graze their livestock on islands that have now become part of Namibian territory (ibid.). As such, the issue is still, not fully resolved at the time of writing.

However, despite predictions by authors that the border dispute had the potential to tarnish South Africa's hydropolitical image, it has never escalated into a major issue that could threaten international relations between South Africa and Namibia (Turton, 2005a, 2005b). There are a range of possible answers for this, but one is arguably due to the role South Africa played in Namibia's political history, as the UN Mandated trustee of South West Africa.

Colonialism therefore, had a major impact on the hydropolitics of southern Africa. Soon, the desire for independence was acutely felt by all southern African states (Turton

and Earle, 2005). The Portuguese colonies of Angola and Mozambique achieved their independence through wars of liberation, while the British colonies of Southern Rhodesia,<sup>38</sup> Northern Rhodesia,<sup>39</sup> Nyasaland,<sup>40</sup> South Africa, and also South West Africa (through the “Struggle” from 1966 to 1989), achieved theirs through various forms of anti-colonial struggle (ibid.). Although Bechuanaland<sup>41</sup>, Basutoland<sup>42</sup> and Swaziland were never British colonies, and operated as fully functional monarchies, they were British Protectorates, appeals which they made during the time of Zulu national expansion and Boer settler land invasions in the previous century (ibid.).

The British withdrawal from the various colonies in the 1960s, combined with the domino effect of newfound independence therefore gave new impetus to the various liberation movements operating at the time (ibid.). More specifically, it opened up new areas and access to safe bases from which they could train guerrilla fighters, and regroup if needed (ibid.). These events, combined with the resultant armed struggle contributed to the securitisation of water, which was based on a strong military response to any threat, supported by destabilisation via economic means (Gutteridge, 1983).

However, the anticipated grand renaissance of the region’s political climate during the decolonisation process failed to emerge, because the suppressive ‘overlay’ (Buzan, 1991) of colonialism and apartheid was replaced by an equally repressive form of overlay from the Cold War (Ashton and Turton, 2005). This had further debilitating social and economic impacts on the region (Buzan, 1991; Taylor and Williams, 2004; Turton, 2003d). As a result, according to Taylor and Williams (2004: 7), in the post-Cold War era, African leaders “found themselves in a precarious domestic as well as international position as their continent’s geostrategic ‘value’ plummeted, their primary source of external resources evaporated, and the nature of their domestic societies was placed under increasing levels of international scrutiny.”

On the other hand, the wave of independence that spread across the region, laid the foundation for greater regional co-operation and coordination in the water sector (Ashton,

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<sup>38</sup> This was later referred to as Rhodesia, the Republic of Rhodesia, the Republic of Zimbabwe Rhodesia, and became Zimbabwe upon independence on 17 April 1980.

<sup>39</sup> This became Zambia upon independence on 24 October 1964.

<sup>40</sup> This became Malawi upon independence on 6 July 1964.

<sup>41</sup> This became Botswana upon independence on 30 September 1966

<sup>42</sup> This became Lesotho upon independence on 4 October 1966.

2002; Heyns, 2002; Ramoeli, 2002; Turton, 2003a, 2003d). The origins of SADC actually predate these developments and go back to 1980. As will be discussed in greater detail in subsequent sections, its foundational objectives included the establishment of an institutionalised common front against apartheid South Africa, and to combat against South Africa's military aggression and economic hegemony. It was only after the abolition of apartheid that South Africa was allowed to join regional political institutions, as part of the process of resuming its position among sovereign states, and the spirit of 'community' (Kranz and Vidaurre, 2008). This historical development has had its effect on the nature of regional hydropolitics today, with neighbouring states adopting an arguably cautionary approach to South Africa's leadership role in several multilateral fora and institutions. However, over the past decade, South Africa has been successful in slowly reducing the distrust with which it was perceived (Turton, 2003c).

Additionally, the post-independence period had further implications for the hydropolitics of the region. This is best encapsulated in Operation Boleas. In 1998, in the aftermath of the 1986 military *coup d'état* in Lesotho, and South Africa's political transition in 1994, political instability broke out in Lesotho following allegations of elections fraud. A call was made to SADC by the Prime Minister of Lesotho, Pakalitha Mosisili, requesting assistance. SADC decided to send in a peacekeeping force, made up of soldiers from South Africa and Botswana. When Operation Boleas moved across the border, it came under heavy and unanticipated fire, causing it to split into two (Turton, 2003d). One element therefore focused on Maseru, while the other moved in to secure the infrastructure related to the Lesotho Highlands Water Project (LHWP) and particularly, the securing of Katse Dam. This is therefore cited, by some, as an example of a water conflict, as the intervention was perceived as South Africa's protection of its national interest, identified to be the strategic water reserve of Katse Dam, which is "a major water source supplying South Africa with fresh water" (Berman and Sams, 2000: 185). South Africa insisted that the intervention was justified by the Lesotho Prime Minister's request and was sanctioned by SADC. The event unfortunately caused strained relations between South Africa and Lesotho as evidenced in various newspaper articles at the time (Lawrence, 1998; Mills, 1998; Mopheme, 1998; Turton, 2003c, 2003d).

It was under these pressures, the end of the Cold War as well as the wave of political independence that spread across all countries in the region that social and economic reforms began to take place (Kranz and Vidaurre, 2008). This, directly influenced the reformulation of water policies and legislation, most notably, South Africa's water reform process, since its first democratic elections in 1994 (Kranz and Vidaurre, 2008).

This brief hydropolitical history highlighted several key factors and events that have contributed to the evolution of co-operative strategies in the region today. Indeed, it depicts a central aspect of riparian relations, that is, a high degree of technical co-operation despite colonial and apartheid eras of political distrust. It is argued here, that this environment greatly influenced co-operative strategies in the 1990s and beyond. This is not to say that co-operation was born out of disputes and distrust, but rather that they played a significant role in shaping the nature of co-operation today, that is, a comparatively high degree of institutional development. In fact, co-operation in the Orange-Senqu has been hailed as a model for effective governance. The following section highlights this.

### **4.3. INSTITUTIONAL AND LEGISLATIVE DEVELOPMENT**

An obvious way for states to co-operate over the management of shared waters such as the Orange-Senqu River is by negotiating international agreements (Hiddema and Erasmus, 2007: 2), which does not encroach on the sovereignty of states, and allows them to reconcile national legal and jurisdictional aspects with regional legal and jurisdictional infrastructure. The most significant international, regional and basin-wide legal instruments for the Orange-Senqu River basin include the 1997 United Nations Convention on the Law of Non-navigational uses of International Watercourses, which has not yet been entered into force, the 2000 SADC Revised Protocol on Shared Watercourses, as well as the Agreement between Botswana, Lesotho, Namibia and South Africa on the establishment of the Orange-Senqu River Commission (ORASECOM) signed in 2000. Additionally, several significant bilateral agreements will also be reviewed. The adoption, and thereafter, socialisation of international norms and principles into the national law of riparian states is noteworthy. The incorporation of such norms to be implemented by the states involved can

occur in several different ways and need not only follow paths of socialisation indicated by Conca and the Maryland School as discussed in chapter three (Conca, 2006; Conca and Dabelko, 2002; Conca and Wu, 2002; Conca, *et al.*, 2006; Conca, *et al.*, 2003). Socialisation can occur when an international institution is mandated with powers to take the necessary decisions and develop detailed tasks, which Member States are required to implement. Alternatively, an international legal framework can be adopted and the onus is then on Member States to interpret it and implement it through their own legislation (Hiddema and Erasmus, 2007).

#### **4.3.1. INTERNATIONAL CONTEXT**

As noted in chapter three, the 1997 UN Convention offers much value as a legal framework, however it proves less useful as an indicator of top-down norm diffusion at the regional SADC level. While no SADC Member States voted against the Convention, only two SADC Member States have ratified it. South Africa and Namibia are both parties and signatories, and are two of only four African signatories (UN, 2009: see Table 9). Despite that however, all SADC Member States indirectly adhere to all the principles contained within it, due to their ratification of the SADC Protocol, which is virtually a verbatim reflection of the UN Convention (Malzbender and Earle, 2008). Global norms have therefore followed a non-linear progression from the top down, where norms and principles are accepted at the global through codification, then the regional level where they are incorporated into legal frameworks. The strategic nature of water in the SADC region has arguably given preference to the need to consolidate regional frameworks first.

The procedural obligations of the UN Convention contain a general duty to co-operate, to disseminate and exchange information, the requirement of prior notification as well as the obligation to consult (Hiddema and Erasmus, 2007; UN, 1997a). Since it is not yet in force it acts as a moral framework, however, some of its provisions are binding as customary international law i.e. watercourse states should not be deprived of their equitable benefits when it comes to a shared watercourse (Tanzi, 2001: 89). The SADC Protocol on Shared Watercourses, adopted in 1995 was revised into the SADC Revised Protocol in 2000 to incorporate its normative principles. These regional agreements are meant to make the normative principles set out in the UN Convention more regionally specific. The



influence of the UN Convention on subsequent legal developments can therefore be found not in the amount of SADC signatories it has, but the degree to which it has influenced the negotiation of regional agreements, and is therefore incorporated into regional texts.

**Table 9: Breakdown of the recorded vote on the UN Convention of SADC States (Adapted from Eckstein, 2002; UN, 1997a)**

Country	Vote	Ratified
Angola	For	No
Botswana (Orange-Senqu riparian)	For	No
Democratic Republic of Congo (DRC)	Absent	No
Lesotho (Orange-Senqu riparian)	For	No
Madagascar	For	No
Malawi	For	No
Mauritius	For	No
Mozambique	For	No
Namibia (Orange-Senqu riparian)	For	Yes
Seychelles	N/A	No
South Africa (Orange-Senqu riparian)	For	Yes
Swaziland	Absent	No
Tanzania	Abstained	No
Zambia	For	No
Zimbabwe	Absent	No

Malzbender and Earle (2008) argue however, that the ratification of the UN Convention is still beneficial to SADC since it could support the interpretation of some provisions of the SADC Protocol. For example, the UN Convention could give greater meaning to Art. 3.6 of the SADC Protocol, which obliges states to exchange available information and data regarding the hydrological, water quality, meteorological and environmental conditions of shared watercourses (ibid.). The UN Convention provides more detailed rules for data-poor areas or in situations where information is not readily available (ibid.). UN Convention stipulates that “if a watercourse State is requested by another watercourse State to provide data or information that is not readily available, it shall employ its best efforts to comply with the request but may condition its compliance upon payment by the requesting State of the reasonable costs of collecting and, where appropriate, processing such data or information” (UN, 1997a: Article 9.2). Similarly, “Watercourse States shall employ their best efforts to collect and, where appropriate, to process data and information in a manner which facilitates its utilisation by the other watercourse States to which it is communicated” (ibid: Article 9.3). In this regard, the UN

Convention could provide further elaboration for the SADC context if there is ever an uncertainty regarding the format in which data is presented as well as the responsibility of costs for the collection and processing of data (Malzbender and Earle, 2008).

Additionally, equitable and reasonable utilisation is another such ambiguously phrased norm which could benefit from the provisions provided in multiple legal frameworks, to give it greater meaning. The interpretation of Article 3.8 of the SADC Protocol, for example, which lists factors for the determination of “equitable and reasonable utilisation”, could receive support and greater elaboration through Article 10.2 of the UN Convention (ibid.). The latter UN article outlines the concept of vital human needs in the determination of “equitable and reasonable utilisation” (UN, 1997a: Article 10.2). According to Malzbender and Earle (2008), the concept of vital human needs is growing in importance in international water law as a key factor to consider in the relationship between different uses, but it is not explicitly mentioned in the SADC Protocol. If the UN Convention entered into force and became legally binding on SADC Member States, the vital human needs factor would be strengthened in the application of the SADC Protocol (ibid.).

Additionally, these authors recommend that the ratification of the UN Convention would be of great relevance for basins shared with non-SADC member states in that it would provide a legal framework and established principles and rules beyond the scope of the SADC Protocol, which is only applicable to SADC Member States (ibid.). Examples of basins that comprise of SADC Member States and non-SADC member states include the Nile (of which two SADC Member States are riparian: DRC and Tanzania); the Congo (of which four SADC Member States are riparian: DRC, Angola, Tanzania and Zambia); the Pangani and Uмба (of which one SADC Member state is riparian: Tanzania).

#### **4.3.2. REGIONAL CONTEXT**

The SADC legal framework reflects the international context in terms of the adoption of the global principles of equitable utilisation, no harm etc. When ascertaining the degree to which norms have been accepted and socialised, and examining the trajectory these norms have followed in the SADC region, it is important to understand the historical development of the SADC water protocols and SADC itself as previously noted.

In an attempt to combat South Africa's military aggression and economic hegemony, 1980 saw the formation of the Southern African Development Co-ordination Conference (SADCC), by nine southern African states including Botswana and Lesotho. Namibia later joined after it became independent in 1990. In 1992, the SADCC was superseded by the Southern African Development Community (SADC), of which South Africa became a member after its 1994 democratic election (Conley and Van Niekerk, 2000; SADC, 1995). SADC is today a regional organisation and has adopted a number of protocols to promote co-operation between the 15 Member States of the region.<sup>43</sup> For the Orange-Senqu riparian states, the 1995 Protocol on Shared Watercourses (SADC, 1995) and the 2000 Revised Protocol on Shared Watercourses (SADC, 2000) are valuable legal instruments, which allow for the evaluation of normative convergence at a regional level.

The first SADC Protocol on Shared Watercourse Systems was signed in 1995 and was the first protocol following the signing of the SADC Treaty in 1992 (Ramoeli, 2002: 105). Its origin and history date back to 1993 when SADC was implementing the largest of its basin-wide programmes, the Zambezi River Basin System Action Plan (ZACPLAN) (Ramoeli, 2002: 105; Turton, 2008b: 62). Drafted initially as one of the ZACPLAN projects (ZACPRO 2), which aimed to establish a basin-wide legal and institutional framework to better facilitate management of the Zambezi River basin, SADC then decided that instead of developing a legal instrument for a single river basin, it should first develop a region-wide legal framework which all river basins in the region could adopt (Ramoeli, 2002: 106). As a result of this decision, the SADC Protocol on Shared Watercourse Systems was drafted and subsequently adopted in 1995 (*ibid.*).

The revision of the 1995 Protocol was influenced by two main factors; 1). Some Member States had reservations about the contents of the Protocol and the summit approved that these concerns be addressed, and 2). The adoption of the UN Convention in 1997. Following these developments, the Protocol was then revised and the SADC Revised Protocol was signed by Member States on 7 August 2000. The SADC Revised Protocol came into force in October 2004 after two-thirds of the signatory states ratified it (Hiddema and Erasmus, 2007).

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<sup>43</sup> As of December 2009, the 15 SADC member states include: Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe

According to the SADC Water Division based in Gaborone, several differences exist between the old and revised protocols:

- While the 1995 Protocol was based on the Helsinki Rules and Agenda 21<sup>44</sup>, the Revised Protocol reflects the UN Convention and in many ways is a direct replica of it (Hiddema and Erasmus, 2007: 6; Ramoeli, 2002: 106; Thompson, 2006: 378).
- While the 1995 Protocol does not include clear objectives, the Revised Protocol expressly states the objectives of fostering closer co-operation. These objectives include the intended outcome of achieving sustainable and coordinated management, protection and utilisation of shared watercourses as well as advancing the SADC Agenda of Regional Integration and poverty alleviation (Hiddema and Erasmus, 2007: 6). Additionally, the Revised Protocol encourages equitable and reasonable utilisation, sound environmental management, harmonisation and monitoring of legislation of the states involved as well as the promotion of research, technology development, information exchange and capacity building (Hiddema and Erasmus, 2007; SADC, 2000). This is an explicit prioritisation of normative convergence and cumulative regional integration through policy alignment.
- While the 1995 Protocol stresses territorial sovereignty of a watercourse state, the Revised Protocol emphasises the unity and coherence of each shared watercourse. This difference has major implications for this investigation because it indicates a higher priority given towards regional co-operative agendas as opposed to unilateral national agendas, thus implying (if not providing evidence for) a regional move towards normative convergence.
- While the 1995 Protocol provides a general regulatory framework, the Revised Protocol, in Article 6 thereof, provides allowance for the creation of future watercourse agreements with respect to entire shared watercourses, a part thereof or a particular project, programme or use (Hiddema and Erasmus, 2007: 7). This is aligned with the stipulations of the 1997 UN Convention, which allows for more flexibility, particularly regarding the creation of ad hoc arrangements with respect to specific international watercourses such as the Orange-Senqu River (ibid.).

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<sup>44</sup> Agenda 21 is a non-binding legal instrument adopted by the Conference of Environment and Development held in Rio de Janeiro in 1992.

- The Revised Protocol provides clearer regulations than does the 1995 Protocol regarding planned measures, environmental protection, management of shared watercourses, prevention and mitigation of harmful conditions and emergency situations (Hiddema and Erasmus, 2007: 7; SADC, 2000).

The Revised Protocol therefore espouses much the same principles as the 1997 UN Convention:

- Unity and coherence of each shared watercourse
- Respect for the existing rules of customary or general international law
- Conservation and enhancement of the environment to promote sustainable development
- Co-operation with regard to the study and execution of projects
- Equitable and reasonable utilisation
- Protection of the watercourse for the benefit of current and future generations
- Prevention, mitigation or compensation of significant harm to other Parties

Since the entry into force of the Revised Protocol means that the previous SADC Protocol has been repealed (SADC, 2000: Article 16), the Revised Protocol is therefore the source of applicable treaty law for the four states bordering the Orange-Senqu River (since they have all ratified this instrument) (Hiddema and Erasmus, 2007).

In terms of its provisions, the SADC Revised Protocol contains general principles in Article 3, specific provisions in Article 4, a detailed institutional framework for implementation in Article 5, provisions on shared watercourse agreements in Article 6 and a provision on dispute settlement in Article 7 (Hiddema and Erasmus, 2007; SADC, 2000).

In Article 3, the priority given to normative convergence is once again expressed: “The State Parties recognise the *principle of the unity and coherence* of each shared watercourse and in accordance with this principle, undertake to *harmonise the water uses* in the shared watercourses and to ensure that all necessary interventions are consistent with the sustainable development of all Watercourse States and *observe the objectives of regional integration and harmonisation of their socio-economic policies and plans.*” (SADC, 2000: Article 3). Additionally, it stipulates that state parties should co-operate

closely and liaise with each other on all projects likely to have an effect on the regime of the shared watercourse, and for equitable and reasonable utilisation to be respected and adopted in these processes (Hiddema and Erasmus, 2007). The exact definition of equitable and reasonable utilisation is clearly outlined in Article 3.8, being virtually identical to that stipulated in the UN Convention (ibid.).

The concept of harmonisation contained in Article 3.1, is outlined, as is the process of carrying it out provided in Article 6. One way in which the protocol calls for harmonisation is through the establishment of shared watercourse agreements/institutions (such as the Orange-Senqu River Commission). Watercourse states should “undertake to establish appropriate institutions such as watercourse commissions or authorities or boards that may be determined” (SADC, 2000: Article 5.3). Additionally, as stated in Article 6.3, “Watercourse States may enter into agreements, which apply the provisions of this Protocol to the characteristics and uses of a particular shared watercourse or part thereof” (SADC, 2000: Article 6.3). Similarly, Article 2 suggests that in order to obtain “closer co-operation for judicious, sustainable and co-ordinated management, protection and utilisation of shared watercourses....this Protocol seeks to promote and facilitate the establishment of shared watercourse agreements and Shared Watercourse Institutions for the management of shared watercourses.”

This sentiment, encouraging the formation of shared watercourse institutions is also elaborated upon in Article 4.3. Article 4 provides in detail for “specific provisions” on planned measures, notification thereof, environmental protection and preservation, management of shared watercourses, prevention and mitigation of harmful conditions, and emergencies (Hiddema and Erasmus, 2007). “Planned measures” are not explicitly defined but the obligation is that states:

...shall exchange information and consult each other and, if necessary, negotiate the possible effects of planned measures on the condition of a shared watercourse. Timely notification must be given to other watercourse states if a particular Party implements or permits the implementation of planned measures which may have a significant adverse effect on a particular watercourse state or states. The duty to notify is accompanied by the further obligation to allow a state that has been notified a period of six months within which to study and evaluate the possible effects of the planned measures and to communicate the findings (SADC, 2000: Article 4.1c).

During this six-month period, the notifying state wishing to implement planned measures “shall not implement or permit the implementation of the planned measures without the consent of the notified States” (SADC, 2000: Article 4.1d). Moreover, information and technical data must also be exchanged (SADC, 2000: Article 3.6).

The Revised Protocol also provides guidelines for the management of such shared watercourses in Article 4.3. In this regard, and upon the request of a watercourse state, states who share a watercourse should “enter into consultations concerning the management of a shared watercourse, which may include the establishment of a joint management mechanism” (SADC, 2000: Article 4.3a). Once again, these provisions in Article 4 are identical to the procedural obligations outlined in the UN Convention.

In addition to calling for the establishment of river basin organisations (RBOs) or Shared Watercourse Institutions (SWIs), Article 5 also calls for an “institutional framework for implementation” on the SADC level (Hiddema and Erasmus, 2007). SADC now has a fully functional Water Sector comprising of a number of organs, such as the Committee of Water Ministers, and the Committee of Water Senior Officials, for example (*ibid.*).

In addition to the concept of ‘harmonisation,’ explicitly mentioned in the SADC Revised Protocol, another is the promotion of regional integration. Regional integration is one of SADC’s overall objectives and is a process which requires focused co-operation, joint decision-making and suitable institutional arrangements between states. When sharing the utilisation of a single watercourse such as the Orange-Senqu River, integration, at least at a basin-wide level, seems unavoidable. The Revised Protocol provides the necessary framework; to be fleshed out in a specific arrangement between the states involved. However, the exact process and consequences of this differs from basin to basin. Moreover, as will later be argued, regional integration, is an incremental process based on the cumulative transformation of unilateral national agendas and norm sets into a multilateral agenda based on the identification of benefits to be shared on and beyond the basin (in the region), thus bypassing sovereignty as a constricting force while not attacking it.

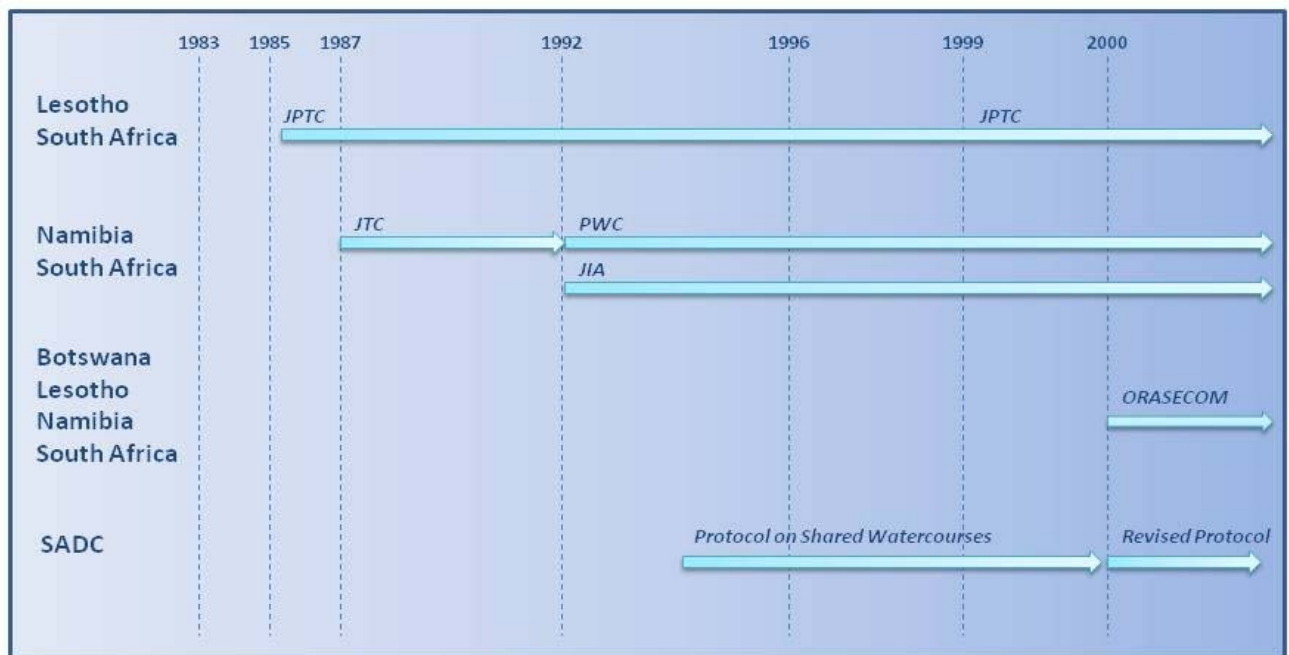
#### **4.3.3. BASIN LEVEL CONTEXT**

Institutional development on the Orange-Senqu River basin has been fragmented but successful where it has occurred, reaching a level of sophistication and success not

found in other river basins in southern Africa (Turton, 2003d). Moreover, institutional arrangements have evolved over time and reflect the changing political, social and economic transformations that have occurred in the region (Kistin and Ashton, 2008: 391). As previously described, the historical and political context within which these development projects and institutional agreements were formed is therefore, of great significance. They were established in a time when public participation and environmental accountability were not routinely performed (Tompkins, 2007: 4). The older institutions established in the Orange-Senqu basin are therefore a reflection of this context i.e. an emphasis on technical co-operation to overcome the political incapacity to engage. The current institutional framework should therefore, be examined in this context.

In addition to the two regional (SADC) protocols and the 1997 UN Convention, the four Orange-Senqu riparian states have established six bilateral agreements and one multilateral basin-wide treaty of noteworthy importance (Hiddema and Erasmus, 2007; Kistin and Ashton, 2008; Kranz, *et al.*, 2005a; Tompkins, 2007; Turton, 2003d) (Table 10).

**Table 10: Schematic timeline showing the emergence of different water management institutions in the Orange-Senqu basin over time (Adapted from Turton, 2003d: 207)**





Four of these agreements are relevant to the current management of the basin:

1. The 1986 bilateral treaty between South Africa and Lesotho, providing a framework for the Lesotho Highlands Water Project (LHWP) and the establishment of the Joint Permanent Technical Commission (JPTC), referred to today, as the Lesotho Highlands Water Commission;
2. The 1992 bilateral agreement for the establishment of the Vioolsdrift and Noordoewer Joint Irrigation Scheme (VNJIS) and the Joint Irrigation Authority (JIA) between South Africa and Namibia;
3. The 1992 bilateral agreement also between South Africa and Namibia that resulted in the establishment of the Permanent Water Commission (PWC);
4. The 2000 multilateral agreement establishing the Orange-Senqu River Commission (ORASECOM) between all four riparian states (Kistin and Ashton, 2008: 391).

In terms of the composition and synergy between the mandates of these various institutions, Kistin and Ashton (2008) summarise the various institutional responsibilities in Table 11.

**Table 11: Composition and Mandate of Joint Institutions for Water Management in the Orange-Senqu River Basin (Kistin and Ashton, 2008)**

<b>Institution</b>	<b>Composition</b>	<b>Mandate</b>
<b>ORASECOM</b>	The Council consists of 3 delegates from each of the riparian states and is supported by a Technical Task Team comprising specialists drawn from each country. A permanent secretariat for the Commission was established in October 2007.	To serve as a technical advisor to the Parties on matters relating to the development, utilisation and conservation of water resources.
<b>PWC</b>	Three delegates from each party.	To serve as a technical advisor to parties on the development and utilisation of shared waters; monitor and advise the JIA.
<b>JIA</b>	Four delegates from each party, at least three of which must be landowners within the district. The fourth space in each delegation is currently filled by a representative from the respective Departments of Water and Agriculture who also serves as liaison to the PWC.	To operate and maintain the Irrigation Scheme and control the abstraction of water from the Orange River.
<b>LHWC</b>	Three delegates from each party.	To be responsible and accountable for the project; monitor, advise, and audit the LHDA and TCTA; determine appropriate policies, procedures and expenditure limits.

The 1986 LHWP treaty, a key bilateral agreement between South Africa and Lesotho, is a project based treaty and establishes provisions for the construction and management of the LHWP. Similarly, the 1992 bilateral VNJIS agreement by the Joint Irrigation Authority (JIA) is also project-based and establishes provisions for the operation and management of the scheme and is specific to the VNJIS. Additionally, it dedicates 20 million m<sup>3</sup> annually to the scheme with 11 million m<sup>3</sup> going to farmers in South Africa, and 9 million m<sup>3</sup> designated for those in Namibia (Kistin and Ashton, 2008: 392-393).

The agreements establishing the PWC and ORASECOM on the other hand, create joint institutions to advise parties on the development and utilisation of shared waters (ibid: 391). As is evident, bilateral agreements and treaties have dominated co-riparian relations in the Orange-Senqu River basin until the ORASECOM Agreement, the only multilateral basin-wide agreement that was reached in 2000 (Treaty, 2000).

In terms of institutional responsibility, the project-related institutions, the LHWC and the JIA, are granted substantial powers to design and carry out policies and procedures relating to the investigation, negotiation and recommendation to parties regarding water allocation (Kistin and Ashton, 2008: 396). The two commissions i.e. the PWC and ORASECOM serve as advisory bodies whose mandates are wider in scope than the project-based institutions, and were specifically designed with an advisory function to parties on “such matters as may be determined,” by the parties (ibid.).

#### **a). The Permanent Water Commission (PWC)**

The PWC, has evolved from the Joint Technical Committee (JTC), which was a bilateral agreement of sorts between Namibia and South Africa established in 1987 (while Namibia was still an autonomous region of South Africa). In 1992, shortly after Namibia’s independence in 1990, a bilateral agreement between Namibia and South Africa established what is referred to today as the PWC. Today, the PWC advises the governments of Namibia and South Africa on the use and development of the lower Orange River (Tompkins, 2007: 8).

### **b). The Lesotho Highlands Water Commission (LHWC)**

Similarly, the Lesotho Highlands Water Commission is a bilateral governmental body that evolved from the Joint Permanent Technical Commission (JPTC) established under the 1986 Lesotho Highlands Water Treaty (Tompkins, 2007; Treaty, 1986). This organisation is responsible for joint matters pertaining to Lesotho and South Africa with regard to the implementation of the Lesotho Highlands Water Project (LHWP) and specifically, monitoring the performance of the two implementing agents of the LHWP, namely the Trans-Caledon Tunnel Authority (TCTA) and the Lesotho Highlands Development Authority (LHDA).<sup>45</sup> Other responsibilities include the appointment of auditors and consultants, operating and maintenance plans, tendering procedures, the allocation of costs between the parties and the quantities of water to be delivered (Mohammed-Katerere, 2001).

The South African implementing agent, the TCTA, manages and maintains the delivery tunnel North which transfers water across the border (i.e. under the Caledon River) to the Ash River Outfall in the Vaal catchment, as well as all other aspects of the infrastructure in South Africa<sup>46</sup> (Kranz, *et al.*, 2005b). Essentially, the TCTA operates on a much smaller scale than its Lesotho counterpart because it is only responsible for the water from the Lesotho border until it reaches the Vaal Dam and therefore manages less infrastructural developments.<sup>47</sup> The Lesotho Highlands Development Authority, on the other hand, is responsible for the management of all aspects of the project that fall within Lesotho, including infrastructure, hydropower as well as social aspects, such as the resettlement and compensation of displaced communities, water supply to resettled communities, public participation and civil society inclusivity in decision-making processes relating to the LHWP, irrigation and tourism<sup>48</sup> (Tompkins, 2007).

The responsibilities of the TCTA are therefore comparatively less than that of the LHDA and this is reflected in the 1986 LHDA treaty (Treaty, 1986). While there are

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<sup>45</sup> Interview with Khathibe, B. (2008) Lesotho Delegate: Lesotho Highlands Water Commission, Government of the Kingdom of Lesotho, Maseru, Lesotho, 25 November 2008: Appendix 1A.

<sup>46</sup> Interview with Roberts, P. (2008) Former Deputy Director General: Water Resources, Department of Water Affairs and Forestry (DWAF), Government of South Africa, Pretoria, South Africa, 19 December 2008: Appendix 2A.

<sup>47</sup> Interview with Phakoe, M. (2008) Chief Executive: Lesotho Highlands Development Authority (LHDA), Maseru, Lesotho, 25 November 2008: Appendix 2A.

<sup>48</sup> Phakoe, M. (2008) Interview: Appendix 2A.

specific management provisions for the LHDA in the 1986 Treaty, the functions of the TCTA, “are provided for in considerably less detail and no attention is given to downstream responsibilities” (Mohammed-Katerere, 2001). While it can be viewed as a matter of the practical implications of the different functions for each state, it can also be regarded as an indication of the significant power asymmetries between the two states (Tompkins, 2007: 9). This also raises key issues presented by several policy-makers and scholars of the exclusion of Namibia and Botswana from the Treaty despite the fact that the LHWP has a very significant impact on the downstream waters of the Orange-Senqu Basin (Heyns, 2003: 20-21; Tompkins, 2007: 9).

### **c). The Lesotho Highlands Water Project (LHWP)**

The Lesotho Highlands Water Project, is the largest infrastructure project in Africa (Tompkins, 2007) and contains the largest inter-basin transfer scheme in the world. Its *raison d'être* arguably dates back to the 1950s and was further concretised in a significant Commission of Inquiry into Water Matters conducted by the South African government in 1966 which predicted that the demand for water from South Africa's Gauteng region, and the water demand to meet population growth, would escalate beyond the country's water supply (Ashton, *et al.*, 2008; Enquiry, 1970; Tompkins, 2007). Phakoe refers to the origin of the LHWP as a “double coincidence of needs” i.e. South Africa's growing need to provide more water to meet its industrial and population needs, and Lesotho's need to tap into its bountiful water resources in order to reduce poverty and foster economic development.<sup>49</sup>

The LHWP therefore, manages water transfers from Lesotho to South Africa, and hydroelectric power generation in Lesotho. Negotiations were conducted for 30 years during the apartheid era in South Africa before the Lesotho Highlands Water Treaty was signed in 1986, between South Africa and Major-General Justin Metsing Lekhanya's military government in Lesotho (de Jonge Schuermans, Helbing and Fedosseev, 2004). The Treaty includes provisions for the quantities of water to be delivered, the calculation of royalties, examines country shares in the common revenue pool of the Customs Union, and also makes provisions for cost sharing, income tax and insurance (Tompkins, 2007: 9).

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<sup>49</sup> Phakoe, M. (2008) Interview: Appendix 2A.

Initial international funding was provided by the World Bank, along with numerous aid agencies and the European Investment Bank, through Lesotho, as a result of sanctions imposed on South Africa (Hildyard, 2002). Despite the negative perceptions of World Bank involvement, qualitative research conducted revealed that it brought credibility and security to the project, and as a result, attracted other foreign investment. Additionally it set up a trust mechanism as a result of sanctions against South Africa, and importantly, increased local capacity.

According to the Chief Executive of the LHDA:

The World Bank has been very, very instrumental in shaping, not only the behaviour of LHDA, but also the governments of Lesotho and South Africa, and of course LHDA. When you look at the total financing of the project, you'll find that for example, the World Bank (WB) contributed less than 5 %. ...But what they brought into the whole scheme was credibility and security. ...It opened room for other multinational corporations and financiers to see, the WB have come in here, they've done appraisal reports, they negotiated, they played match-maker. It was a difficult period... [And] they even helped us set up a very complicated trust system. South Africa, at that time, could not directly borrow capital on world financial markets because the apartheid regime was a pariah state... So a complicated trust mechanism was set up, but of course, it has been dismantled now because South Africa, since 1994 has been the darling of the world...

First they did their homework, they were satisfied that it was a good project. It had economic, political and social viability. So they brought it capital, and other organisations then came in. But not only that, the WB went beyond that. They set up a system of supervision. They brought a panel of experts, social and engineering. So these people would come in and advise the governments and LHDA. So everybody knew that whatever has been done it has been looked at by experts in the field. Over and above that, WB themselves came here twice a year. Supervision which was designed in the project, half yearly for all the period, come here and actually checked...[T]he half yearly supervision continued right up until the end [of Phase I]. It was mandatory. It was a requirement, twice every year until the end. Every 6 months they'd come in and checked progress. So, as you can imagine, kept a lot of pressure, so we behaved well as a result....And one of things, the WB was not shy to say that they were using this project as a guinea pig, as a test, because some of the theories had never been tested before. So they were experimenting. But the experiment worked so well, and we succeeded. Now, we are a pioneer. People come to us to learn how to manage environmental flows.<sup>50</sup>

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<sup>50</sup> Ibid.

The overall plan for the scheme was designed to comprise of several components: five dams, over 200km of tunnels and a 72-megawatt hydropower plant for the supply of electricity to Lesotho (IRN, 2005). Thus far, Phase I of the project has been completed, which includes the 185m Katse Dam, the 145m Mohale Dam, as well as the hydropower plant and the transfer and delivery tunnels to South Africa (Tompkins, 2007). Additionally, as of December 2009, the feasibility study for Phase II has been approved.

Dam construction which commenced in 1989 has resulted in an increase in employment for Lesotho and has subsequently provided substantial revenue to the government of Lesotho through import duties (ibid.). The first water was delivered from the Katse Dam (Phase IA) in 1998, and supplies the Government of Lesotho with roughly R20 million per month in royalties (ibid.). Moreover, simultaneous power production from the Muela power plant has resulted in Lesotho becoming self-sufficient in electricity. The Mohale Dam (Phase IB), linked to Katse by a tunnel, was later inaugurated in 2004 (ibid.).

However, the LHWP has been extensively criticised by various local, regional and international civil society groups, the most notable being the INGO, International Rivers<sup>51</sup>, and the Maseru-based, Transformation Resource Centre.<sup>52</sup> This has been due to the massive social upheaval caused by the project in Lesotho. Although a relatively small amount of households (1,000) had to be resettled, approximately 27,000 lost access to valued resources in the areas inundated by the two dams as well as downstream of these (TRC, 2006). Some sources note that \$62,000 was spent for each household resettled from the Katse Dam, and over \$30,000 per household for Mohale Dam (de Jonge Schuermans, *et al.*, 2004). However, the resettlement process has been plagued by problems including corruption, lack of adequate basic services in resettled areas, inadequate compensation for displaced people and tension between resettled people and residents of the resettlement areas (Hildyard, 2002; Tompkins, 2007).

Moreover, another unforeseen and indirect consequence of inter-basin transfer schemes of this nature was brought to the fore in the form of “water theft,” unlawful farm use or illegal abstraction of the waters on the South African side. In the Vaal River system

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<sup>51</sup> Formerly referred to as International Rivers Network (IRN)

<sup>52</sup> Telephonic/Skype interview with Pottinger, L (2008) Director: Africa Program, and Editor: World Rivers Review, International Rivers, 18 July 2008: Appendix 2C; Electronic interview with Thamae, M (2008) Head: ‘Water for Justice’ Program at Transformation Resource Centre (TRC), 6 December 2008: Appendix 2A.

the amount of water lost to unlawful farm use (the construction of illegal small dams etc.) is equivalent to the entire annual yield of Mohale Dam in the Lesotho Highlands Water Project or 200 million cubic metres; the amount of water that can be supplied to approximately 8.5 million households using 100 litres per day (Hendricks, 2008). Moreover, this water has already been allocated to paid users in the Gauteng Province. The underlying premise of this issue is that farms are located in areas that are riparian to those streams which are being used for conveyance.

A common argument used by farmers is that they are merely abstracting water which would have been available to them through the natural flow of the river. However, the quantity of water that is currently being abstracted outweighs that which would have been possible had the conveyance streams operated under natural flows i.e. without the increased flow due to the transfer scheme. The issue is further exacerbated by the fact that water reforms adopted in 1998 as a result of the New Water Act have required farmers to obtain abstraction permits, and report volumetric use. Implementing and enforcing this law, which determines how much water users may abstract from a dam, river or stream, has therefore been met with severe opposition by farmers. This dispute is noteworthy because it questions whether global norms of equitable utilisation cascade down and become socialised at the local level, whether these norms in fact matter at the local level, whether individuals are aware of these principles, or whether local norms of historic rights to the land (and therefore the water on it) still take precedence. Indeed, in this case, a form of local resistance to norms of equitable utilisation as well as water privatisation norms (i.e. paying for water versus water a basic and free human right), is evident. New development projects, combined with the requirement for farmers to obtain water licenses (as initiated by the water reforms on 1998 in South Africa), are therefore said to be incompatible.

However, the challenges of ‘water theft’ illustrate the difficulties in implementing norms once they are codified at the national level. This issue has been made even more politically charged due to the racial dimension of national perceptions regarding previously advantaged white farmers benefiting from water abstraction. South Africa’s challenge to balance service delivery with redressing social inequalities therefore becomes a profoundly political act. This is arguably one of the primary factors for local resistance, when newer norms threaten to disturb extant configurations of power within the state (Swatuk, 2005a).

#### **d). The Orange-Senqu River Commission (ORASECOM)**

Arguably, the most significant institutional and legal framework for the Orange-Senqu River basin exists in the ORASECOM Agreement (established in November 2000) an institutional structure, which is the first attempt to bring all Orange-Senqu riparian states together in a multilateral forum. Its mandate is to serve as a technical advisor to the Parties on matters relating to the development, utilisation and conservation of water resources (Kistin and Ashton, 2008) and can, in this capacity, execute the necessary feasibility studies to support decision-making. As such it is responsible for the dissemination of information and encourages communication on basin issues between the Member States by hosting an annual meeting of all state representatives. It also stipulates that states utilise the resource within their respective states equitably and reasonably (in accordance with the 2000 Revised Water Protocol). It furthermore acts within the role of funding coordinator for basin specific and joint basin projects. It does not, however, have any formal oversight, advisory or coordinating powers with respect to the pre-existing bilateral agreements (Kistin and Ashton, 2008) albeit it the umbrella body to which preceding bilaterals should report on any issues pertaining to the basin, changes to agreements or impacts of the waters of the basin.<sup>53</sup>

Additionally, the Commission comprises of 3 delegates from each country of the riparian states, and is supported by several task teams including Communications, Financial, Legal and Technical (including a hydrogeology committee) comprising of specialists drawn from each country. A permanent secretariat was established in October 2007 comprising of 4 core members i.e. Executive Secretary (Mr. Lenka Thamae), a water resources specialist, a finance administrator and administrative support.<sup>54</sup>

In terms of the 2000 ORASECOM Agreement, its Preamble is inspired by wide-ranging sources such as the Helsinki Rules (with its acceptance of sovereignty), the 1997 UN Convention and importantly, quotes the 1995 SADC Water Protocol (ORASECOM, 2000: 1). Arguably, its most basic objective is to “extend and consolidate the existing tradition of good neighbourliness and friendly relations between the Parties by promoting

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<sup>53</sup> Thamae, L. (2008) Interview: Appendix 2A.

<sup>54</sup> Thamae, L. (2008) Interview: Appendix 2A.



close and coordinated co-operation in the development of the resources of the River System” (ORASECOM, 2000: 1).

The Agreement therefore establishes ORASECOM as an international organisation with legal personality and powers (Hiddema and Erasmus, 2007: 11). However, nothing “shall affect the prerogative of any number of the Parties to establish among themselves river commissions with regard to any part of the River System” (ORASECOM, 2000: 2). This clause clearly protects the sovereignty of riparian states as final custodians of the river system. These commissions will then be subordinate to ORASECOM (ORASECOM, 2000: Article 1.4). Additionally, Articles 2 and 3 speak to notions of sovereign equality and territorial integrity by stipulating that each delegation may only consist of no more than three permanent members (ORASECOM, 2000: Article 2.3). Each delegation to the Council is allowed one vote (i.e. one vote per country) (ORASECOM, 2000: Article 3.6), ensuring even representation by all riparian states. Additionally, by conducting meetings on a rotational basis, each Party is given a chance to host and coordinate annual meetings (ORASECOM, 2000: Article 3.1, 3.2, 3.3, 3.4, 3.5).

Article 7 is noteworthy as it lists the obligations of the Parties or the manner in which the River System is utilised within the respective riparian territories. Article 7.2 requires states to “[U]tilise the resources of the River system in an equitable and reasonable manner with a view of attaining optimal and sustainable utilisation thereof, and benefits there from, consistent with adequate protection of the River System” (ORASECOM, 2000: Article 7.2). Equitable and reasonable utilisation is specifically defined and “[I]nterpreted in line with the Revised Protocol on Shared watercourses in the SADC region” (ORASECOM, 2000: Article 7.2). Similarly, the no harm obligation is also cited with the term being interpreted in accordance with that of the Revised Protocol (ORASECOM, 2000: 7.3). Prior notification and communication duties are given great importance and specifications cover several sub-sections (Article 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11) in Article 7.

Ecosystem protection is also articulated, whereby “Parties shall individually and jointly take all measures that are necessary to protect and preserve the River System from its sources and headwaters to its common terminus” (ORASECOM, 2000: Article 7.12). Article sub-sections 7.13, 7.14, and 7.15 further elaborate on ecosystem protection and

specifies obligations as it relates to pollution (prevention, reduction and control), preservation of the estuary of the River System including the marine environment, prevention of the introduction of alien species. The settlement of disputes is specified in Article 8 which stipulates that “Any dispute between the Parties arising out of the interpretation of implementation of this Agreement shall be settled amicably through consultation and/or negotiation between them” (ORASECOM, 2000: Article 8.1). Additionally, Article 8.2 makes provisions for states to go to the Tribunal, as established in Article 16.1 of the 1992 SADC Treaty and shall accept the decision of the Tribunal as binding (ORASECOM, 2000: Article 8.2, 8.3). Once again, the dispute resolution mechanism binds Orange-Senqu riparians to the SADC treaty and to normative principles contained therein.

As such, the global normative principles of equitable and reasonable utilisation, no harm, information exchange, consultation with other riparian states, prior notification, environmental protection, peaceful resolution of disputes are all articulated in the ORASECOM Agreement, although the degree to which they are deepened in terms of specification varies.

#### **4.3.4. NATIONAL CONTEXT**

At the national level, while the institutional and legal frameworks vary considerably between the four basin states the consistent factor amongst all is the transitional nature of state political and legislative frameworks (Tompkins, 2007). The 1994 political transition in South Africa has led to an entirely new Water Act (1998) for South Africa and a change in the delivery and management of water services (following local government restructuring). Botswana’s institutional framework is based on its 1991 Water Master Plan (Kranz, *et al.*, 2005b), which is currently under review. Namibia too, awaits the completion of a review of the new Water Resources Management Act (Act 24 of 2004).<sup>55</sup> Similarly, Lesotho is also undergoing a review of its institutional framework and has produced the National Environment Policy (NEP) of 1998, the subsequent Lesotho Environment Act of 2001 acting as a principle document as it is not yet in force, and a revised version of its

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<sup>55</sup> Interview with Heyns, P. (2008) Former Under Secretary: Department of Water Affairs, and Namibian delegate to the ORASECOM and the OKACOM, Ministry of Water Affairs, Namibia, 1 September 2008: Appendix 2A.

Lesotho Water and Sanitation Policy of February 2007.<sup>56</sup> Additionally, the Water Act (2008) was recently enacted by the Parliament of Lesotho. These new Acts are generally compatible with the normative principles of the UN Convention and the SADC Protocols. The new or revised national water acts also make reference to international rivers and meeting international obligations, an element not previously found in preceding national water laws. This indicates an awareness of international obligations and transboundary matters as well as a commitment to the implementation of the SADC Protocols at a national level. However, unique political contexts and governance structures have altered the way in which these riparians have localised transboundary co-operation norms.

#### **a). Lesotho**

Lesotho's national hydropolitical outlook is very much a reflection of its geopolitical position: a small and fragile state, completely landlocked by South Africa, with structural dependence in relation to South Africa (Santho, 2000). In this regard, Lesotho has faced and continues to face challenges of economic dependence and political survival, which are consequently, highly dependant on exogenous factors (ibid.)

Particularly, Lesotho's relationship with South Africa has been paradoxically heavily dependant on co-operative water exchange, yet tense at times (in the 1970s) as a result of Lesotho's criticism of apartheid, and South Africa's condemnation of Lesotho harbouring the then banned members of the ANC (Mirumachi, 2004). During 1976-78 for example, talks on the LHWP came to a halt due to worsening relationships (ibid.). Even though feasibility studies continued through the early 1980s, the LHWP was still susceptible to being politicised as a security issue (Meissner and Turton, 2003). Only after the military *coup d'état* in Lesotho in January 1986, when Lesotho Paramilitary Force leader, Major-General Justin Metsing Lekhanya overthrew Chief Leabua Jonathan, did the process of negotiations accelerate (Mirumachi, 2004). This could arguably be attributed to the fact that Lekhanya was initially popular both in Maseru and Pretoria. In fact, the agreement of the LHWP was signed almost nine months after this political change (ibid.).

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<sup>56</sup> Interview with Nthathakane, P. (2008) Technical Task Team Member: ORASECOM and Water Commission, Maseru, Lesotho, 24 November 2008.

From this brief summation, it can be argued that issues like apartheid, which may not be directly linked to water transfer, were quite instrumental in steering the direction of negotiations (ibid.). Moreover, the nature of co-operation was significantly different to what may be perceived as ideal today. Both countries used the LHWP as a tool to achieve political objectives and to further national agendas (ibid.). While South Africa used the LHWP as leverage to impose its control over ANC members, Lesotho emphasised protection of integrity and sovereignty (Meissner and Turton, 2003). As a result, a deep rooted mistrust permeated bilateral co-operative strategies. Since 2000, however, South Africa and Lesotho have experienced a relatively peaceful relationship, with the exception of Operation Boleas. Lesotho was also influenced by the emerging sense of regionalism in the 1990s, as well as the water reforms that ensued.

The Water Resource Act, 22 of 1978 is still in force and is limited in scope, makes no provisions for the development of water resources and is strongly administrative in nature (Hiddema and Erasmus, 2007). It is therefore in need of revision and replacement, made more urgent by South Africa (1998) and Namibia (imminent) adopting new legislation and revising old legislation respectively. The Government of Lesotho is aware of this need and has commissioned several projects, the most notable being the World Bank-funded Lesotho Water Sector Improvement Project, which included the successful revision of the new Water and Sanitation Policy of February 2007 and a revision of the Water Resources Act. Indeed, the 2007 Water and Sanitation Policy provides for “[T]he management of transboundary water resources on the basis of Lesotho’s sovereignty in a way that ensures maximum benefits while taking cognisance of her obligations to downstream users under international law” (Lesotho, 2007: 6).

Domestically, a significant policy framework for water resources is the National Environment Policy (NEP) of 1998, which sets out the policy and strategy provisions for integrated water management, and places a strong emphasis on commitment to environmental sustainability and protection (Tompkins, 2007: 15). The NEP includes strategies for demand management and pollution control, provisions for the development and enforcement of water quality standards, and the protection of the environment (Tompkins, 2007: 15). Significantly, the NEP is based on internationally agreed sustainable development and IWRM principles.

The subsequent Lesotho Environment Act (2001) was also drafted to replace the 1978 Water Resource Act. The 2001 Act, although not yet in force, acts as the guiding document for EIA practices and has a degree of influence on the environmental management of water and land resources (Tompkins, 2007: 15). The most recent legal addition is the 2008 Water Act, recently enacted by the Parliament of Lesotho to guide the management, protection, conservation development and sustainable utilisation of water resources.

While Lesotho has a transforming water management framework, there are two significant issues that affect the successful implementation of this structure. Firstly, the policy, legislative and institutional frameworks are in the initial stages of transformation and as such are either not enforceable yet or will take time to be integrated into the current institutional framework (ibid: 17). Secondly, technical capacity to implement this framework is limited in Lesotho (ibid.). Therefore, even if normative principles are articulated within in new legislation and policy, the degree to which it is implemented and socialised on the ground is determined by an array of drivers and barriers to normative convergence.

#### **b). South Africa**

South Africa's political transformation formalised by the country's first democratic elections in 1994 brought with it a host of progressive reforms in the water sector. The Water Services Act was ratified in 1997 and the landmark National Water Act in 1998 (Government of South Africa, 1998). The National Water Act prioritises common property aspects of water; separates ownership of land from ownership of water; confirms the need to ensure that aquatic ecosystems receive sufficient water to function properly; stipulates the need to ensure that neighbouring states utilise shared water resources equitably; and prioritises the right of all South Africans to have adequate access to wholesome supplies of water (DWAF, 1997). More specifically, the 1998 NWA includes provisions for international arrangements, and provides for bilateral and multilateral bodies to implement international agreements pertaining to management and development of water resources shared with neighbouring countries and regional co-operation of water resources (Government of South Africa, 1998). As such, it is regarded, along with the EU Water

Framework Directive (EU, 2000), as a pioneer of an international wave of reform and one of the most innovative and far-reaching water law in the world, which has set the benchmark for new ways of managing water resources (Ashton, *et al.*, 2008: 11-12; Postel and Richter, 2003; Woodhouse, 2008). The establishment of the NWA has also been instrumental in influencing the national water management frameworks of neighbouring states (Zimbabwe Water Act 31 of 1998, Namibian Water Resources Management Act No. 24 of 2004 has been promulgated but has yet to enter into force pending a an outcome of previous review processes, Lesotho Water and Sanitation Policy of 2007 etc.).

Additionally, South Africa is party to 25 agreements with its neighbours on shared rivers (Kistin, *et al.*, 2009), and, since 1910, it is documented that South Africa has entered into 101 international water-related treaties and agreements (*ibid.*). These include protocols and conventions with countries worldwide e.g. the Ramsar Convention (*ibid.*). A total of 61 of these treaties and agreements deal with shared water resources (*ibid.*). Some examples include: 1). Treaty on the LHWP with Lesotho in 1986, 2). The Permanent Water Commission between South Africa and Namibia in 1992, 3). The Development and Utilisation of the Komati River Basin with Swaziland in 1992, 4). The ORASECOM Agreement with Lesotho, Namibia and Botswana in 2000, and 5). The SADC Revised Water Protocol on 2000. South Africa has also, as previously mentioned, ratified the 1997 UN Convention. This brief policy and legislative framework could imply an outward looking stance on co-operation, and indeed, may also display South Africa's hegemonic influence in determining the broader normative framework within the southern African region. However, as will later be discussed, the fragility of its hegemonic position makes for interesting implications regarding normative influence.

### **c). Namibia**

Much like South Africa's policy reforms after apartheid, Namibia also adopted water reforms after independence in 1990. The first was the 1993 Water Supply and Sanitation Sector Policy, followed by a new National Water Policy White Paper in August 2000, which was developed into a new act, the 2004 Water Resources Management Act (Act No. 24 of 2004). The latter is yet to enter into force, pending a review process, and as such, Namibia's legal position is still governed (as of December 2009) by the old Water

Act (Act No. 54 of 1956), inherited from South Africa. The latter instrument is outdated and does not provide the legal and institutional basis to allow Namibia to effectively cope with contemporary challenges (Hiddema and Erasmus, 2007: 16). The new Water Resources Management Act is aligned with South Africa's NWA: makes provisions for a future IWRM and planning system, promotes the equitable and beneficial use of international watercourses and is also based on the eight normative principles and practices of international water law (ibid: 14). Part ten of this Act focuses on "international water management institutions," and provides a basis for integrating and aligning Namibia's arrangements with the future activities of regional institutions (Hiddema and Erasmus, 2007: 15; Namibia, 2004). However, it is inherently flawed with a multitude of amendments (104 to be specific)<sup>57</sup> and requires substantial revision to enable effective implementation. Furthermore, even upon successful revision, the Namibian government faces conventional challenges of technical capacity to implement it.<sup>58</sup>

After the Act was promulgated in December 1994, the Head of the Department of Water Affairs and Forestry at the time, Mr Piet Heyns convinced the Minister that the Department had insufficient human, technical and financial capacity to administer the new Act once implemented. Moreover, he highlighted the fact that the text needed considerable revision to make it practically implementable. The Minister agreed and the Department started with a process to amend the Act.<sup>59</sup> The above-mentioned review process illustrates the critical importance of individuals and personalised politics of norm entrepreneurs to the success of building normative frameworks. The clarity with which policies, legal and institutional frameworks are drafted, is highly influenced by an individual dimension. That is to say, key individuals play a major role in the framing of norms, the way in which they are codified, and the degree of socialisation in terms of influencing others' uptake of these norms.

Namibia's review process (i.e. the Namibia Water Resources Management Review (NWRMR)) of the 2004 Water Resources Management Act has been particularly politically charged reflecting a degree of norm contestation at the national level. The motivation behind this review was a decision taken by the minister at the time, in

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<sup>57</sup> Biggs, D. (2008) Interview: Appendix 2A.

<sup>58</sup> Heyns, (2009) e-mail correspondence: Appendix 4.

<sup>59</sup> Ibid.

consultation with the Cabinet, that a water resources management review project will be conducted by young indigenous Namibians (Heyns, 2005: 98). The NWRMR comprised mainly of a technical team of young Namibians with “acceptable academic backgrounds, but unfortunately very little practical experience in the water sector”, and was supported by consultants and directed by a task force of stakeholders (ibid: 99). One significant criticism of this process was that this team operated in isolation from Namibian Department of Water Affairs (DWA) (because the DWA was also “reviewed”) and were guided mostly by foreign consultants with little knowledge of the Namibian situation (ibid: 99).

The review process started in 1997 but petered out by 2002 due to a lack of further support from donors who initially funded the process.<sup>60</sup> According to several sources directly involved and affected by this process, the post-independence review of functional processes was initiated as a way of exposing the perceived evils perpetrated in the past and to get rid of an older generation of white (predominantly male) professionals that symbolised a colonial past.<sup>61</sup> The said rationale for the reforms centred around the need to improve institutional arrangements to meet new challenges specific to Namibia, in a changing water management environment and to accommodate political views, perceptions and requirements to meet the expectations of the electorate (ibid: 99). Moreover, the rationale relates to several other socio-political issues. Primarily, “The post-independence sentiments of the public created political imperatives to remove all unacceptable practices originating from the colonial past, including the institutions, policies and legislation that could be associated with that period” (Heyns, 2005: 99).

Another pertinent issue influencing Namibia’s institutional and legislative framework involves access to transboundary rivers. As such, Namibia is party to several water agreements with its neighbours: 1). The Permanent Joint Technical Commission (JPTC) between Angola and Namibia on the Cunene River in 1990, 2). The 1992 PWC Agreement between South Africa and Namibia on the lower Orange River, 3). The Agreement on the Establishment of the Vioolsdrift and Noordoewer Joint Irrigation Scheme on the lower Orange River in 1992, 4). The Permanent Okavango River Basin Water Commission (OKACOM) between Angola, Botswana and Namibia of 1994, 5). The

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<sup>60</sup> Ibid.

<sup>61</sup> Ibid.



1990 Joint Permanent Water Commission (JPWC) Agreement between Botswana and Namibia, and 6). The 2000 ORASECOM Agreement. Like South Africa, Namibia has also signed and ratified both the 1997 UN Convention as well as the 2000 Revised Water Protocol.

Once again, this may lead to the conclusion that Namibia is particularly willing to co-operate with regards to its international watercourses. However, international agreements require further legislative incorporation, translation and implementation before they are domestically effective in Namibia (Tompkins, 2007: 15). This reiterates a key argument presented in this dissertation: coherent implementation of these agreements does not happen automatically nor does it occur smoothly. Moreover, the manner in which policy reform and review takes place also determines the degree to which global, regional and national normative principles are accepted and socialised on the ground. But the Namibian example further illustrates the complexities of the effect of poorly developed policy and legal frameworks. Indeed, it is this latter fact that owes to the lack of sub-national uptake and socialisation of certain regional and international norms. The poorly drafted 2004 Water Resources Management Act, and the subsequent politically charged problems in its review process, has indeed marred smooth institutionalisation processes. However, it also reflects the necessity for local congruence and against fast-track water reforms and convergence with international or regional frameworks.

#### **d). Botswana**

Due to Botswana's water scarcity and limitations to access of surface water resources (particularly in the area of the Orange-Senqu basin), the management of water resources and the protection of the environment are key national priorities (Hiddema and Erasmus, 2007; Tompkins, 2007). However, surprisingly, Botswana's legal and institutional framework is the most outdated and cumbersome of the Orange-Senqu riparian states (ibid.). While it is party to several international environmental agreements such as the RAMSAR Convention, the ORASECOM and OKACOM Agreements and the Revised SADC Protocol on Shared Watercourses, Botswana's national legislation on Water Works dates to 5 March 1962, the Water Utilities Co-operation to 30 June 1970, the Boreholes Act to 19 October 1956 and the Water Act dating back to 1968 (Hiddema and Erasmus, 2007).

While these have been amended over time, it is questionable whether they can address new policy challenges of harmonisation with regional and international agreements and transboundary challenges relating to climate change, equitable and reasonable use, and information exchange (ibid.).

#### **4.3.5. SUMMARY OF LEGISLATIVE AND INSTITUTIONAL FRAMEWORK**

As is evident from the legislative and institutional overview, normative convergence has emerged in southern Africa and in the Orange-Senqu River particularly. Global principles found in the 1997 UN Convention have diffused down to the regional level in a non-linear fashion, and are included almost verbatim in the 2000 Revised Protocol. An interesting characteristic of the SADC region is that while SADC states (with the exception of South Africa and Namibia) have not ratified the UN Convention, they have all accepted the SADC Protocols and in so doing, have indirectly adopted the principles of the UN Convention and thereby do not find tremendous value in ratifying the global framework.

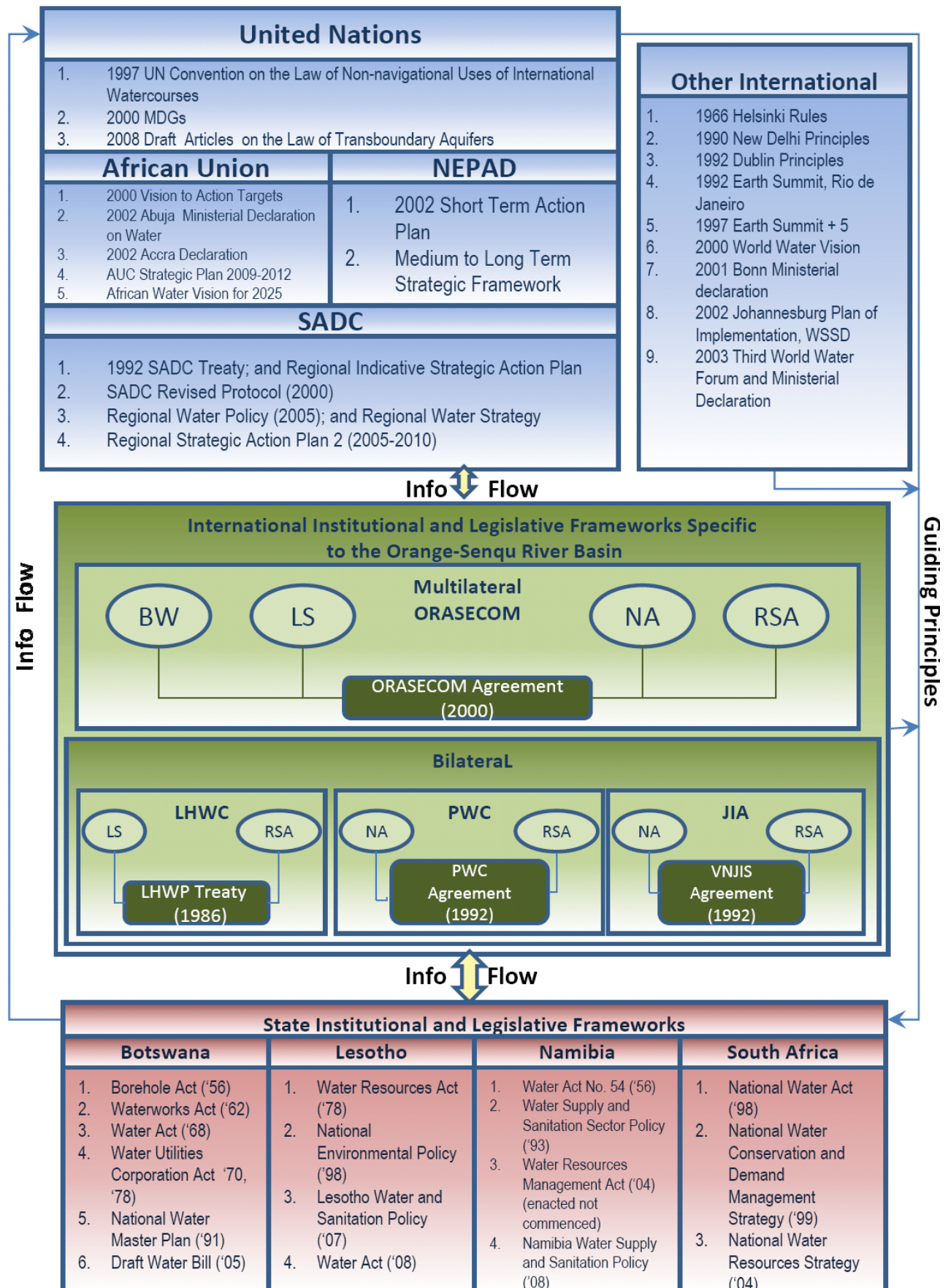
Additionally, the transitional nature of national institutional and legal frameworks since the 1990s has also resulted in lateral norm convergence from state to state, and regional normative convergence from state to basin to region, although fast-track reform policies have at times been detrimental to successful implementation. Barriers to normative convergence do, however, exist at the basin-wide level due to resource and capacity constraints shared by all four countries.

These include but are not limited to the political consequences of policy reform processes (South Africa's challenge to balance service delivery with redressing social inequalities, Namibia's politically charged review process opposed by several echelons of government), capacity constraints and insufficient implementation policies to make these policies effective at the local level. Indeed, the idea that that Orange-Senqu River is in fact an internationally shared river is foreign to many local residents in various parts of the basin.<sup>62</sup>

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<sup>62</sup> Phakoe, M. (2008) Interview: Appendix 2A; Heyns, P. (2008) Interview: Appendix 2A; Thamae, L. (2008) Interview: Appendix 2A.

**Figure 4: The Current Institutional Framework of the Orange-Senqu River Basin**  
(Adapted from: Tompkins, 2007)



A review of legislative and institutional frameworks is therefore not sufficient to understand the intricacies of normative convergence or the trajectory of normative processes. For that, it is significant that the practical drivers and barriers to normative convergence be described. This is done using the conceptual lens of the Southern African Hydropolitical Complex (SAHPC).

#### **4.4. THE ORANGE-SENQU RIVER AND THE SOUTHERN AFRICAN HYDROPOLITICAL COMPLEX**

As outlined in chapter three, Turton (2001a; Turton, 2003a, 2003b, 2003d, 2008a, 2008b) considers the Orange-Senqu River as a pivotal basin in the SAHPC due to its economic importance for strategic purposes to any one or more of the four pivotal states in southern Africa (South Africa, Botswana, Namibia and Zimbabwe). Secondly, the Orange-Senqu River basin is regarded as a pivotal basin because of its strategic economic importance and because it faces basin closure, (Seckler, 1996; Svendsen, Murray-Rust, Harmancioglu and Alpaslan, 2001). Three of its riparian states i.e. South Africa, Botswana and Namibia, are water scarce and approaching the limits of their readily available water resources (Jacobs and Turton, 2009; Smakhtin, *et al.*, 2001; Turton and Ashton, 2008). As a result, escalating water scarcity will progressively impose stricter limitations to the economic growth potential of these countries (Ashton and Turton, 2007) and could potentially elevate water resource management to the level of a national security concern (Turton, 2003a, 2003d, 2008a, 2008b; Turton and Ashton, 2008). If left unmanaged, this process of ‘securitisation’ can lead to disputes and conflict, both between countries and between economic sectors within a single country (Ashton and Turton, 2007).

The interests of the four states are also closely linked through their co-riparian status of the adjacent Orange-Senqu and Limpopo basins because high proportions of their respective national economies depend on these water resources. Importantly, these four countries are riparian to the Basins at Risk as defined by Wolf and his co-workers (Wolf, *et al.*, 2003: 29). According to Turton (2005a; 2008b) the Orange-Senqu is best understood hydropolitically, in terms of several strategic issues. Firstly, two of the Pivotal States in the SAHPC; South Africa and Namibia, are extremely dependent on the Orange-Senqu River system to sustain economic growth (Turton, 2005a: 30; Turton, 2008b: 55). Secondly,

water allocation has become increasingly complex in the Orange-Senqu in that although agriculture is still the primary user, there has been a movement away from the agricultural sector to industry and the services sector (Turton, 2005a: 30; Turton, 2008b: 55). Thirdly, a spatial development pattern exists in southern Africa where several large cities or centres of economic development (such as Johannesburg, Pretoria, Harare, Bulawayo, Francistown, Gaborone and Windhoek) are located not on rivers, lakes or seafronts but on watershed divides (Oberholster and Ashton, 2008; Turton, 2008a; Turton, Patrick and Rascher, 2008). This translates into a dependency on water that has to be pumped uphill, and subsequently, results in sewage return flows as these rivers are additionally burdened with transporting waste material, most of which enters downstream water storage reservoirs (Oberholster and Ashton, 2008). This ultimately results in deteriorating water quality, specifically associated with managing a closed river basin, where base flow in years of drought is adversely affected by effluent return flows and specific pollution arising from acid mine drainage (Turton, 2008b: 55-56). Fourthly, the concept of good neighbourliness, as enshrined in the South African National Water Act, which stipulates that minimum ecological flows and volumes agreed to in specific water sharing regimes must be adhered to, is critically important to the basin. At the heart of this issue is the emotive aspect of balancing resource protection with resource use (Turton, 2005a; Turton, 2008b: 56). Fifthly, inter-basin transfers are a central feature of the Orange-Senqu River system (Turton, 2005a; Turton, 2008b: 56). Finally, the Orange-Senqu River forms a contiguous border between Namibia and South Africa (Turton, 2005a; Turton, 2008b: 56). As previously noted, this border has been disputed (Turton, 2005a, 2008b) for virtually the entire century, arguably making the Orange-Senqu a model for how resource managers deal with sovereignty issues that are typically conflict-drivers in their own right, and more so, under conditions of endemic scarcity.

#### **4.5. CRITICAL ENGAGEMENT WITH THE SAHPC**

The following sub-section outlines the HPC's strengths and weaknesses in furthering and/or hindering an understanding of transboundary water resource governance. Through the use of South Africa as a case study, and by opening up the 'black box' of the

region's most powerful state and the fragility of the hegemon, the HPC unveils its numerous weaknesses.

#### **4.5.1. STRENGTHS OF THE HPC**

By using the SAHPC as a conceptual lens, one is able to have an understanding, albeit limited, of the patterns, nature and evolution of co-operation in international river basins. According to Turton, southern African hydropolitics may have evolved in the post-apartheid era, but the underlying drivers of transboundary co-operation, are still the same. "The four most economically developed states in the region are also those facing the greatest scarcity of water; they all share international river basins with other states, they are all riparian to the "Basins at Risk", and they all face significant limitations to their future economic growth prospects as a result of looming water shortages"(Turton, 2005a: 17).

The SAHPC therefore connects riparian states in a series of inter-state arrangements at a level beyond the river basin, which reflects the degree to which water issues have become drivers of international relations in their own right (Turton, 2005a: 15). This is based on the premise that whilst water scarcity occurs at the basin level (also known as the watershed) (Allan, 1999b; Earle, 2003: 229-249), workable solutions are found at a level other than the international river basin, in what is known as the Problemshed. This is particularly notable given the finding by Gleditsch *et al.* (Gleditsch, *et al.*, 2005), that countries in which endemic water scarcity occurs in a shared river basin, have substantial long-term incentives for co-operative management of the water resource. According to Turton, security complexes thus emphasise the interdependence of both rivalries and shared interests, threats and vulnerabilities, which are inherently greater over shorter distances thus assuming greater priority (Turton, 2001a: 2).

#### **4.5.2. SHORTFALLS OF THE HPC**

The SAHPC is not however without weaknesses. Firstly, it assumes the acceptance of the categories pivotal basin/state and impacted basins/state and applies these labels to specific states or basins as if the categories were fixed in design (using GDP per capita as the benchmark with which to measure a state's pivotal-ness as opposed to any other indicator i.e. the UNDP Human Development Index, GDP growth rate, military

expenditure as a percentage of GDP, for instance) and that these categories remain constant over time, implying economic growth, or economic growth ratios between countries remain constant over time.

Additionally, the categorisation of pivotal states, while not explicitly referred to as such in the writings of Turton, implies a hegemonic standing to some or other degree. Jacobs (2010) lists as an example, the case of Angola and its positionality in the Okavango Basin. According to the HPC, Angola is an ‘impacted state’ due to the fact that both Botswana and Namibia are somehow ‘pivotal’ states downstream and therefore determine the parameters of Angola’s capacity to act (ibid.). However, by any aggregate measure of military might, and with a military expenditure of 5.7% of GDP (in 2006) and a GDP (purchasing power parity) of \$110.3 billion (2008 est), Angola’s economic and military power dwarfs that of both Botswana and Namibia.

Hypothetically, if Angola decided to dam the Okavango, the question then begs what could the downstream states do? Realist solutions would argue for diplomacy or the search for a powerful ally to deter Angola from such behaviour. To date, Angola has not taken this hard-line approach, necessitating an understanding as to why not, through the use of different theoretical frameworks. An allowance that states can be both pivotal and impacted depending on the variable used (economic development or military power), and that one state’s status as pivotal could change to impacted, is therefore overlooked when using the SAHPC as a conceptual lens.

**Table 12: A summary of three economic indicators for Angola, Botswana and Namibia (CIA, 2009)**

Country	GDP (Purchasing Power Parity) (2008 est.)	GDP real growth rate (%) (2008 est.)	Military Expenditure as a % of GDP (2006 est.)
Angola	\$110.3 billion	13.2%	5.7%
Botswana	\$27.06 billion	2.9%	3.3%
Namibia	\$13.25 billion	2.9%	3.7%

Through a Constructivist lens, the categories of pivotal versus impacted are given their form by ongoing processes of social practice and interaction. Botswana’s presence in transboundary relations regarding the Orange-Senqu River has been minimal prior to the ORASECOM Agreement and its label as Pivotal State in this particular basin is

questionable. Botswana contributes no stream-flow and makes no use of the water from the Orange-Senqu River, yet despite this, Botswana is still a recognised riparian state. While Turton argues that this provides Botswana with a wider range of diplomatic options by allowing concessions to be granted to other riparian states in return for political support in other river basin agreements where they have a greater strategic interest such as in the Limpopo and Okavango River basins (Turton, 2003d: 210). Other policy-makers attribute this to the development of multilateralism as an “ideology of best practice” within the region. Botswana, in an act of good neighbourliness provides support and thus complies with normative codes of conduct.<sup>63</sup> States may therefore act as both Pivotal and Impacted due to their varied dependence and political interest in various shared basins determined by ongoing social practice and interaction.

Moreover, Lisa Thompson, in a critique of the water discourse(s), and in particular, mainstream state-legitimizing rationalism, presents a sound argument for the concept of scarcity, which has repercussions for the concepts of basin closure, and the limits to utilisable water resources in particular countries. Thompson argues for the relativity of scarcity as mediated by power relationships, amongst other factors, both within and between states (Thompson, 2002: 235). According to Thompson analysing water scarcity on a state-to-state basis is “a little like trying to measure rainfall before precipitation and, indeed, without indicating where the rain will end up”(Thompson, 2002: 235) Indeed, based on Thompson’s view, it is questionable whether in fact it is useful to refer to basins as reaching closure, and the limited use in referring to an entire country as approaching the limits to its available resources when in fact, these arguments are loaded with hegemonic actor fears to economic security.

#### **4.5.3. A REGIONAL INSTITUTIONALIST PERSPECTIVE**

The SAHPC as a state-centric framework is particularly weak at explaining regional dynamics involving non-state or supra-state actors. It is silent on the role that regional institutions such as SADC play in influencing co-operative agendas and the degree to which they influence how water is viewed (as a strategic resource, as an economic good, as a public good) within the region. Moreover, the SAHPC unfortunately, fails to capture their

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<sup>63</sup> Thamae, L. (2008) Interview: Appendix 2A.



normative importance i.e. how they provide fora through which states can push national interests and/or converge on normative trajectories that involve incremental processes toward shared co-operative agendas. Additionally, the SAHPC provides less clarity on the role that transnational advocacy groups play in influencing norm diffusion.

Indeed, regional developments have fostered a degree of regional integration between African states, such as the creation and development of SADC, and its incorporation of South Africa in 1994; the establishment of the African Union (AU) in 1999; the New Partnership for Africa's Development (NEPAD); and the African Ministerial Council on Water in so far as they have facilitated dialogue amongst states. These multilateral institutions have created a context in which multilateral co-operation of water resources are a small component of a much wider series of co-operation efforts (Kranz, *et al.*, 2005a: 1-36).

Despite the AU's shortcomings, particularly as they relate to implementation and delivery, and generally weak institutional capacity as a result of a shortage of qualified staff, lack of funding, overlapping memberships and unresolved tensions with RECs, the AU arguably exerts a degree of influence in shaping the hydropolitical normative frameworks existent on the continent. Its predecessor (the OAU), has been referred to as the "custodian of the norms of international society...that restrictively defined self-determination" and "whose rigid and inflexible adherence to the principles of international society...undermined the maintenance and promotion of peace and security" (Francis, 2006: 122). The argument here refers to the OAU's stance of non-interference regarding intra-state conflicts. In contrast, "the AU and its Constitutive Act have created a fundamental normative shift in the recognition of the deleterious effects on peace and security on underdevelopment, conflict, gross violations of human rights and bad governance" (Francis, 2006: 136). In this regard, the AU has attempted to more clearly articulate its hydropolitical agenda. Through its Commissioner for Agriculture and Water by, for example, the AU has influenced regional policy frameworks as well as the complete development agenda of the Water Programme of NEPAD (Kranz, *et al.*, 2005a: 11). Along with the AU and NEPAD, the African Ministerial Council on Water (AMCOW), formed in 2002, also aims to provide supra-regional coordination of water resource management although it still needs to develop into this role institutionally (*ibid.*).

Regionally, SADC, through the SADC Water Division has provided a sound organisational platform for norm entrepreneurs<sup>64</sup> within the region in fostering greater transboundary co-operation, particularly by monitoring the implementation of the 2000 Revised Shared Watercourses Protocol, the Regional Water Policy (RWP) and the Regional Water Strategy (RWS), as well as the creation and implementation of the SADC Regional Strategic Action Plan on Integrated Water Resources Development and Management (RSAP-IWRM). The SADC legal framework therefore reflects the international context in terms of the adoption of the global principles of equitable and reasonable utilisation, the no harm doctrine, information exchange, prior notification and ecosystem protection.

Additionally, non-governmental actors acting in the region have used persuasion to exert ‘moral influence’ on state interests and contribute to the attention paid to social issues within this multilateral context. International Rivers, a well-known INGO, has become extremely active in the Lesotho Highlands Water Project (LHWP), focusing on social issues such as the resettlement of villagers and problems regarding the delivery of promised compensation, as well as the new social issues created through reallocation and building projects (ibid: 17). According to the International Rivers Director of the Africa Program, International Rivers regard themselves as facilitators of gathering information and sharing that information with local communities and NGOs.<sup>65</sup> As such, they acted as ‘norm vocalisers’ by helping local actors to better articulate their grievances. When referring to the awareness raising capability of International Rivers in the LHWP, Lori Pottinger notes that:

Often they [local actors] knew very specifically what was amiss, what was not going to be satisfactory, but didn’t have the ability to speak out, or if they spoke out, the government knew that they were powerless because they could all be thrown in jail if worse came to worse. So they had a real problem with making their voices heard. And we tried to take their voices to an international level and bring other NGOs to back them and to understand what they’re saying, and to take their arguments to places that are

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<sup>64</sup> Norm entrepreneurs are influential agents, working from organisational platforms, who convince a critical mass of the moral appropriateness of a certain behaviour, which may lead to the emergence of norms.

<sup>65</sup> Pottinger, L (2008) Telephonic/Skype interview: Appendix 2C.

considering funding, to basically create a coalition around some of the bigger battles, the Bujagali Dam is the most obvious.<sup>66</sup>

Finally, norm entrepreneurs exist largely in the epistemic community, both domestically and internationally. An epistemic community is created by a dense network of activists, policy makers, academics, and entrepreneurs, who are influential in setting the agenda and defining the interests related to water resource management. Moreover, due to the highly technical nature of water management in the region and the emphasis placed on engineering, hydrology, and other environmental, ecological and soil and land management sciences, this community comprises of an restricted club of experts who dominate the production and application of knowledge, defined in a specific way (Swatuk, 2005b: 163). Swatuk argues that, often, their conservationist or technical interests take precedence (and usually win out) over that of local actors (small farmers, pastoralists etc.) in that they are present at organisational platforms to convince policy-makers to embrace their norms while local actors are not (ibid.). This point is pivotal to advancing the Constructivist thread in this chapter, for it alludes to the idea that despite interests and therefore behaviour being defined by social interaction processes, these very processes marginalise a significant proportion of ‘voiceless’ stakeholders, thus questioning the degree to which non-state actors are in fact influential in affecting policy. That said however, eliminating them from basin-level or regional analyses as does the SAHPC neither provides a holistic understanding of regional dynamics nor furthers our understanding of how and to what degree non-state actors are influential and the challenges they face in this regard.

#### **4.5.4. SUB-OPTIMISATION AT THE SUB-NATIONAL LEVEL AND THE FRAGILITY OF THE HEGEMON**

Based on the state-centric focus of the SAHPC, the question then begs, to what degree can it explain sub-national configurations? South Africa’s status as pivotal state within the SAHPC and hegemon within the region assumes asymmetries of power and consequent behavioural traits that may be misaligned with the sub-national picture, a picture that conveys several sub-optimal outcomes. South Africa, therefore offers much

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<sup>66</sup> Ibid.

value as a case study in highlighting the SAHPC's weakness in delving into analyses within the state.

#### **a). Current Infrastructure Not Meeting Current Needs**

Several critical trends in water infrastructure have been noticed in recent years that could affect South Africa's level of water security. It is arguably the case that South Africa has outgrown the capacity of its existing infrastructure due to the following factors.

- ***The influx of people and population growth***

Recent statistical data suggest that "illegal" immigrants living in South Africa range from 3 to 5 million (STATS-SA, 2007). Since these individuals have mostly subsistence lifestyles, they seldom exert additional demand on the water used in formal sectors. However, since access to effective sanitation and waste disposal is minimal, many of their activities have adverse impacts on the quality of localised water such as rivers and streams (Ashton, *et al.*, 2008: 3). Moreover, in 2000, the South African area contained within the four strategically important and subsequently stressed river basins (i.e. Incomati, Maputo, Orange-Senqu and Limpopo) comprised of roughly 24.5 million people or 55.3% of the national South African population.<sup>67</sup> Low growth estimates project a 32% increase while high growth rates project a 73% increase in population size by 2025. Of the population living in these basins, 59% is urbanised while 41% live in scattered rural communities, in areas that formed part of the former apartheid homelands (Turton, *et al.*, 2005: 19-67). These rural areas receive poor service delivery and are strongly dependent on localised water sources (Ashton, *et al.*, 2008: 3). If economic development and population size continue to grow at the rate they currently are, these millions (both rural and urban populations) will place increasing pressure on already limited supplies. The impact on the region is staggering if one considers that few policies regarding basic service delivery have accounted for this influx.

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<sup>67</sup> See Table 4 for data of the three Pivotal States as defined by Turton, which excludes Incomati data

- ***The non-maintenance of sewerage and treatment works leads to reduced capacity to naturally dilute effluent***

A survey conducted by the Council for Scientific and Industrial Research revealed that while wastewater treatment plants in some regions such as the Gauteng area operate successfully, many other wastewater treatment plants do not meet effluent standards and some do not even measure effluent quality (Wall, 2005). This results in high levels of eutrophication with microcystin-producing cyanobacteria emerging in most of the major dams and reservoirs (Oberholster and Ashton, 2008: 3-4). Moreover, reticulation systems are not being maintained, which results in unnecessary wastage. For example, night flow (the off-peak in-flow of unused water into sewage treatment works) is a serious concern for water managers because the higher the proportion of night flow, the higher the indication of ills in a reticulation system i.e. leaking toilets, missing taps.<sup>68</sup> Some areas in South Africa have had up to 70% - 80% night flow of peak in-flow (McKenzie, Mostert and de Jager, 2004). The degree to which these specific domestic issues filter across the border into transboundary rivers, is however, less discussed. Several scholars have brought attention to the extent to which South Africa has exploited the water resources of the four shared basins (Mohammed, 2003), reporting that some residents of the neighbouring countries resent the fact that South Africa already uses a larger portion of the water resources in the shared river basins (Ashton, *et al.*, 2008: 2).

#### **b). Institutions not the Problem but Implementation**

The necessary goal of redressing past racial and gender inequality means that South Africa's water reform is expected to deliver on changes in process (holistic, decentralised, participatory and economically cost effective), social outcomes (Woodhouse, 2008) while simultaneously ensuring higher environmental standards as stipulated in the 1998 National Water Act (Jacobs and Turton, 2009). According to Philip Woodhouse, "The prospect of redistribution from existing 'haves' to 'have nots' raises considerably the political risks and expectations attached to the implementation of reform" (Woodhouse, 2008: 3). The challenge in reconciling process and social outcomes plays itself out in recent xenophobic and other violent attacks. Most of the causes cited for these outbreaks include poor service

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<sup>68</sup> Pyke, P. (2008) Interview: Appendix 2A.

delivery (particularly of clean water and sanitation), poor governance and a lack of capacity at the local level (Johnston and Bernstein, 2007: 3) which compounded with an influx of foreigners from neighbouring African countries, has resulted in localised hotspots for conflict. However less research has sought to understand the relationship between the lack of clean water and sanitation and localised conflict (Jacobs and Turton, 2009). As Wolf argues, "...while no water wars have occurred, there is ample evidence that the lack of clean freshwater has led to occasionally intense political instability and that, on a small scale, acute violence can result. What we seem to be finding, in fact, is that geographic scale and intensity of conflict are inversely related" (Wolf, 1998: 255).

### **c). Institutional Reform**

In line with South Africa's water reforms of the 1990s, and an attempt to promote social efficiency between alternative and competing demands, 19 water management areas (WMAs), each with its own Catchment Management Agency (CMA) were planned (Government of South Africa, 1998: Section 8.1), though ultimate responsibility for shared river basins remains with central government. Water user associations (WUAs) were also established at a subsidiary level to CMAs to promote further devolution of water management. The core responsibilities of the CMAs are a) to investigate and advise on the protection, use, development, conservation, management and control of water resources in its WMA, b) to develop a catchment management strategy, and c) to coordinate the related activities of water management institutions within a particular WMA, i.e. to provide scope for greater public participation (Government of South Africa, 1998: Section 8.1; Woodhouse, 2008: 6-7). Unfortunately, the majority of CMAs are not yet fully functional, and as a result, the intended benefits not yet realised (DWAF, 2007/2008: 8; Rogers, Roux and Biggs, 2000: 505-512).<sup>69</sup>

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<sup>69</sup> To be specific, the (former) Department of Water Affairs and Forestry, in their Annual Report for 2007/2008 reported that eight CMA proposals have been accepted: Inkomati, Crocodile (West)-Marico, Mvoti, Thukela, Usuthi to Mhlathuse, Breede, Olifants and Gouritz. Since then the Berg CMA proposal has also been accepted increasing the total to 9 accepted CMA proposals. Of the nine CMA proposals accepted, only 2 CMAs have been established – the Breede and Inkomati. In some cases government approval is still needed to establish CMAs as fully functioning institutions. Additionally, CMAs have no tested precedent in South Africa and have had/will have to evolve in complex and changing business, social and natural environments.

While progressive actions within the South African water sector are evident (policy reforms), these selective case examples of sub-optimisation within South Africa were listed to question the degree to which the SAHPC delves into the interconnectedness of national/basin/regional and sub-national levels of scale. Through examples of population increase and its effects on future demand, the non-maintenance of sewerage and treatment works, and the challenges of implementing its progressive policy reforms, South Africa's positionality in terms of pivotal and or hegemonic state in most southern African basins and the region, is questionable when viewed from a realist perspective as portrayed in the SAHPC. South Africa's ability to "project its power beyond its borders" says little about its ability to project its power within its borders, and the degree to which this affects how it is perceived is overlooked by the SAHPC.

#### **4.5.5. SUMMARY OF CRITICAL ENGAGEMENT**

Using a broad Constructivist approach, this section attempted to emphasise the HPC's strengths and weaknesses in both helping and hindering an understanding of transboundary water resources. While the HPC emphasises co-operative strategies due to the manner in which water is prioritised as a strategic resource within a basin and beyond a basin to the regional level, it displays a limited utility in explaining sub-national configurations and its relationship to basin and regional dynamics, particularly the categories of pivotal and impacted state. Additionally, the socially constructed nature of key concepts such as pivotal basin/state and impacted basin/state were pointed out with an emphasis placed on the malleability of these terms by definition and over time.

It can also be argued that the HPC's emphasis on state sovereignty perpetuates the self-replicating 'territorial trap'. States who exhibit little or a highly uneven capability to deliver efficient services to its population, or to provide 'some water for all forever' use the notion of sovereignty as a safety net when it comes to international rivers. Power inequalities and exploitation within a state can therefore be marginalised and treated less harshly if states are seen to be acting in "the national interest." Not only does this create the illusion of capability and the benevolent state (or to use Agnew's language, the state as prior to and container to society), it reinforces the realist narrative among SADC states. Moreover, theorists that adopt state-centric ontological frameworks (be they realist or neo-

institutionalist) wittingly or unwittingly contribute to the easily ascribed hierarchy of states in the region, i.e. that South Africa is strong and that Malawi is weak and that others fall somewhere in between. Therefore, those who govern states as well as those who govern the discourse succumb to the pitfalls of the territorial trap, whether they are aware of it or not. Constructivist theory allows us to see beyond the territorial trap and to ask better questions regarding ‘water security’ in southern Africa.

It is, however, important to note that while the state-centric focus of the HPC was limiting, this is not to dismiss the crucial and pivotal role states play in transboundary water governance in the region. Indeed they, along with non-state actors form part of a region characterised by complex politics among, within and beyond states that lead to varied possibilities and challenges.

#### **4.6. TOP-DOWN NORM DIFFUSION**

Albeit in a non-linear pattern of top-down norm diffusion, global principles found in the 1997 UN Convention have indeed infiltrated regional agreements such as the Revised SADC Protocol. Additionally, despite the fact that South Africa and Namibia are the only SADC states to sign and ratify the UN Convention, all other SADC states have indirectly adopted the principles enshrined within the UN Convention, due to the inclusion of it, almost verbatim, in the Revised SADC Protocol, to which all are party (Ramoeli, 2002: 09; Turton, 2008b: 64). These riparian states have therefore, de facto accepted the core principles enshrined in the UN Convention because these principles have been codified into the SADC Protocol. Thus, irrespective of whether the individual states have ratified the UN Convention or not, their accession to the SADC Protocol on Shared Watercourse Systems requires them to abide by the core requirements of the UN Convention (Ashton, *et al.*, 2005). Subsequent amendments to the SADC Water Protocol have also been made, each reflecting evolving international legal norms and a subsequent evolution in normative priorities regarding international watercourses.

#### **4.7. REGIONAL NORM CONVERGENCE**

As previously mentioned, several points allude to the argument made for regional norm convergence at an institutional level. Firstly, the transitional nature of national policy



frameworks for all (except Botswana) Orange-Senqu riparian states, has enabled them to align their policies with that of the Revised SADC Protocol but also the national policies of their neighbours.

While Conca's Maryland School (2006:119) argued that cumulative basin to basin norm dissemination has not occurred significantly in recent years and therefore shows little evidence of regional norm convergence or basin to basin norm spread, the southern African case proves otherwise. Basin-wide agreements have been signed in all of the SADC basins that have a significant level of development (Ashton, *et al.*, 2005; Turton and Ashton, 2008: 312). Additionally, the wide range of bilateral and basin-wide agreements signed by the individual states within the SADC region, and their accession to important international agreements, suggest that SADC states are committed to strengthening levels of co-operation between states and reducing the potential for disputes and conflicts to occur (Ashton, *et al.*, 2005; Turton and Ashton, 2008: 313).

Turton and Ashton (2008: 313) argue that ideally, this should translate into the establishment of suitable multilateral institutions that can manage the different river basins on behalf of the riparian states concerned. However, despite the evidence of growing co-operation between states, less success has been achieved in the development of multilateral institutions to manage shared water resources. While multilateral commissions have been formed for several river basins (e.g. the Cunene, Incomati, Limpopo, Orange-Senqu, Okavango, Umbeluzi and Zambezi basins), these commissions remain almost purely advisory in nature; each country still conducts its normal processes of decision-making for managing the water resources within the boundaries of its sovereign territory (Turton, *et al.*, 2005). This could either suggest that the countries concerned are reluctant to delegate part of their sovereign responsibility to another party (in this case to an institution for the management of water resources), especially where these resources are critical for their future social and economic development (Turton and Ashton, 2008: 313). Alternatively, as is evident in the Orange-Senqu basin, it can also be the case that due to pre-existing bilateral regimes, multilateral regimes are slower to develop and their mandates are questioned as a result of project-based bilateral agreements conducting most operational functions i.e. infrastructural developments etc. Different scholars and managers have had varying opinions on the co-existence of both multilateral and bilateral

agreements/institutions on the Orange-Senqu i.e. PWC and LHWC (PJTC), stating that the pre-existing bilaterals advise ORASECOM processes because they are older and more established, while others argue that ORASECOM acts as the central advisory forum that supersedes the bilaterals. Qualitative research conducted revealed that power dynamics are not contentious and that no overlap of mandates exist due to the fact that most state representatives are members on both bilateral and the multilateral institutions.<sup>70</sup>

Another argument presented by the Maryland School is that lateral normative convergence is not occurring nor is the lack of deepening (or specification) of the set of normative principles in regional and basin agreements. Once again, as is evident with the ORASECOM Agreement, each normative principle was referenced to varying degrees. Similarly, Article 12 of the ZAMCOM Agreement makes specific reference to eight legal principles, which are sourced from wider than the UN Convention alone. The concept of deepening is first of all in and of itself questionable as to what exactly it is and why it is necessary. Also, the degree to which these principles are deepened, is arguably reflected in processes unique to the socio-political and cultural context of the basin and not policy. The way in which normative convergence occurs is arguably a reflection of behaviour. The following sub-section lists several barriers and drivers to normative convergence specifically in the Orange-Senqu River basin.

## **4.8. BARRIERS TO NORM CONVERGENCE IN THE ORANGE SENQU RIVER BASIN**

### **4.8.1. SKILLS FLIGHT AND LACK OF SUSTAINABLE KNOWLEDGE TRANSFER**

The loss of intellectual assets is a major threat to effective water management and subsequently normative convergence, particularly in water-scarce countries such as South Africa where the onus is on the scientific community to find technological solutions (Turton, 2008a: 180-200; Walwyn and Scholes, 2006: 239-243). There has been a large skills flight in southern Africa in recent years due to increased crime, lack of confidence in

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<sup>70</sup> Biggs, D. (2008) Interview: Appendix 2A; Heyns, P. (2008) Interview: Appendix 2A; Interview with Shilomboleni, A. (2008) Chief Hydrological Technician. Namibian Hydrological Services, MAWF, Namibia, Windhoek, Namibia, 3 September, 2008: Appendix 2A; Interview with Philander, R. (2008) Attorney, LorentzAngula, Former Principal Legal Officer for ORASECOM, Ministry of Justice, Namibia, Windhoek, Namibia, 10 September 2008: Appendix 2A.

the government, and social mobility. The mobility of skilled people is however widespread and varies in nature. Water specialists in African countries often emigrate to apply their trade in developed countries, but also move to international and multi-national organisations. Similarly, South Africa attracts significant capacity, particularly from Zimbabwe, where highly skilled people seek economic security.

The repercussions for the water sector include high staff turn-over, the loss of skills and institutional memory due to the departure of experienced staff, little or no career path and succession planning, the appointment of non-technical personnel to management positions requiring technical experience, as well as the absence of well structured educational and training programmes suitably targeted to all stakeholders in the water management chain (Mwendera, *et al.*, 2003: 761-778). These factors impact institutional effectiveness as it involves a large degree of re-learning and re-building of trusting relationships. This problem is not however unique to South Africa with neighbouring states experiencing the same challenges. This in turn affects the institutional capacity and effectiveness of transboundary institutions such as river basin organisations where to a large extent, certain individuals who have represented their countries on both bilateral and multilateral fora, created an institutional vacuum when they left.<sup>71</sup> The lack of sustainable knowledge transfer policies therefore impedes normative convergence due to the time it takes to re-learn and rebuild a national, basin-wide or regional culture.

Institutional memory loss is therefore a major obstacle to institutional development but also to normative convergence. A Water Research Commission (WRC) report concluded that institutional memory loss results in negative impacts on service delivery and opportunities for co-operation, particularly where mechanisms to institutionalise individuals' knowledge have not been put in place (Pegram, Mazibuko, Hollingworth and Anderson, 2006). Moreover, the lack of sustainable knowledge transfer policies contribute to norm resistance, not because individuals actively resist a normative pull, but because they lack an awareness of such convergence taking place. This consideration is critical to a Constructivist understanding of the problem by emphasising the significance of individual

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<sup>71</sup> Interview with Van Langenhove, G. (2008) Head of Hydrological Services, MAWF, Namibia, Windhoek, Namibia, 2 September 2008: Appendix 2A; Van Wyk, N. (2008) Chief Engineer: National Water Resource Planning (East), Department of Water Affairs and Forestry, Pretoria, South Africa, 13 August 2008: Appendix: 2C; Heyns, P. (2008) Interview: Appendix 2A; Pyke, P. (2008) Interview: Appendix 2A; Roberts, P. (2008) Interview: Appendix 2A; Shilomboleni, A. (2008) Interview: Appendix 2A.

identities on both personal relationships and institutional capacity. As Checkel argues, the environment in which agents/states take action is social as well as material and this setting can provide agents/states with understandings of their interests and can in fact “constitute them” (Checkel, 1998: 325-326).

#### **4.8.2. LACK OF TRUST**

A key aspect of the above-mentioned barrier is the process of trust-building and how this is facilitated as well as the importance of individual actors and personal relationships in the management of freshwater resources, producing both positive and negative repercussions. Trust in this case can be divided into institutional trust (the trust individuals have of an institution’s functionality i.e. ability to carry out its mandate) and individual trust (the trust that develops between individuals’ interactions with each other).

National departments and river basin commissions alike have had water resources managers and planners that have held their positions for years, and have in recent years retired, or are fast approaching retirement age.<sup>72</sup> In South Africa, others have been replaced or made redundant as a result of Black Economic Empowerment policies. While on the one hand, the interpersonal relationships they formed have enabled a trusting environment due to personal trust between individuals, on the other hand, little or no new managers and policy-makers have been sufficiently trained and equipped to fill these positions. Since institutions need to have a life after individuals, this creates a skills vacuum when new managers are hired without adequate succession planning and skills transfer policies in place to groom individuals.<sup>73</sup>

It is important to note that while political trust has not been essential for technical co-operation to take place and be successful in the Orange-Senqu River basin, and also the SADC region, it does make for better co-operative management strategies as a result of personal relationships. Due to the strategic nature of water for southern Africa, it can be argued that transboundary co-operative management in southern Africa has had a very strong technical component (Joint Permanent Technical Commission, Tripartite Permanent Technical Committee, JWC, PWC, etc). Even before 1994, in a period of severe political

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<sup>72</sup> Heyns, P. (2008) Interview: Appendix 2A; Pyke, P. (2008) Interview: Appendix 2A; Roberts, P. (2008) Interview: Appendix 2A; Thamae, L. (2008) Interview: Appendix 2A.

<sup>73</sup> Pyke, P. (2008) Interview: Appendix 2A.

instability and distrust of South Africa's economic hegemony and military aggression, there was a high degree of technical co-operation i.e. hydrological exchange of information and collaboration. Despite distrust among riparian states at that time, technical co-operation existed as a means to overcome the political incapacity to engage.

The second aspect of trust relates to institutional trust or the confidence individuals have in an institution's functionality. It is hypothesised that an increase in institutional trust influences individuals to accept institutionalised norms that have emerged as part of institutional fabric. Qualitative research conducted revealed that several technical water managers in Namibia, South Africa and Lesotho, perceive the practical co-operation on the exchange of hydrological data to have disappeared with the introduction of international river basin commissions.<sup>74</sup> "The reason is that there are now top-heavy structures that need excuses for meetings and international travelling and studies. Instead of exchanging data, all energy is spent on discussing the exchange of data and writing reports on that subject."<sup>75</sup> Examples cited were the Kavango and Zambezi, where managers argued that there was never any problem getting Kavango data from Botswana before OKACOM was established.<sup>76</sup> This could be translated into the opposition to the formalisation of information exchange channels which are time-consuming. These sentiments reflect a lack of trust in multilateral institutions to effectively perform their mandates, and as such, may be a barrier to the development of a "community of interests." This sentiment is not shared by several other decision-makers, however. According to Heyns (2009), the real problem is not so much the existence of the institution (OKACOM), but rather the capacity of Botswana to provide the information, which relates more to the aforementioned barrier, skills flight.<sup>77</sup> "The OKACOM always encouraged the exchange of information and there was never any requirement that information had to pass through the Commission, in fact, the Commission always encouraged co-operation at the lowest appropriate level between the various water departments."<sup>78</sup>

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<sup>74</sup> Van Langenhove, G. (2008) Interview: Appendix 2A.

<sup>75</sup> Ibid.

<sup>76</sup> Ibid.

<sup>77</sup> Heyns, (2009) e-mail correspondence: Appendix 4.

<sup>78</sup> Ibid.

## **4.9. DRIVERS FOR NORM CONVERGENCE IN THE ORANGE-SENQU RIVER BASIN**

Several drivers to normative convergence exist that act as catalysts to the development of a “community of interest” on water resources.

### **4.9.1. TECHNICAL CO-OPERATION**

As previously noted, technical collaboration has been particularly dominant in the Orange-Senqu basin, largely influenced by the political and historical context in which it was necessitated. Due to the relative scarcity of water as a resource in the region, and despite the political instability and distrust, there were few alternative options that countries had other than to co-operate in this manner.<sup>79</sup>

### **4.9.2. NORM ENTREPRENEURS AND THE SIGNIFICANCE OF PERSONALISED POLITICS**

As previously noted, the importance of individuals to the success or failure of effective water governance in southern Africa is noteworthy (see Closed Meeting Proceedings: Appendix seven). As Swatuk argues, water governance in southern Africa exists within a context of differently empowered actors who negotiate and renegotiate roles and rights to resources (Swatuk, 2002b, 2005a). This may have positive consequences (a close-community of technical experts based on trusting relationships, a wealth of knowledge and experience in the water sector) and negative consequences (power asymmetries and an elite epistemic community, institutional memory loss when these individuals leave as alluded to previously etc.). These individuals have succeeded in persuading their constituencies of the moral appropriateness of certain codes of conduct relating to transboundary water governance. Mr. Piet Heyns, facilitated the Namibian ratification of the UN Convention. Mr. Dudley Biggs; Mr. Piet Heyns; Mr. Leleka; former Water Affairs Minister of South Africa, Kader Asmal; Mr. Emmanuel Lesoma; Mr. Reginald Tekateka and other key individuals, encouraged the drafting of the 1995 SADC

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<sup>79</sup> Thamae, L. (2008) Interview: Appendix 2A.

Water Protocol.<sup>80</sup> In essence, key individuals have played a significant role in ‘bringing’ international and national norms and principles home. Moreover, where certain of these norms have been ambiguous or deliberately vague in wording (such as equitable utilisation), individuals, acting as norm entrepreneurs, have adopted the language of the norm without giving it immediate substance (Swatuk, 2005a), or have interpreted them for specific national contexts.

#### **4.9.3. CAPACITY BUILDING**

Despite the fact that Orange-Senqu riparians have developed, or are in the process of developing sophisticated water policy, without appropriate capacity to implement the policy in the long term, little is likely to change for the better at a local level. Effective policy implementation is dependent on a combination of technical knowledge, social skills, and practical experience. This need to develop capacity translates into the need to increase social learning capacity. SADC has, since its inception, placed an emphasis on international programmes that foster human resources capacity building (Swatuk, 2005a). There is wide recognition of the capacity deficit in the region (Swatuk, 2005a), and it is through capacity building that institutions can be strengthened, regional integration facilitated, reform effectively implemented, and normative convergence evolved. This growing awareness of the need for capacity is evident in the regional trend of donor-funded institutional strengthening and capacity building projects.

#### **4.9.4. SUSTAINABLE KNOWLEDGE TRANSFER POLICIES**

Sustainable knowledge transfer policies, while few (or non-existent) in most river basin organisations, contribute to capacity and competence building but also competence sustainability. Sustainable knowledge transfer policies therefore address issues of continuity, a phenomenon which is often lost through social/professional mobility, when individuals move to other organisations or sectors or retirement. According to a study conducted by the WRC of South Africa, the natural tendency for knowledge gained through involvement in policy processes is to dissipate to the extent that it is unavailable as a resource for the next generation of policy makers (Pegram, *et al.*, 2006). As was

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<sup>80</sup> Heyns, (2009) e-mail correspondence: Appendix 4.

discussed in chapter three, social (and collective) learning processes help to educate and make individuals aware of the moral appropriateness of a given norm, as it involves the expansion in time and space of the background knowledge that constitutes practices and, thus, also in the expansion of ‘communities of practice’ (Adler, 2005).

Sustainable knowledge transfer policies therefore include the re-defining of capacity needs of institutions, equipping young professionals with relevant skills by revising curricular to address emerging issues in the water sector, as well as formal mentoring programmes, which retain the knowledge of the old by transferring it to the young. This point reiterates the importance of individual non-state actors, their interests and identities as endogenous to the system of interaction and social interaction processes that determine both behaviour, and in this case, institutional effectiveness. Moreover, it includes the development of suitable Research and Development strategies that follow a learning-by-doing approach i.e. mentorship, incremental participation in RBO processes. These processes are largely absent in the Orange-Senqu River basin, although an RBO strengthening process is underway to ascertain the best R&D strategy for the basin.<sup>81</sup>

#### **4.9.5. TRUST AND CONFIDENCE-BUILDING**

As previously noted, institutional or state-to-state trust is not a necessary factor for co-operation particularly that of a technical nature, but it does produce more effective co-operative management strategies. Once again, the distinction between individual trust and institutional trust is worthy of reiteration. RBO management is largely based on individual personalities and identities. Trust in this context is of paramount importance since good relations translate into more robust policies. Institutional trust, however, builds the credibility of the institution and how it is perceived as a functional institution which effectively carries out its mandate. The latter is equally important to facilitate normative convergence by persuading other institutions of the moral appropriateness of certain principles and/or ways of doing things. Indeed, ORASECOM has developed a great deal of credibility both regionally and internationally and acts as the multilateral model for RBO institutional development in the region. As such, it arguably sets the standard for best practice in the region in activities regarding multilateral institutions. Norms adopted or

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<sup>81</sup> Ibid.



created by ORASECOM therefore carry greater clout than those borne out of, or advocated by less respected institutions.

#### **4.9.6. CONGRUENT NORM SETS**

In line with the Finnemore-Sikkink logic (1998: 908) of adjacency claims or path dependence i.e. when the norm fits, or can be portrayed to fit, into existing normative frameworks (Finnemore & Sikkink, 1998: 908), when a set of global principles are more congruent with the existing domestic normative structures, these norms have a greater probability of being accepted. Similarly, Checkel (1999) refers to this as “cultural match.” As the case of southern Africa shows, the domestic context is conducive to the socialisation of several of the global principles since versions of these principles (such as co-operative governance, communication and information exchange, and so forth) have become prioritised in post-colonial and post-apartheid ideals of democratic governance, stakeholder participation, and decentralisation. In essence, the domestic context allows for ‘normative fit’ with several global principles. Indeed, actors throughout the SADC region support those ideas that are morally appealing and that serve their political interests, without threatening pre-existing configurations of power, such as the notion of ‘peace parks’ (Swatuk, 2005a).

#### **4.9.7. THE BENEFIT-SHARING PARADIGM**

While benefit-sharing as an ideal to effective water governance at the transboundary level is often cited, little is discernable beyond the catch-phrase level (Phillips, *et al.*, 2006: 29). Sadoff and Grey (2002) provide the simplest and most useful general framework to date regarding benefit-sharing, arguing that benefits from co-operation over a shared river basin may be divided into four categories: environmental, economic, political and catalytic. Using this as their point of departure, they argue that conflict/co-operation between states is largely determined by incentives for co-riparians to co-operate. Other scholars have expanded on this notion, noting that one option for sharing the resources in a basin could be to identify development strategies that can thrive under the equitable division of water and other resources (Savenije and van der Zaag, 2000).

Sadoff and Grey (2002; 2005) also explain that states will always have a “national agenda” for a river that they share, and that they will co-operate if it serves that national agenda. But central to their argument is the potential to move from national agendas that are unilateral, to national agendas that incorporate significant co-operation, and to converge upon a shared co-operative agenda. The extent to which this is possible will be determined by each party’s perception of the benefits it can secure from co-operation. Convergence towards this co-operative agenda will be facilitated by the following:

- The perception of the range and extent of the potential benefits needs to be expanded, from the tangible to the less obvious – also going beyond the river and mere water-sharing solutions (Sadoff and Grey, 2005: 2).
- The distribution of benefits and benefit-sharing opportunities to redistribute the costs and benefits of co-operation need to be explored and agreed upon to enable the definition of co-operation that will be perceived as fair by all parties (ibid.)
- Alternative modes of co-operation as well as appropriate types of co-operation need to be identified to secure the greatest net benefits (ibid.)

A collaborative team of researchers from the CSIR, SIWI and PRA have however, produced a practical methodology as to how benefit-sharing can be achieved, called the Transboundary Waters Opportunity (TWO) Analysis (Phillips, *et al.*, 2008). The conceptual framework of the TWO Analysis comprises of a matrix with four key development opportunities (hydropower production and power trading, primary production, urban and industrial development, and environment and ecosystem services), and two main categories of sources of water to realise those opportunities (New Water, defined as the potential for new water to be developed through water demand management strategies, or supply-driven infrastructure; and the efficient use and management of water i.e. institutional strengthening, joint management regimes etc). Through a participatory process, development preferences are discussed, negotiated and/or agreed upon, by stakeholders. Benefit-sharing can therefore be classified as the incremental and iterative process whereby states develop a similar development strategy regarding shared water resources. Indeed, benefit-sharing norms become more influential within this framework as they have a “normative fit” with notions of regional integration and thus fit into the existing normative structure.

#### **4.10. CONCLUSION**

The first section of this chapter focused on tangible legal and institutional processes that symbolised a movement toward normative convergence. However, an evaluation of the institutional and legal frameworks within the basin is not sufficient to fully grapple with the intricacies of normative convergence. Qualitative research in the basin produced significant drivers and barriers to the development of a “community of interests” in the Orange-Senqu basin around water resources. While it can be concluded that institutional or national trust was neither a driver nor a barrier to technical co-operation, personal trusting relationships and personalised politics have acted as drivers (trust-building) or barriers (lack of trust) to facilitating normative convergence since the latter has been dependent on social learning and persuasion in the Orange-Senqu River basin.

Sustainable knowledge transfer policies or the lack thereof is of paramount importance to the sustainability of competence and to the ability of an RBO to absorb institutional shocks such as skills flight. The maintenance of institutional memory in this regard, also helps to facilitate norm convergence through social learning. The identification of benefits within and beyond the basin contributes substantially to the fostering of incremental processes of normative convergence and aids in redirecting state interests from unilateral agendas to co-operative agendas. These drivers and barriers not only affect regional normative convergence at a basin level, but are particularly relevant to sub-national normative influences. Barriers to normative convergence are arguably even more critical at the national level when reviewing bottom-up normative infiltration. These barriers are largely responsible for sub-optimisation within a state. The last section of this chapter focused on a critical engagement with the SAHPC and the degree to which it is a suitable conceptual lens for viewing normative convergence at all appropriate levels of scale. While the HPC emphasises co-operative strategies due to the manner in which water is prioritised as a strategic resource within a basin and beyond a basin to the regional level, it displays a limited utility in explaining sub-national configurations and its relationship to basin and regional dynamics. It therefore cannot provide a holistic view of normative convergence, particularly processes examining bottom-up norm infiltration from the local to national levels.

## **CHAPTER 5**

### **CASE STUDY 2: THE NILE EQUATORIAL LAKES SUB-BASIN (NELSB)**

This chapter provides an overview of the second case study, the Nile Equatorial Lakes Sub-Basin (NELSB) as a sub-set of the Nile River basin and incorporates results of a textual analyses as well as qualitative interviews, to argue for regional normative convergence around specific issue clusters of co-operative management norms through a process of institutional strengthening and benefit-sharing. The HPC conceptual lens will also be reviewed to ascertain the degree to which it furthers an understanding of all normative processes: top-down norm diffusion from the global to basin levels; lateral state-to-state and state-to-basin-to-region normative convergence; and bottom-up normative infiltration from the local to national levels.

Nile River basin management exists on a much larger scale than its southern counterpart, analysed in the previous chapter. Firstly, the Nile River is longer and the river basin is therefore larger. Secondly, Nile River basin management involves many more state actors than does the Orange-Senqu River, flowing through ten riparian states: Egypt, Sudan, Ethiopia, Kenya, Eritrea<sup>82</sup>, Democratic Republic of Congo, Tanzania, Burundi, Rwanda, and Uganda (Abraham, 2004: 15; NBI, 2007; Waterbury, 2002: 1-6; Wolf, 1998: 1). And thirdly, Nile River basin management has been embroiled in bilateral agreements/treaties and unilateral action for longer than the Orange-Senqu River basin. All these factors, combined with political instability, tense co-riparian relations and a general lack of trust has led to greater resistance to the global transboundary co-operation norm set in the Nile River basin, with some scholars going so far as to argue that a community of riparians does not exist in the Nile Basin (Waterbury, 2002). Waterbury (2002) states that there are no accepted norms of group behaviour that could shame riparian states into upholding group action, and that the main frameworks that promote and sustain co-operation are contract and hierarchy. This is arguably due to the fact that externally

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<sup>82</sup> Eritrea's role in Nile River basin management has always, and continues to be secondary. Even in the newly-formed Nile Basin Initiative, Eritrea is not a member but rather participates with observer status (Nile Basin Initiative, 2007).

induced norms of transboundary co-operation have not been fully socialised and internalised and have met with greater local resistance. That said however, this study found that there has been a steady increase in state-to-state and state-to-sub-basin-to-region-to-basin normative convergence as well as some degree of bottom-up normative infiltration from local communities to the national level.

## **5.1. GEOPHYSICAL AND SOCIO-ECONOMIC OVERVIEW OF THE NILE RIVER BASIN**

The Nile River is nearly 6, 700 kilometres long, and is the longest river in the world. Its basin covers approximately one-tenth of Africa, and has a catchment area of over three million square kilometres (see Table 13). The river does not form a contiguous border between any of the riparian states, and instead, flows through them, which has made it possible for any one riparian state to act unilaterally regarding infrastructure development on its portion of the river (Malzbender and Earle, 2008). It is generally agreed that the Nile River has several major sources: 1). More than eighty per cent of the water originates from the Ethiopian Highland Plateau through the Blue Nile (Abbay) and the Atbara River (Tekeze) with their sources in Lake Tana; 2). the basin of the Equatorial Lakes Plateau shared by Burundi, Democratic Republic of Congo (DRC), Kenya, Rwanda, Tanzania and Uganda, with its most distant source in the Kagera River, which winds its way through Burundi, Rwanda, Tanzania and Uganda into Lake Victoria and 3). the Bahr el Ghazal Basin whose contribution is almost negligible (El-Fadel, El-Sayegh, El-Fadl and Khorbotly, 2003: 107; Waako, 2008).

In terms of national contributions to streamflow and to the percentage of national land mass in the basin, all the Nile water used in Burundi and Rwanda, and more than half the waters in Uganda are produced within their national boundaries. Most of the water resources of Sudan and Egypt, however, originate outside their borders: 77% and 97%, respectively (El-Fadel, *et al.*, 2003: 108). Egypt and the Sudan also account for over 90% of Nile River water use and have legitimated this use in historical treaties and agreements (1929 and 1959 Agreements) formed under colonialism. Similarly, less than nine percent of Kenya's land mass falls within the Lake Victoria basin, however it provides over half of the country's freshwater supply (Tadesse, 2008: 3). Ethiopia is by far the greatest

contributor of streamflow, supplying 86% of the Nile's waters and 95%<sup>83</sup> during the flood period (ibid.). In comparison to the Blue Nile's enormous contribution, the White Nile contributes only 14% (ibid.).

**Map 3: The Nile River Basin (NBI, 2001)**



**Table 13: Physical Characteristics of the Nile River Basin (Malzbender and Earle, 2008; UNEP, 2005)**

Nile River Basin – Major features	
Total Basin Area	3, 349,000 km <sup>2</sup>
Area Rainfall (mm/y)	Average: 600-650mm
Estimated Natural runoff	84 km <sup>3</sup>
Water Demand	Irrigation, power generation and navigation
Population	160,000,000 within the boundaries of the basin and 300, 000, 000 live within the 10 countries that share and depend on the Nile waters.

<sup>83</sup> Ethiopia contributes 95% of the streamflow of the Nile in flood period because the White Nile loses a large amount of water to swamp areas near its source and then to evaporation throughout its course over arid terrain (Tadesse, 2008: 3).

Water availability is highly varied in this basin. Nearly all of the river's water is generated from an area covering 20% of the basin, while the remainder are arid or semiarid regions with minimal water supplies and very large evaporation losses (Karyabwite, 2000). To be specific, while the sources of the Nile have average rainfall exceeding 1 000mm per annum, as it moves northwards through Sudan, rainfall gradually decreases to approximately 200mm per annum at the confluence of the Blue and White Niles in Khartoum (Tadesse, 2008: 3). Semi-desert and desert conditions characterise the northern part of the basin, with rainfall dropping to virtually zero in northern Sudan and most of Egypt (ibid.).

**Table 14: Summary of Climate and Terrain of Nile Riparian Countries (CIA, 2009)**

Country		Climate	Terrain
Eastern Nile Sub-Basin (Blue)	<b>Egypt</b>	Desert; hot, dry summers with moderate winters	Vast desert plateau interrupted by Nile valley and delta
	<b>Sudan</b>	Tropical in south; arid desert in north; rainy season varies by region (April to November)	Generally flat, featureless plain; mountains in far south, northeast and west; desert dominates the north
	<b>Ethiopia</b>	Tropical monsoon with wide topographic-induced variation	High plateau with central mountain range divided by Great Rift Valley
	<b>Eritrea</b>	Hot, dry desert strip along Red Sea coast; cooler and wetter in the central highlands (up to 61 cm of rainfall annually, heaviest June to September); semiarid in western hills and lowlands	Dominated by extension of Ethiopian north-south trending highlands, descending on the east to a coastal desert plain, on the northwest to hilly terrain and on the southwest to flat-to-rolling plains
Equatorial Lakes Sub-Basin (White Nile)	<b>Kenya</b>	Varies from tropical along coast to arid in interior	Low plains rise to central highlands bisected by Great Rift Valley; fertile plateau in west
	<b>Tanzania</b>	Varies from tropical along coast to temperate in highlands	Plains along coast; central plateau; highlands in north, south
	<b>Uganda</b>	Tropical; generally rainy with two dry seasons (December to February, June to August); semiarid in northeast	Mostly plateau with rim of mountains
	<b>Rwanda</b>	Temperate; two rainy seasons (February to April, November to January); mild in mountains with frost and snow possible	Mostly grassy uplands and hills; relief is mountainous with altitude declining from west to east
	<b>Burundi</b>	Equatorial; high plateau with considerable altitude variation (772 m to 2,670 m above sea level); average annual temperature varies with altitude from 23 to 17 degrees centigrade but is generally moderate as the average altitude is about 1,700 m; average annual rainfall is about 150 cm; two wet seasons (February to May and September to November), and two dry seasons (June to August and December to January)	Hilly and mountainous, dropping to a plateau in east, some plains
	<b>DRC</b>	Tropical; hot and humid in equatorial river basin; cooler and drier in southern highlands; cooler and wetter in eastern highlands; north of Equator - wet season (April to October), dry season (December to February); south of Equator - wet season (November to March), dry season (April to October)	Vast central basin is a low-lying plateau; mountains in east

The population size of the Nile River basin mirrors its biophysical enormity. It is home to an estimated 160 million people within the boundaries of the basin, while roughly 300 million live within the ten countries that share and depend on Nile waters. Over the next 25 years, the population is expected to double, which has led some scholars and environmental activists to forecast that this projected increase in water demand could lead to a potential conflict situation (El-Fadel, *et al.*, 2003: 109; Pottinger, 2004: 2). A World Bank study, for example, predicted that the amount of water available to each person in North Africa will drop by 80% in a single lifetime by 2025 (Brunnée and Toope, 2002: 118). El-Fadel *et al.* (2003: 109) further argue that the increase in population distribution in the basin is dominated by a shift toward greater urbanisation, migration and over-grazing, which have contributed to deforestation and land degradation.

**Table 15: Contributions to the Nile River Basin by Country (Phillips, *et al.*, 2006: 67)**

Sub-Basin	Nile Riparian	Item		
		Area in Basin (km <sup>2</sup> )	Approximate Basin Area (%)	MAR (mm)
Eastern Nile Sub-Basin	Egypt	326, 751	10.5 %	15
	Sudan	1 978,506	63.6%	500
	Ethiopia	365, 117	11.7%	1,125
	Eritrea	24,921	0.8%	520
Equatorial Lakes Sub-Basin	Kenya	46,229	1.5%	1,260
	Tanzania	84,200	2.7%	1,015
	Uganda	231,366	7.4%	1,140
	Rwanda	19,876	0.6%	1,105
	Burundi	13,260	0.4%	1,110
	DRC	22,143	0.7%	1,245

In terms of socio-economic demographics, the basin is characterised by poverty, instability, rapid population growth and environmental degradation (Waako, 2008). Despite the extraordinary endowment of natural resources, four of the Nile riparian countries are among the ten poorest countries in the world. GDP per capita is on average, USD 1,500 (see Table 16).



**Table 16: Nile Riparian State Demographic/Socio-Economic Statistics (CIA, 2008, 2009; UNDP, 2008)**

SUB-BASIN	Eastern Nile Sub-Basin				Nile Equatorial Lakes Sub-Basin					
Item	Egypt	Sudan	Ethiopia a	Eritrea	Kenya	Tanz.	Uganda a	Rwanda	Burundi	DRC
<b>Population</b>	83,082,869 (July 2009 est.)	41,087,825 (July 2009 est.)	85,237,338 (July 2009 est.)	5,647,168 (July 2009 est.)	39,002,772 (July 2009 est.)	41,048,532 (July 2009 est.)	32,369,558 (July 2009 est.)	10,473,282 (July 2009 est.)	8,988,091 (July 2009 est.)	68,692,542 (July 2009 est.)
<b>Population Growth rate</b>	1.642% (2009 est.)	2.143% (2009 est.)	3.208% (2009 est.)	2.577% (2009 est.)	2.691% (2009 est.)	2.04% (2009 est.)	2.692% (2009 est.)	2.782% (2009 est.)	3.279% (2009 est.)	3.208% (2009 est.)
<b>% Nat. Pop res. in basin (and % of Nile pop)</b>	95% (45%)	84% (19%)	39% (17%)	36% (1%)	23% (5%)	11% (2%)	100% (15%)	70% (3%)	40% (2%)	2% (1%)
<b>Total Area</b>	1,001,450 km <sup>2</sup>	2,505,810 km <sup>2</sup>	1,127,127 km <sup>2</sup>	121,320 km <sup>2</sup>	582,650 km <sup>2</sup>	945,087 km <sup>2</sup>	236,040 km <sup>2</sup>	26,338 km <sup>2</sup>	27,830 km <sup>2</sup>	2,345,410 km <sup>2</sup>
<b>GDP (Purchasing Power Parity)</b>	\$443.7 billion (2008 est.)	\$88.08 billion (2008 est.)	\$68.77 billion (2008 est.)	\$3.945 billion (2008 est.)	\$61.51 billion (2008 est.)	\$54.25 billion (2008 est.)	\$39.38 billion (2008 est.)	\$9.706 billion (2008 est.)	\$3.102 billion (2008 est.)	\$20.64 billion (2008 est.)
<b>GDP Real Growth Rate</b>	7.2% (2008 est.)	6.5% (2008 est.)	11.6% (2008 est.)	2% (2008 est.)	1.7% (2008 est.)	7.1% (2008 est.)	6.9% (2008 est.)	11.2% (2008 est.)	4.5% (2008 est.)	5.9% (2008 est.)
<b>GDP per capita (PPP)</b>	\$5,400 (2008 est.)	\$2,200 (2008 est.)	\$800 (2008 est.)	\$700 (2008 est.)	\$1,600 (2008 est.)	\$1,300 (2008 est.)	\$1,300 (2008 est.)	\$1000 (2008 est.)	\$400 (2008 est.)	\$300 (2008 est.)
<b>Government type</b>	Republic	Government of National Unity (GNU)	Federal Republic	Transitional government	Republic	Republic	Republic	Republic; presidential, multiparty system	Republic	Republic
<b>HDI and rank in 2006 (published in 2008)<sup>84</sup></b>	0.716 Rank - 116	0.526 Rank - 146	0.389 Rank - 169	0.442 Rank - 164	0.532 Rank - 144	0.503 Rank - 152	0.493 Rank - 156	0.435 Rank - 165	0.382 Rank - 172	0.361 Rank - 177

## 5.2. BRIEF HYDROPOLITICAL HISTORY OF THE NILE RIVER

In terms of basin-wide multilateral co-operation, several dilemmas are evident. Firstly, a multilateral treaty agreement governing all ten Nile riparian states is nonexistent (Abraham, 2003: 98; Mallat, 1994: 366; Spiegel, 2005: 333-361). Secondly, many treaty agreements and resulting claims were formed under British colonial rule rather than in a context of independent sovereign states, and their validity is uncertain (Abraham, 2003: 98-

<sup>84</sup>Human Development Index as included in the United Nations Development Program's Human Development Statistical Update released on December 18, 2008, compiled on the basis of data from 2006. It covers 177 U.N. member countries out of 192 countries.

99). And finally, even the more recent treaties fail to adequately address future factors such as climate change, human intervention set to harness the flow of the waters, changes in the flow of the water itself (Abraham, 2003: 99) and the growing pollution problem (Tadros, 1996-1997: 1096).

Colonialism is arguably responsible for the beginning of modern legal and institutional tensions in the Nile River basin when the colonial superpowers realised the significance of the Nile water for the prosperity of the colonies, particularly Egypt (El-Fadel, *et al.*, 2003: 109). In this regard, Britain also had to enter into agreements with France and with Italy to prevent their interference with British dominance over the Nile. The Protocol signed in Rome on 15 April 1891 between Britain and Italy, for instance, demarcated their respective spheres of influence in East Africa from Ras Kasar to the Blue Nile (Degefu, 2003), at a time of Italian colonisation of Eritrea (Nicol, 2003b). Article III of this protocol stipulates that “The Italian Government engages not to construct on the Atbara, in view of irrigation, any work which might sensibly modify its flow into the Nile” (Degefu, 2003: 95). In return, Britain recognised Ethiopia as an Italian Sphere of Influence, thereby denying Ethiopia’s independence (*ibid.*). Ethiopia has never accepted the 1891 protocol since it was signed by Italy on Ethiopia’s behalf on the basis of the Treaty of Wechale between Emperor Menelik and the Italian Government on 2 May 1889 (*ibid.*). Additionally, the latter treaty was annulled following the Italian defeat by Ethiopian forces at the Battle of Adwa in 1896 (*ibid.*).

Additionally, one of the most disputed agreements regarding the waters of the Nile was signed on 15 May 1902 between Britain (acting for Egypt and Sudan) and Italy-Ethiopia, and is highly contentious to this day. This agreement prohibited Ethiopia from engaging in any construction activities of the Nile’s headwaters that would “arrest” the flow of water to Egypt (Okidi, 1990). This was brought about by the realisation of the enormity of Ethiopia’s contribution to streamflow, and the British had no control over the Ethiopian portion (El-Fadel, *et al.*, 2003: 109). While this agreement was actually drafted to regulate the frontiers between Anglo-Egyptian Sudan, Ethiopia and Eritrea (Nicol, 2003b), it contained within it a stipulation on the Nile waters in Article III:

His majesty the Emperor Menelik II, King of Kings of Ethiopia, engages himself toward the government of His Britannic Majesty not to construct or allow to be constructed any work across the Blue Nile, Lake Tana or the Sobat which would

arrest the flow of their waters into the Nile, except in agreement with His Britannic Majesty's Government of Sudan (Hertslet, 1967: 585; Tadesse, 2008: 7).

This treaty was prepared in two languages, Amharic and English, “both being official and equally authentic” (Degefu, 2003: 96). The disputed term was the meaning of “arrest.” According to the Amharic version, the wording “not to arrest the flow of the Nile” did not imply a prohibition on use. Additionally, the English version, contained a phrase, “and the Government of Sudan.” This required Ethiopia to seek clearance not only from the colonising power but also from the local Sudanese authorities for any planned developments on the Blue Nile (Degefu, 2003; Nicol, 2003b). However, this additional wording is absent in the Amharic version (Degefu, 2003). According to Degefu (2003), therefore, Ethiopia signed this agreement under duress, but has never ratified it. In 1935, however, the UK recognised the annexation of Ethiopia by Italy, an act that invalidated all previous agreements between the two governments (ibid.).

Another important agreement between the colonial powers was that of the 1906 agreement between Britain, France and Italy, referred to as the Tripartite Agreement. The agreement, in Article I, stipulated that “France, Great Britain and Italy shall co-operate in maintaining the political and territorial status quo in Ethiopia” (Tadesse, 2008: 7). In essence, this referred to the renewal of previous declarations, such as the 1902 Agreement, and giving joint support in their quests for economic penetration of Ethiopia (ibid.). Specifically, it defined their interests in Ethiopia, and recognised the principles of non-interference with the flow of the Blue Nile, Sobat and Atbara (Degefu, 2003). Britain's main interest was based on strategic, political and economic considerations, particularly with regards to Egyptian cotton, a huge resource for the British textile industry. Additionally, the Suez was critically important as the gateway to India and the Middle East. Great Britain therefore “continued to seek the protection of the Nile affluences” (ibid: 103). France's interest was related to the railroad and its adjoining territory, which followed the Awash Valley, and which spanned one hundred kilometres to the north and two hundred and fifty kilometres to the south, from Djibouti (formerly French Somaliland) to Addis Ababa (ibid.). Italy, hoped to gain control of northern Ethiopia. While this agreement did not remove all differences among the colonial powers who competed for access to the region, it enabled Britain to buy the goodwill of the French “extremely cheaply by

accepting a railway which they did not have the financial resources to oppose and in the process staked out a future claim to a good part of Ethiopia” (Keefer, 1981: 380) However, Ethiopia immediately rejected the agreement since it denied Ethiopia of its sovereign right over its water resources.

Egypt’s present rights and inequitable control over the Nile basin were also imposed by colonial agreements. In the quest to regulate the flow of the Nile and apportion its use, British-Sudan reached an understanding with Egypt on behalf of the British controlled territories of Uganda, Tanganyika, and Kenya (a British colony), that culminated in the signing of the Nile Water Agreement in 1929 (Othieno and Zondi, 2006: 2). The cotton scheme in Sudan also acted as a catalyst for this agreement since it required perennial irrigation as opposed to the traditional flood-fed method (TFRD, 2007). The British assured Egypt of its dominant share of the waters. Of the river’s average flow of 84 billion cubic metres at the time, 48 billion cubic metres was allocated to Egypt, while 4 billion cubic metres was designated for Sudan, at a ratio of 12:1 (ibid.). The British concessions then legalised Egyptian hegemony over the Nile by awarding it veto rights over any upstream water projects.

Disputes over water rights during colonial times were minimised or eliminated because of overall British hegemony in the region. However, as the Nile riparians gained independence, riparian disputes became international and more contentious. The core question of historic versus sovereign water rights is complicated by the technical question of where the river ought to best be controlled, upstream (Ethiopia) or downstream (Egypt) (ibid.).

One particular bone of contention was that voiced by newly independent Sudan in 1956, which repudiated the 1929 Agreement and demanded an increased share in the Nile waters (ibid.). The allocations were then increased to 55.5 billion cubic metres for Egypt and 18.5 billion cubic meters for Sudan, after the 1959 Nile Waters Agreement was signed between the United Arab Republic of Egypt and the Republic of Sudan for the Full Utilisation of the Nile Waters, which altered the ratio from 12:1 to 3:1 and fully allocated the Nile flow between the two states (Spiegel, 2005: 354). Under this agreement, Sudan was allowed to undertake a series of development projects, such as the Rosieres Dam, while Egypt was allowed to build the Aswan Dam which was designed to create an

assurance of supply, particularly during droughts, and also harness the hydroelectric power of the river (Tadesse, 2008).

Once again, Ethiopia has never recognised the validity of the 1959 Nile Waters Agreement, while Egypt has continued to assert the no harm doctrine<sup>85</sup> and its historical claim to the Nile (Spiegel, 2005: 354).

Tense co-riparian relations therefore have a long history of dispute and distrust. This differs to the Orange-Senqu historical characteristic of a high level of technical co-operation *despite* (or as a way to overcome) political distrust. Egypt has been heavily criticised by the upstream riparian states for its reluctance to compromise on the bilateral 1929 and 1959 agreements made with Sudan and its unwillingness to renegotiate this position with the other eight riparian states. Othieno and Zondi (2006: 2) argue that Egypt's hard-line stance and intransigence can in part be attributed not only to the fact that the Nile provides a source of its survival, but also to the fact that Cairo has the support of the United States as Washington's key ally in the Middle East and North Africa.

Othieno and Zondi argue, that as a result, other Nile states have resented Egypt's control of and dominion over their use of the Nile waters (Othieno and Zondi, 2006: 2). These authors cite the example of Tanzania's attempt to launch a project in 2004 that involved watering the Shinyanga region, 160 kilometres from Lake Victoria, which was funded by the Chinese at a cost of US\$27 million (ibid.). The Egyptian response was to veto the project on the basis of its 'right' to do so as interpreted from the 1929 agreement as it would affect the Nile's water supply downstream (ibid: 2). In the past, Ethiopia too, has been prohibited from building any major dams that would reduce the flow of the Blue Nile's waters into the greater Nile River. Similarly, Kenya has, in the past, threatened to withdraw from the 1929 agreement so that it could use the Nile's waters for the irrigation of some of the driest parts of its territory. In response, Egypt stated that withdrawing from the treaty would be tantamount to a declaration of war.

The Nile Basin has therefore been a global hotspot for potential conflict over water resources for several decades now and many a multilateral initiative aimed at co-operation has failed or has been nullified by riparian states. Added to this, there has been a range of

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<sup>85</sup> The no harm doctrine, in this instance, refers to the principle that there may be no harm done to a state's watercourse that might affect its natural flow, thus implying that an upstream state such as Ethiopia may do nothing that might affect the natural flow (quantity and quality) of the water into downstream Egypt.

broad political disputes, both inter and intrastate, that have touched on transboundary water issues further complicating the situation, a lack of trust between states due to historical ethnic/religious/cultural cleavages being a key obstacle (Brunnée and Toope, 2002: 129; Spiegel, 2005: 355).

### **5.3. INSTITUTIONAL AND LEGISLATIVE DEVELOPMENT SINCE THE 1990s**

While the waters of the Nile have historically created or deepened tension among Nile riparian states, opportunities for co-operation have also been evident, and are increasing. The 1990s saw several developments made in multilateral management of the Nile Basin that indicate an emerging spirit of co-operation. As a result of burgeoning multilateral institutions, initiatives such as the Nile Basin Initiative (NBI) formed in 1999 and task groups/committees such as an intergovernmental Technical Co-operation Committee for the Promotion of Development and Environmental Protection on the Nile (TECCONILE), transboundary co-operation has seeped into the region, however, with slightly less ease of socialisation than it has had in southern Africa. This is partly due to the fact that the interest in the Nile at the political level differs greatly among the Nile riparians, as national water plans tend to be designed in isolation, accompanied by a significant level of political distrust and a lack of information sharing (Brunnée and Toope, 2002: 130; Spiegel, 2005: 355-366).

Moreover, due to the concerted effort towards developing and sustaining a co-operative milieu, international donors such as the World Bank have provided funding with few, but nonetheless, strings attached. In this instance, the less tangible and often vague global norm set of transboundary co-operation seems to be less prioritised than the tangible and highly prioritised values of economic development in the region.

#### **5.3.1. INTERNATIONAL CONTEXT**

One of the major legalistic problems in the Nile case has been the inability to strike a balance between the principle of equitable utilisation and the no harm doctrine. To date, the riparian states have been unable to ratify a comprehensive and legal framework inclusive of all riparian states. As such, the UN Convention on the Law of the Non-

Navigational Uses of International Watercourses is applicable as the only global Convention that governs the utilisation, management and development of shared water resources for non-navigational purposes. However, the difficulty transboundary co-operation norms had at regional acceptance in the Nile is also evident in the unwillingness by some riparian states to ratify the UN Convention (Spiegel, 2005: 356). According to a UN Press release, Sudan and Kenya voted for the UN Convention; Egypt, Ethiopia, Rwanda, and Tanzania abstained; Burundi voted against; and Uganda, Eritrea and the DRC were absent (UN, 1997b: see Table 17).

Spiegel aptly summarises each riparian's decision:

Ethiopia protested that giving priority to the no harm doctrine would override the right to equitable and reasonable utilisation. On the opposing side, Egypt continued to claim that the no harm rule was the foundation of international watercourse law and that it should not be given the same weight as equitable utilisation. It has been suggested that the [UN] Convention's success at balancing the interests of upper and lower Nile riparians was in fact the reason for its lack of success on the ballot...It is important to note that none of the Nile riparians have since ratified or signed the [UN] Convention, perhaps challenging its probable status as customary international law in the region (Spiegel, 2005: 356).

**Table 17: Breakdown of the recorded vote on the UN Convention of Nile River Basin states (Adapted from Eckstein, 2002; UN, 1997a)**

Country		Vote	Ratified
<b>Eastern Nile Sub-Basin</b>	Egypt	Abstained	No
	Sudan	For	No
	Ethiopia	Abstained	No
	Eritrea	Absent	No
<b>Equatorial Lakes Sub-Basin</b>	Kenya	For	No
	Tanzania	Abstained	No
	Uganda	Absent	No
	Rwanda	Abstained	No
	Burundi	Against	No
	DRC	Absent	No

The UN Convention therefore, acts as a useful, albeit incomplete, tool and offers some value as a framework, but is once again, less effective as an indicator for the acceptance and impact of transboundary co-operation at a national level in terms of

compliance, implementation and translation to the local level. According to Spiegel, one of its assets is its focus on co-operation largely devoid of political influence (Spiegel, 2005: 357). Spiegel further argues that since the Nile basin suffers from a large inequality of political and economic power in its members, by creating a “community of interest,” the UN Convention focuses on the Nile River itself and its outreach into its communities rather than on the diverse, individual, political players who divide and control the distribution of its waters (Spiegel, 2005: 357). However, as previously mentioned, the Convention does not distinguish between actual compliance and rhetoric. As such, it does little to uncover inconsistencies between norm socialisation at a state/elite level and norm socialisation at a sub-national level, or norm contestation/dynamism between global principles and pre-existing domestic norms. It is therefore not sufficient to merely evaluate norm effects by looking at the existence of a treaty/convention and how many signatories it has in a particular basin. It is for this reason that an investigation of domestic configurations is vital to determine whether socialisation of global norms occur at the local and regional levels in terms of compliance to legal principles and implementation thereof.

#### **a). State Sovereignty Norms in the Nile**

In its most simplistic sense, the issue of sovereignty, as it relates to hydropolitics involves the debate between sovereignty and equitable distribution of shared water resources. Underlying this is the contradiction between the compartmentalisation of states who claim sovereignty rights over resources in their territory vs. the indivisible and uninterrupted continuum of water (Westcoat, 1992). The question here is simple: can a country use its water as it pleases? This results in a clash of two global norms i.e. sovereign ownership and exclusive rights over one’s resources vs. the principle of shared ownership and equitable utilisation of an international river. According to Spiegel, this debate has stemmed largely from four doctrines adopted from US riparian law: absolute territorial sovereignty, absolute territorial integrity, limited territorial sovereignty and community of interests (Spiegel, 2005: 335).

Absolute territorial sovereignty, otherwise referred to as the Harmon Doctrine of 1895, is strictly in favour of upstream riparians, but has never been put into practice officially (ibid.). Absolute territorial integrity falls on the opposite end of the spectrum and



reflects the notion that upstream riparians are prohibited from doing anything that may affect the natural flow of the water into the downstream state (*ibid.*). This principle is naturally in favour of downstream states, and may even have a debilitating effect on 'slow-to-develop' upstream riparians, such as Ethiopia for example. This is also the origin of the no harm doctrine, prohibiting any harm done to a state's watercourses that might affect natural flow. Similar to the absolute territorial sovereignty principle, absolute territorial integrity is rarely used in practice, because it denies the needs and reliance of other riparians on a transboundary river (*ibid.*).

Limited territorial sovereignty acts as the middle ground between the two principles discussed previously, and is subsequently, the prevailing theory of international watercourse rights and duties today (*ibid.*). This principle translates into respecting the rights of other riparians as they all have an equality of right. This has evolved into the principle of equitable utilisation. Finally, the fourth principle, community of interests is also not widely accepted (in part because it so closely resembles the principle of equitable utilisation) and is based on a community of interests created by the natural, physical unity of a watercourse, such as the present and prospective uses of the watercourses and the health of the ecosystem (*ibid.*).

While the principles of equitable utilisation and no harm, have been codified increasingly in international water law, it remains to be fully acknowledged, given local meaning, and implemented in practice, at regional and domestic levels. The fact that the 1997 UN Convention is yet to enter into force can largely be explained by the reluctance of certain states to sign away their various hard-line stances. The official abandonment of the doctrines which deny other riparians access to water in favour of doctrines which promote sharing, co-operation and interdependence, is a long process and involves the complex task of analysing the different needs of the water users in each riparian state and how they can be amicably met.

In addition to the above-mentioned evolution of sovereignty norms as it relates to water law, this investigation wishes to illuminate a second dimension of sovereignty, particularly relevant for the African landscape, that is, the challenge to sovereignty of African states (Turton, 1999b: 15). Among a list of internal (to the state) threats and external threats, Turton argues that 1). Many quasi-states in Africa have failed to pass the

test for internal sovereignty in terms of the capacity to be self-governing, e.g. lack in service delivery of which water and sanitation is pertinent; 2). Concerns about the western notion of standards of civilisation, particularly under the banner of human rights and advocated by powerful international NGO's; 3). The core-periphery structure of the post-Cold War international system gives both power and international legitimacy to the core to re-impose a degree of unequal political relations on the periphery, e.g. the UN as an embodiment of the principle of sovereign equality, has imposed sanctions on states such as Somalia, Angola, Burundi, Libya, Liberia and Mozambique, hereby degrading their status as sovereign equals (Turton, 1999: 5-15). These challenges to African states' sovereignty create both busts and boons for transboundary water resource management in Africa. On the one hand, inter-state co-operation is becoming increasingly common as Cold War perceptions of sovereignty (absolute territorial sovereignty/integrity) are making way for newer interdependent regional, multilateral collaborations. On the other hand, the challenges African states face regarding both internal and external threats to sovereignty make them both more susceptible to the socialisation of global norms but also create unique domestic configurations with localised norm sets that run contrary to western principles, allowing for either norm distortion/translation or norm contestation.

### **5.3.2. BASIN-LEVEL CONTEXT**

At the basin level, various organisations have been created in an attempt to stimulate sustainable development and co-operation in the greater Nile River basin. Moreover, some initiatives have failed due to financial and political obstacles. In recent times, however, Nile riparian states have begun to recognise the potential gains from co-operation within and beyond the basin. As such, tremendous resources have been pooled to create institutions or strengthen existing ones through capacity and trust building, policy harmonisation and basin-wide communication and information exchange. These initiatives have created regional norms of economic development and communication which have received basin-wide support and as such have been socialised. In part, these processes have been easier due to institutional tiers at all levels of scale. A series of institutional developments are highlighted below.

#### **a). UNDUGU COMMISSION (1983-1993)**

The word *Undugu* is derived from the Swahili word, *Ndugu* meaning “Brotherhood.” It was formed in accordance with the 16<sup>th</sup> OAU Summit of July 1979, which called for self-reliance of African states as well as inter-dependence (Ahmad, 1994: 360). It was also further inspired by the African Summit (1980) Lagos Plan of Action that called for an African commitment to strengthen the existing regional economic communities and the establishment of joint river and lake basin organisations to promote inter-governmental co-operation in the development of shared water resources (ibid: 359). Undugu was therefore created in 1983, and operated as an unofficial grouping (Ahmad, 1994: 359-360; Tadesse, 2008). Its broadly defined objectives included consultation on infrastructure, culture, environment, telecommunications, energy, trade and water resources (Arsano and Tamrat, 2005).

Its members were comprised of Egypt, Sudan, Uganda, the DRC, and the Central African Republic (even though the latter is not a Nile riparian) (ibid.). Burundi, Tanzania, Kenya, and Ethiopia participated later but only as observers, and Eritrea never joined the group (ibid.). It has been argued that the lack of complete support by all riparian states from the onset, was regarded as an impediment to the implementation of principles developed at meetings of the Ministerial Council (Ahmad, 1994: 363) The group held sixty-six meetings at the technical and ministerial level between 1977 and 1992, but produced few results (Ahmad, 1994; Mohamoda, 2003: 20).

#### **b). The TECCONILE Initiative (1993-1998)**

The Technical Co-operation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin (TECCONILE)<sup>86</sup> was created in 1993 and was the first attempt to focus on formulating a long-term development agenda for the Nile River basin (Tadesse, 2008: 18). TECCONILE initiated a series of ten Nile conferences in 1993, with the aim of providing an informal forum for dialogue among Nile riparian states and with the international community. This series resulted in the development of a Nile River Basin Action Plan adopted in 1995 with financial support from the Canadian International

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<sup>86</sup> TECCONILE was also the successor of the Hydromet programme launched in 1967, which was a broad-based effort to collect and analyse data on hydro-meteorological aspects of the upper White Nile drainage system.

Development Agency (CIDA) (Arsano and Tamrat, 2005; NBI, 2001: 106; Tadesse, 2008: 18). Original members of this community included Egypt, Rwanda, Sudan, Tanzania, Uganda and the DRC, while Burundi, Ethiopia Kenya, and later Eritrea, maintained observer status (Tadesse, 2008: 18).

The plan outlined 21 projects at a cost of US\$100 million, and in 1997 (Tadesse, 2008: 18), the World Bank agreed to a request by the Nile Council of Ministers of Water Affairs to lead and coordinate donor support for its activities (NBI, 2001: 106). Ethiopia submitted reservations about the Nile Basin Action Plan proposing that the project be undertaken by a multi-disciplinary panel of experts (POE) (Tadesse, 2008: 18). The TECCONILE accepted Ethiopia's proposal to form a POE with the mandate for the development and recommendation of a permanent Nile Basin Co-operative Framework Agreement (CFA) (ibid.).

The POE comprised of three delegates from each Nile riparian state including lawyers, water resource specialists and senior government officials. In 2000, they produced the draft text for the CFA, encompassing general principles, rights and obligations, and institutional structure (NBI, 2001: 106). The draft framework document has made tremendous strides in getting riparian states closer to reaching a basin-wide treaty, however, key issues remain to be resolved. To date, negotiations on the treaty have been concluded at the ministerial level, which started with the POE but later, moved to a negotiation committee. In June 2007, negotiations were concluded, but not with full agreement.

Only one article, the phrasing of Article 14(b) on water security, remains to be resolved (NBI, 2009a).<sup>87</sup> It stated that "...the Nile Basin States therefore agree, in a spirit of co-operation, to work together to ensure that all states achieve and sustain water security and not to *significantly* affect the water security of any other Nile Basin States" (NBI, 2000: Article 14(b)). Drafted in an attempt to harmonise divergent claims of upstream and downstream riparian states, Article 14(b) was deliberately vague in order to diffuse conflictive positions and avoid a stalemate (Erdogan, 2009). However, Egypt and Sudan

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<sup>87</sup> Interview with Ndayizeye, A. (2008) Former Executive Director of NBI, Entebbe, Uganda, 30 September 2008: Appendix 2B; Interview with Mutayoba, W. (2008) Director of Water Resources, Ministry of Water and Irrigation, Tanzania, Entebbe, Uganda, 25 September 2008: Appendix 2B; Interview with Tindimugaya, C. (2008) Commissioner, Water Regulation: Directorate of Water Resources, MWE, Entebbe, Uganda, 1 October 2008: Appendix 2B.

objected to this, arguing instead, that the wording be changed to: “...the Nile Basin States therefore agree, in a spirit of co-operation, to work together to ensure that all states achieve and sustain water security and not to *adversely* affect the water security *and current uses and rights* of any other Nile Basin State” (ibid.). According to the former Executive Director of the NBI, Mr. Audace Ndayizeye, “the ministers decided to refer the impending issue to the heads of states. And we hope that the heads of states can take a decision. Otherwise 39 articles have been agreed upon except that one”<sup>88</sup>. Concluding this process and adopting a CFA would establish a permanent river basin commission, and may facilitate incremental basin-wide socialisation and internationalisation of agreed upon norms, both global and regional.

### **c). The Nile Basin Initiative (NBI)**

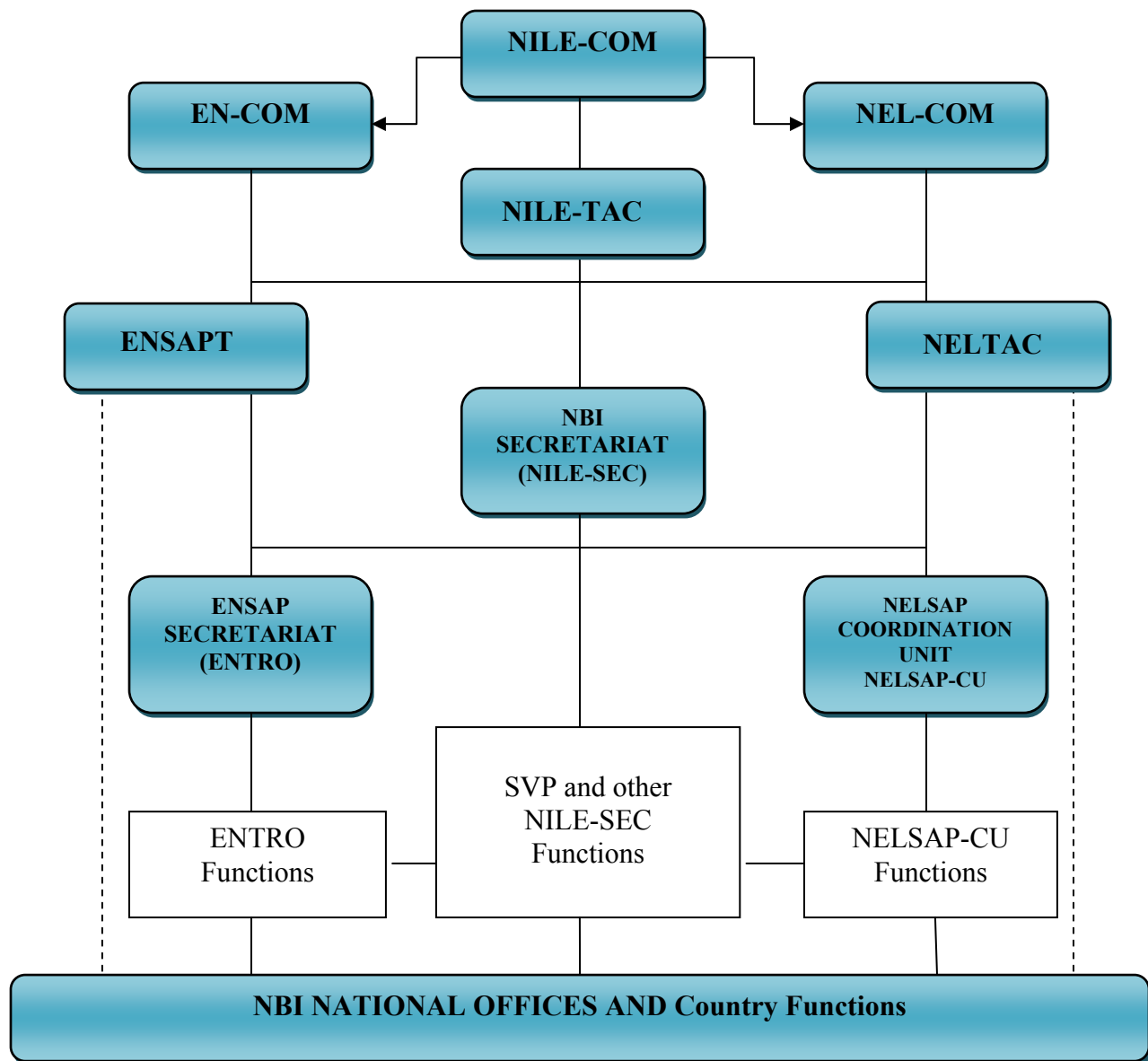
The NBI was launched in 1999 to be a transitional mechanism that included all Nile riparian countries in a regional partnership to catalyse economic development and regional integration, to fight poverty and promote stability in the region. The NBI’s shared vision agreed upon by Member States is, “To achieve sustainable socio-economic development through equitable utilisation of, and benefit from, the common Nile Basin Water resources” (Waako, 2008: 3). The NBI organisational structure is made up of the following:

1. The Council of Ministers of Water Affairs of the Nile Basin States (Nile-COM), which serves as the highest decision-making body of the NBI. Its chair rotates annually, and it is subsequently divided into the Eastern Nile Council of Ministers (EN-COM) presiding over issues pertaining to the Blue Nile, and the Nile Equatorial Lakes Council of Ministers (NELCOM). While EN-COM is supported by the Eastern Nile Subsidiary Action Programme Technical Team (ENSAPT), NELCOM is supported by the Nile Equatorial Lakes Technical Advisory Committee (NELTAC) (ibid.).
2. A Technical Advisory Committee (Nile-TAC), which comprises of technical level representatives from the Member States who report to Nile-COM, are charged with technical guidance of the NBI (NBI, 2001). Nile-TAC is composed of two senior officials from each member country (ibid.).

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<sup>88</sup> Ndayizeye, A. (2008) Interview: Appendix 2B.

**Figure 5: NBI Operational Structure (Waako, 2008: 10)**



3. And a Secretariat (Nile-SEC) based in Entebbe, Uganda. The Nile-Sec is subsequently divided into the sub-basin investment-oriented Subsidiary Action Programmes i.e. the Eastern Nile Subsidiary Action Programme (ENSAP) comprising of Egypt, Sudan and Ethiopia; and the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP) comprising of Burundi, DRC, Kenya, Rwanda,

Tanzania and Uganda as well as Sudan and Egypt.<sup>89</sup> These programmes manage investment projects and ensure that they remain within budget and on schedule (NBI, 2001; Waako, 2008).

#### **d). Orchestrated Norm Convergence**

Through its institutional design, the NBI has set out to build trust amongst the riparian countries and promote co-operative multi-purpose investments in the area of energy and power trade, agriculture, watershed management, information sharing, monitoring, and the environment (Waako, 2008: 2). It is arguably the case that the NBI has orchestrated the socialisation of specific norms around issue clusters through its Strategic Action Programme (SAP). The SAP has two main objectives: 1). to achieve a shared vision in order to provide a framework for 2). activities on the ground (NBI, 2001: 106-107). These ideas/norms are translated into actions through two complementary sub-programmes: 1). the Shared Vision Programme (SVP), which aims to create a coordination mechanism and “enabling environment” for co-operation action; and 2). The Subsidiary Action Programmes plan and implement action on the ground at the lowest appropriate level (NBI, 2001: 107). While the Subsidiary Action Programmes deal with the implementation of investment activities on the ground, which help to realise the shared vision, the SVP relates to ideational and normative convergence at the basin level in order to achieve implementation. Extensive resources have also been put into this process (US\$130 million) to facilitate collaborative action, exchanges of experiences, trust and capacity building, designed to build a strong foundation for regional co-operation, and thereby defining the type of regional co-operation (through the establishment of agreed upon rules, norms and ideas).

The SVP includes seven thematic projects and one SVP Coordination Project managed by the Nile-Sec. These include projects on water resources, the environment, power trade, agriculture, applied training, communications and stakeholder involvement

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<sup>89</sup> Sudan and Egypt's inclusion in the NELSAP indicates that the strategic interests of these downstream countries also extend to this portion of the basin.

(NBI, 2001; Waako, 2008). The SVP Coordination project was created to strengthen the capacity of the NBI institutions.<sup>90</sup> A description of all eight projects is outlined in Table 18.

**Table 18: Descriptive outline of the NBI's eight Shared Vision Programmes (Waako, 2008)**

<b>Project</b>	<b>Location</b>	<b>Brief Description</b>
<b>Applied Training Project (ATP)</b>	Cairo, Egypt	This project seeks to strengthen capacity, build knowledge and provide training for water resources planning and management in the basin. It does this through short courses and tertiary level education, MSc and PhD education, curriculum development and facilitating exchange between water professionals in different basin countries.
<b>Confidence Building and Stakeholder Involvement</b>	NBI-Sec, Entebbe, Uganda	This project aims to create awareness about NBI activities, goals in the NBI process and ensures stakeholder engagement. Builds confidence through awareness-raising activities: the dissemination of the NBI newsletter, promoting a journalist network, Nile Day. Also engages with stakeholders at all levels through workshops e.g. the Nile Development Forum.
<b>Efficient Water Use for Agri Production</b>	Nairobi, Kenya	This project aims to improve water use efficiency in the agricultural sector, by helping to identify best practice, disseminate best practice guidelines and provides training through regional workshops and consultation.
<b>Nile Transb. Env. Action Programme</b>	Khartoum, Sudan	This project aims to promote co-operation among the Nile Basin countries in protecting and managing the environment and the Nile River basin ecosystem. It also provides skills training to government ministries, NGOs, and local communities in environmental management and monitoring, water quality monitoring and wetlands conservation. The project supports micro-lending activities e.g. the water conservation micro grant programme.
<b>Regional Power Trade (RPT)</b>	Dar es-Salaam, Tanzania	This project seeks to promote regional power markets in Nile Basin countries by delivering technical assistance to promote regional power trade and by conducting a series of studies and training sessions that equip Nile riparians to understand the benefits, impacts and trade opportunities associated with regional power markets.
<b>Socio-econ. Development &amp; Benefit-sharing</b>	Entebbe, Uganda	This project aims to develop a knowledge base and network of professionals focused on the potential gains from Nile basin co-operation by developing a body of applied research highlighting co-operative options and benefits in the Nile, as well as supporting research networks in Nile basin countries.
<b>Water Res. Planning and Management (WRPM)</b>	Addis Ababa, Ethiopia	This project looks at improving analytical capacity for water resources management in the Nile. The primary focus here is on Decision Support System development for information sharing and analysis. The project also builds capacity in water policy at the national and regional levels.

The unique way in which the SVPs are structured has also contributed substantially to creating national ownership of these SVPs by 1). having each thematic project housed in a different riparian country, and 2). by redistributing leadership i.e. by delegating project managers to offices in other riparian countries and not in their country of origin.<sup>91</sup> As Wondimu notes, “We have an Ethiopian in Sudan, we have a Rwandese in Egypt, we have

<sup>90</sup> Interview with Wondimu, H. (2008) Senior Program Officer, Shared Vision Program, NBI Secretariat, Entebbe, Uganda, Entebbe, Uganda, 30 September 2008: Appendix 2B.

<sup>91</sup> Ibid.



an Egyptian in Ethiopia, we have a Ugandan in Tanzania, this type of arrangement, Kenyan in Uganda. So you don't see any leader of that project sitting within his country, because it also creates a sense of ownership for the other countries whereby they see it as giving benefits to their countries as well.”<sup>92</sup> This approach has facilitated trust and created ownership by all riparians and local communities.

Collectively, SVP activities have helped to promote a common understanding of the interaction between national policies, regional needs and co-operative development, forming a more effective basis for co-operation at the regional and sub-regional levels (Waako, 2008: 5). Basin-wide, sub-regional, and national information exchange under the SVPs are active and are being used to facilitate dialogue (ibid.). Capacity building is another objective, although this is a challenging feat with riparian countries operating at vastly different capacity levels (ibid.). Stakeholder consultation is currently underway at regional, sub-regional, national levels of scale including investment consultations and socioeconomic development and benefit-sharing activities (ibid.). Protocols for transboundary data-sharing and other related protocols are being developed (ibid.). Moreover, significant progress has been made in terms of policy alignment and harmonisation between national water policies and transboundary water strategies (ibid.). These achievements all point to the conclusion that the SVP has contributed substantially, and was in fact designed, to build a Nile basin community of interest; to facilitate lateral norm convergence from state to state, as well as from state level to the basin level. As Waako (2008: 5) concludes, these achievements have helped to build a technical foundation for water management in the basin; and establish and promote the NBI as a trusted institution at all levels.

### **5.3.3. SUB-BASIN LEVEL AND SUB-REGIONAL CONTEXTS**

Due to its biophysical magnitude, the Nile River basin is institutionally sub-divided into two river systems or sub-basins, the Eastern/Blue Nile and the Nile Equatorial Lakes sub-basin (NELSB) or White Nile. However, the division of the Nile River basin into two parts can largely be attributed to economic and political reasons. The World Bank's role in investment projects also helped define the co-operative parameters. Instead of sticking to

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<sup>92</sup> Ibid.

Operational Directive 7.70 which prohibits it from lending to one riparian if any other riparian objects to the proposed project, another approach was adopted – subsidiarity (Nicol, 2003a: 181). This enabled the sub-division of the basin into two key areas, and thus, facilitated continued co-operation through a reduction in transaction costs and increased linkage of benefits to riparian countries (ibid.). In accordance with these groupings, sub-regional economic institutions are similarly structured. Since this investigation uses the NELSB as its case study, this section will provide an institutional and legal overview of the sub-region.

The NELSB comprises of those countries on the White Nile that are riparian to the Nile i.e. Burundi, DRC, Tanzania, Kenya, Uganda and Rwanda, but excluding Sudan and Egypt. Additionally, several of these countries are also united by their riparian status to Lake Victoria, which is a significant economic resource. Several institutions and initiatives exist in this region, most notably the Lake Victoria Environmental Management Project (LVEMP), the Lake Victoria Basin Commission (LVBC) formed as a branch of the East African Community (EAC) as well as the Lake Victoria Fisheries Organisation (LVFO).

The LVEMP started in 1997 and its aim was to restore the degraded lake ecosystem (NBI, 2001: 4). This agreement between Kenya, Tanzania and Uganda, is laying the foundation for a long-term programme on investments to help sustain the many activities in the lake and its catchment areas. As part of a complementary long-term process, the governments of Kenya, Tanzania and Uganda have formalised co-operation through the East African Community (EAC) (EAC, 2007, 2008a, 2008b). Kenya, Tanzania and Uganda have had a long history of co-operation under several regional integration arrangements. These have included the Customs Union between Kenya and Uganda in 1917, which the then Tanganyika (present day Tanzania) joined in 1927, the East African High Commission between 1948 and 1961, the East African Common Services Organisation (1961 – 1967), the Permanent Tripartite Commission for East African Co-operation (1967 – 1977) and the Permanent Tripartite Commission (1993 – 2000) (EAC, 2008a).

Following the dissolution of the Permanent Tripartite Commission for East African Co-operation in 1977, Kenya, Tanzania and Uganda negotiated and signed a Mediation Agreement for the Division of Assets and Liabilities in 1984 (ibid.). This led to the signing of the Agreement for the Establishment of the Permanent Tripartite Commission for East

Africa Co-operation in November 1993 (ibid.). Following the establishment of a Secretariat in 1996 in Arusha, Tanzania, the Agreement establishing the Permanent Tripartite Commission was upgraded, and a treaty-making process was initiated (ibid.). The conclusion of this process and the signing of the Treaty for the Establishment of the East African Community in November 1999, led to the establishment of the East African Community in July 2000 (ibid.). Burundi and Rwanda joined the organisation in 2006 (Cascao, 2009: 251). The treaty was subsequently amended in 2007 to put in place processes to establish an East African Customs Union, a Common Market, and ultimately, a Political Federation (EAC, 2007).

The LVBC, through the Lake Victoria Development Programme, coordinates the various interventions on the Lake Victoria and its basin and therefore serves as a centre for promotion of investments and information sharing among various stakeholders (EAC, 2008b). The EAC, seeing the need to develop Lake Victoria into a “regional economic growth zone,” established this programme in 2001 to focus on the harmonisation of policies and laws on the management of the environment in the catchment area, to manage the eradication of alien species such as the water hyacinth, to manage the conservation of aquatic resources including fisheries, and to oversee economic activities (fishing, industry, agriculture, tourism), as well as to focus on the development of hydraulic infrastructure such as irrigated agriculture and hydropower energy in the Lake Victoria basin (ibid.).

The Lake Victoria Fisheries Organisation (LFVO) is also noteworthy since it too is an organ of the EAC with a specific mandate to manage the fisheries of Lake Victoria. Moreover, the LFVO is an overlay institution made up of partner agencies such as fisheries departments/ministries, fisheries research institutes, committees and working groups. The LFVO’s core functions are also to manage fisheries and the control of alien species (both fauna and flora) pertaining to the Lake, in addition to the development of aquaculture, fisheries research, post harvest development and policy and legislation development (Nyeko, 2008).

Another sub-basin that exists on the White Nile is the Kagera River sub-basin. This sub-basin is noteworthy for its role in co-operative institutional arrangements involving some of the White Nile riparians: Burundi, Rwanda, Tanzania and Uganda. The Kagera Basin Organisation (KBO) was established in 1977 in an attempt to facilitate basin-wide

development and co-operation on the Kagera (Mbaziira, Senfuma and McDonnell, nd.). This agreement was signed by Burundi, Rwanda and Tanzania, and in 1981, Uganda acceded to it. However, the KBO became defunct and the formal dissolution occurred in July 2004 following a decision by the Kagera Council of Ministers that all KBO activities be transferred to the EAC upon its reactivation (ibid.). Scholars have attributed the KBO's dissolution to its failure to deploy appropriate social resources to engender a culture that would enable the riparian states to sacrifice constituency interests and focus on the goal of fighting poverty (ibid.). In essence, they failed to achieve internal cohesion, commitment and ultimately normative convergence. The experiences from the KBO do, however, offer tremendous insight from lessons learned in terms of political stability, commitment, financial resources mobilisation and importantly, the strengthening of social resources to identify, define and deploy the appropriate development, reform and adaptation mechanisms (Mbaziira, *et al.*, nd.)

The summary of sub-basin level institutional arrangements described above, points to a complex institutional structure in the sub-basin. However, this sub-basin could also be interpreted as being institutionally overburdened. Nyeko has argued that the LVFO's relationship with the LVBC is unclear due to the ambiguous demarcation of roles and responsibilities (Nyeko, 2008). He argues that the scope for co-operation and communication requires resolution to prevent duplication or conflicting agendas (Nyeko, 2008: 2). When asked about the degree of coordination and synergy or the overlapping of responsibilities and functions, the EAC pointed to the need for institutional complexity due to the need to define and consolidate different interests in different fora.<sup>93</sup> According to Tom Okurut, head of the LVBC, the LVBC helps to articulate the interests of the East African people in NBI processes involving East African states but also non-East African states.<sup>94</sup> “And that's why the LVBC is here, to better define our interests. So that when we are negotiating in the NBI process, ours are well-defined as a region.”<sup>95</sup>

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<sup>93</sup> Interview with Okurut, T. (2008) Head of Lake Victoria Basin Commission (LVBC), East African Community (EAC), Arusha, Tanzania, Entebbe, Uganda, 26 September 2008: Appendix 2B.

<sup>94</sup> Ibid.

<sup>95</sup> Ibid.

#### 5.3.4. NATIONAL CONTEXT

Historically, upstream countries have been mainly characterised by (British or Belgian) colonial rule, economic underdevelopment, internal conflict, political instability, lack of financial support and capacity, lack of water policies or strong governance structures such as institutions and weak bargaining strategies. As a result, the waters of the White Nile have remained mostly underutilised (Cascao, 2009: 249). Cascao argues for the dynamics of change in the basin as a whole, brought on, in large part, by increasing economic and political stability of upstream countries as well as increased integration (ibid.). Upstream riparians are becoming more willing and able to develop their water resources to meet national development needs (ibid.). They have more financial support, both in terms of their own resources, but also access to external donors such as the World Bank and China, support which was not available a decade ago (ibid.). Remaining questions are whether the riparians of the White Nile have converged on a regional normative agenda by redefining their interests accordingly, or whether they have in fact used their economic and political leverage to move forward with unilateral hydraulic infrastructural development despite the multilateral co-operation processes that have become more apparent. A brief overview of White Nile riparian states' transboundary stance is noteworthy.

##### **a). Tanzania**

Tanzania is endowed with more transboundary waters than any country in Africa (Mutayoba, 2008), sharing twelve international rivers and lakes with other nations.<sup>96</sup> The institutional framework for water governance in Tanzania is provided by the National Water Policy (NAWAPo) of July 2002, although Tanzania is undergoing a review of its policies particularly as it relates to current and future transboundary challenges i.e. the falling levels of Lake Victoria.<sup>97</sup>

In terms of the Nile waters, Tanzania has stated its needs as: wanting to exercise its riparian rights on Lake Victoria, having great interest in developing and conserving the

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<sup>96</sup> Tanzania's shared rivers and lakes include the three East African Great Lakes (Victoria, Tanganyika, and Nyasa), Lakes Chala, Jipe, Natron system; and the Kagera, Mara, Pangani, Uмба, Ruvuma, and Songwe Rivers. Some wetlands and aquifers are also transboundary (Mutayoba, 2008).

<sup>97</sup> Mutayoba, W. (2008) Interview: Appendix 2B.

resources of the Lake Victoria sub-basin, and having an interest in developing tourism and agriculture (Tadesse, 2008: 4). Additionally, it poses a relatively smaller threat to the quantity and the quality of the Nile River, and would benefit from basin-wide co-operation (ibid.).

Tanzanian international water law has arguably been greatly influenced by the Nyerere Doctrine, which is based on the selective succession to treaties. Following independence in 1961, Julius Nyerere, the first president of independent Tanganyika, invoked an optional doctrine which stated that international agreements dating back to colonial times could be renegotiated or repudiated when a state becomes independent. This was based on the notion that newly independent nations could not be bound to laws that the state was not in a sovereign position to agree to or change at the time (Collins, 1994: 122; Makonnen, 1984; Okidi, 1994: 328-329). The doctrine therefore enabled newly independent states to review all international treaties that it stood to inherit and choose which of those agreements it would accept or not, following a probation period of two years (Waldock, 1972). Shortly after independence, in 1962, the government of Tanzania, therefore rejected the 1929 Nile Waters Agreement and all other agreements signed by Britain on its behalf, citing the Nyerere Doctrine (Kalpakian, 2004). The Nyerere Doctrine is therefore significant for the role it has played in codifying norm resistance to externally imposed norms, and giving a certain degree of agency back to NELSB countries.

#### **b). Kenya**

Kenya gained independence in 1963 and followed Tanzania's example by invoking the Nyerere Doctrine, and rejecting the 1929 Agreement. Tadesse (2008: 4) argues that while Kenya has no significant claim to Nile water allocation, it has interests in developing its part of the basin. Additionally, while it is not directly affected by the status quo, it expects its riparian rights to be respected and upheld, hopes to gain from basin-wide co-operation, and supports new Nile water agreements (ibid.).

Kenya has major interests in Lake Victoria, evident in its membership status in all regional co-operative arrangements regarding the lake. In terms of basin-wide relations, Waterbury argues that Kenya has always seen itself as a "broker" in the Nile basin and has

never exhibited much interest in any binding agreements on water use (Waterbury, 2002: 5).

### **c). Uganda**

Uganda is very important amongst the NELSB states as a result of its water contribution (Tadesse, 2008: 4). Owing to the abundance of rainfall, and the characteristics of hydrology of the Sudd, its consumptive demands are not a serious threat to downstream users. Uganda does, however, have a great deal of interest in ensuring its entitlement in future Nile water agreements, and also expects to benefit from basin-wide co-operation programmes (ibid.).

According to Uganda's National Water Policy of 1999, "it is in Uganda's interest to ensure that the good water quality in the water bodies within the national boundaries is maintained for sustainable use" (Ministry of Water, 1999: 3.2). Based on Uganda's overall policy objectives of good neighbourliness and promotion of regional co-operation for optimal use, Uganda's policy principles therefore adhere to the various accepted principles of international law, regional and basin-wide bodies of co-operation such as TECCONILE, IGAD, the Kagera Basin Organisation, LVFO etc. (Ministry of Water, 1999: 3.2).

### **d). Burundi, Rwanda and the DRC**

Burundi, the DRC and Rwanda are secondary players in the Nile River Basin as a whole but have specific interests in various sub-basins. Burundi's interest in the Nile is vested in the Kagera River on which it is highly dependent for development (Tadesse, 2008: 3), particularly hydropower generation (Waterbury, 2002: 5). While its consumptive water demand is relatively low, and while it does not expect water allocation from the Nile, it does claim riparian rights on the Kagera River. It also has strategic interests in the Lake Victoria Basin and could benefit from regional co-operation (Tadesse, 2008: 3). Burundi has also been constrained by political instability and internal violence, contributing factors to its lack of capacity. In this regard, it has sought out the assistance of the NBI to help develop its capacity in an attempt to level the playing field at basin-wide negotiations.<sup>98</sup>

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<sup>98</sup> Interview with Hakizimana, G. (2008) Director of Environment, National Institute for Environment and Nature Conservation (INECN), Burundi, Entebbe, Uganda, 25 September 2008: Appendix 2B.

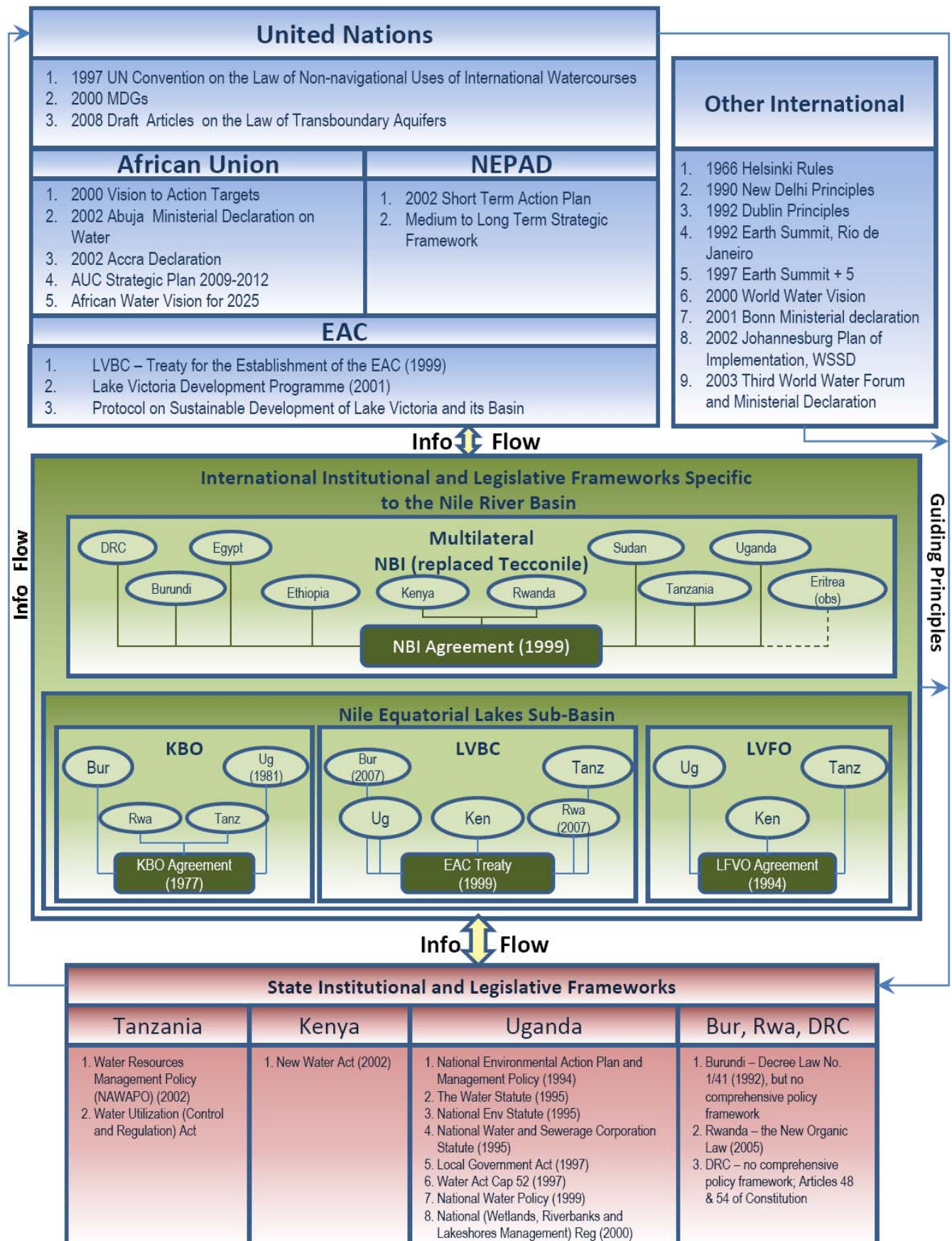
Rwanda has similar interests to Burundi. It too, is blessed with high and regular rainfall and it is also mainly interested in strengthening its hydropower capabilities (Tadesse, 2008: 4; Waterbury, 2002: 5). The Kagera River inflow is hugely important to the water balance of Lake Victoria, in which Rwanda is a key riparian player. Moreover, it expects to gain from regional co-operation and this is evident in its bid to join the EAC. It is also in support of a new basin-wide agreement (Tadesse, 2008: 4).

The DRC is an interesting case, because only recently, has it expressed any interest in the Nile (Waterbury, 2002: 5). It is less dependent on the White Nile for its development, and as such its consumptive demands in the basin are relatively low (Tadesse, 2008: 4). However, Waterbury argues that when Mobuto Sese Seko was in power, he entertained an Egyptian proposal to build a power grid leading from the Great Inga hydropower station to the Nile basin, which would eventually lead all the way to Europe (Waterbury, 2002: 5). The Inga Dams also served a political objective. They enabled Kinshasa to control the energy supply of the sometimes rebellious Shaba province. Currently, the two hydroelectric dams, Inga I and Inga II, operate at low output, and are commonly regarded as white elephants.

The DRC also contributes significantly to Lake Victoria and Lake Albert, and as such, has expressed interest in ascertaining its riparian rights, promoting tourism as well as its fishing and shipping rights on and in Lake Albert (Tadesse, 2008: 4; Waterbury, 2002: 5). It also has expressed a newfound interest in co-operating in mutually beneficial basin management programmes, evident in the fact that the current Executive Director of the NBI is Congolese. In this regard, it also supports the formation of a future basin-wide agreement (Tadesse, 2008: 4).



**Figure 6: The Current Institutional Framework of the Nile Equatorial Lakes Sub-Basin**



### **5.3.5. SUMMARY OF LEGISLATIVE AND INSTITUTIONAL FRAMEWORK**

In summary, the legislative and institutional framework of the Nile has been historically characterised by unilateral development as a result of colonial agreements. This has resulted in the lack of multilateral treaty agreements governing the entire Nile River basin. Trust-building is of paramount importance to rebuild riparian relationships.

A central legalistic challenge in the Nile has been the inability to strike a balance between the principle of equitable utilisation and the no harm doctrine, with downstream countries invoking historic rights to water and the no harm doctrine, and upstream countries citing equitable use. As such, the UN Convention has added little value in terms of clarifying these misunderstandings. If anything, the Nile River basin displays a typical case example of norm resistance to global normative principles.

The past decade has seen major developments made towards multilateral co-operation. Some institutions have displayed behaviour that resembles an attempt to orchestrate normative convergence, however, due to the Nile's unique socio-political and historical context, this has not always produced intended results.

### **5.4. THE NELSB WITHIN THE NILE BASIN AND THE MENA HSC: A REALIST ARGUMENT**

The same elements relevant to the SAHPC described in chapter four, such as, the relationship between pivotal and impacted states, and the economic and governance status of states, are also important when reviewing the Nile River basin and its sub-basins. Indeed, this is of even greater importance in the Nile due to the role of Egypt as a pivotal state or the 'hydro-hegemonic' riparian, the latter term defined by Zeitoun and Warner (2006) in their writings on hydro-hegemony. Zeitoun and Warner differentiate between three types of power: 1). Material power, which relates to the levels of economic development, military might, political stability, and access to external political and financial support; 2). Bargaining power, which is determined by the ability to control and influence the agenda and the 'red lines' of negotiations; and 3). Ideational power, which is determined by the ability to influence knowledge and construct discourse (Cascao, 2009; Zeitoun and Warner, 2006). It is arguable that Egypt has historically been the most

powerful riparian in each of these dimensions (Cascao, 2009: 248; Zeitoun and Warner, 2006).

Turton highlights the fact that since most of the Nile's waters originate in Ethiopia, it is out of the control of the most dependent and most powerful downstream user i.e. Egypt. This characterises the Nile River basin by an asymmetric power configuration, with the most downstream riparian regarding the Nile as a vital national security interest (Turton, 2001c: 22). Based on these dynamics, Turton argues that the Nile River basin is, in fact, a hydropolitical complex because the water issues that have been raised within this context can only be solved by co-operation amongst its riparians (Turton, 2001c: 22).

As is evident in Table 16, Egypt is undoubtedly the regional hegemon in economic terms; its GDP and GDP per capita dwarfing that of the nine other riparian states. According to Cascao, its economy is stronger, more diverse and further integrated in the global economy than those of the other Nile riparians (Cascao, 2009: 248). Moreover, it has maintained this role because it has nurtured its relationship with international donors and cultivated close political alliances with the United States and the Middle East (Hira and Parfitt, 2004; Othieno and Zondi, 2006). It is also the most powerful state militarily, and has the capacity to project and sustain this might (Cordesman, 2004).

In terms of bargaining power, Egypt comes out first as well, in its control over the agenda of politics and of the ways in which it is able to sanction issues and keep them out of the political process (Lukes, 2005 [1974]). Through the use of discursive and bargaining tools and threats, Egypt has been able to influence the basin's overall hydropolitical agenda in both multilateral and bilateral arrangements. By citing its "historic and acquired rights," as well as the 1959 Agreement, it has been able to steer negotiations in its favour, something which other riparians have not been able to do historically as a result of weaker or no bargaining tools (Cascao, 2009: 248). The latter dynamic has, however, changed in recent times, with upstream countries acquiring more political and economic stability.

In ideational terms, Egypt has also been the strongest state in the basin. According to Allan, Egypt has been able to sanction particular favoured discourses in the basin (Allan, 1999a). By citing its "historic rights" and linking its national security to water security, Egyptian norm entrepreneurs have framed the debate in a highly securitised manner. Several authors, including Buzan and Turton, have argued that, throughout history, Egypt

has employed the “securitisation” tactic (water as security priority or even top national priority) to reinforce its hegemony in the basin, and justify certain actions (“hydraulic mission” and “resource capture”) over the Nile waters. However, Buzan explains that desecuritisation is the alternative to securitisation (Buzan, *et al.*, 1998:87; Turton, 1999b: 96) and “is desirable wherever possible” (Turton, 2003d: 113). This is one of the options available to Ethiopia, which would enable it to place water issues in normal politics rather than security politics. If the national and regional institutional arrangement were enhanced, and if political will and transparency were present, the “desecuritisation” dynamics would be translated into capacity and confidence-building, and later in win-win co-operative outcomes. According to Turton, a desecuritisation model includes several important elements: enhanced co-operation, basin-wide institutional development, changing perceptions, negotiations, third-party involvement, and mobilisation, interpretation and sharing of data (Turton, 2003d: 120). It is, therefore, in the best interest of Ethiopia’s strategy that co-operation and institutional development replace conflictive competition.

## **5.5. CRITICAL ENGAGEMENT WITH THE NELSB’S ROLE IN THE HSC**

However, much like the SAHPC, the static nature of the terms pivotal and impacted is a severe constraint when using the HPC as a conceptual lens in the Nile River basin due to the multi-level level of water governance, particularly at the sub-basin level. Indeed, these terms become interchangeable when comparing different Nile riparians in different sub-basins as compared to their role in the entire basin. Moreover, the shift in power relations in the past decade makes the HPC view outdated, and once again proves that it is too static a lens to address the dynamic nature of transboundary water governance. Additionally, the state-centric nature of the HPC is once again a limiting factor. Finally, it adds little to our understanding of external actors and their influence, and sub-national configurations; and how both affect the normative environment within which transboundary water governance is embedded.

### 5.5.1. CHANGE IN POWER ASYMMETRIES

Over the last decade the Nile River basin has undergone several political and economic changes that are expected to promote shifts in the current balance of power in the basin and thus affect hydropolitical dynamics between Egypt and the NELSB. The NELSB states have seen an increase in economic and political stability and as such, have become more vocal in articulating their interests in basin-wide arrangements. Indeed, the sub-basin itself has obtained significantly more leverage, and while it still pails in comparison to the Eastern Nile in terms of strategic importance and contribution to streamflow, it has articulated and developed a unique sub-basin voice in many respects. In this regard, the static nature of the terms pivotal (basin) and impacted (basin) is a severe constraint to using the HPC as a conceptual lens in the Nile River basin due to the multi-level level of water governance, particularly the importance of the sub-basin level.

Indeed, these terms also become interchangeable when comparing the role or positionality of a Nile riparian in different Nile sub-basins as compared to their role in the entire basin. Uganda is, for instance, an impacted state in the entire basin, but can certainly be regarded as a pivotal state in the NELSB. Similarly, while Ethiopia may be viewed as a pivotal state in the whole basin and Eastern Nile sub-basin in particular, it is only impacted by the NELSB. More importantly, the distinction between these two terms becomes arbitrary when one reviews Egypt's status as a pivotal state in the entire basin, but both impacted *and* pivotal in the Nile Equatorial Lakes sub-basin. The distinction between what is pivotal and what is in fact impacted adds little understanding to the complex roles of states in the Nile.

Additionally, while Waterbury argues that national factors are the “main determinants for collective action” (Waterbury, 2002) the riparians of the Nile Equatorial region have begun to consolidate their interests into sub-basin co-operative agendas. The NELSB countries are economically and politically stronger than what they were a decade ago. They have developed stronger bargaining tactics and are more vocal in their claims for renegotiation of the basin's volumetric water allocations (Cascao, 2009: 263). These countries are resolute to develop their water resources and with the help of their new external funding partner, China, they have begun to achieve this.

### **5.5.2. THE ROLE OF EXTERNAL ACTORS: ENTER CHINA**

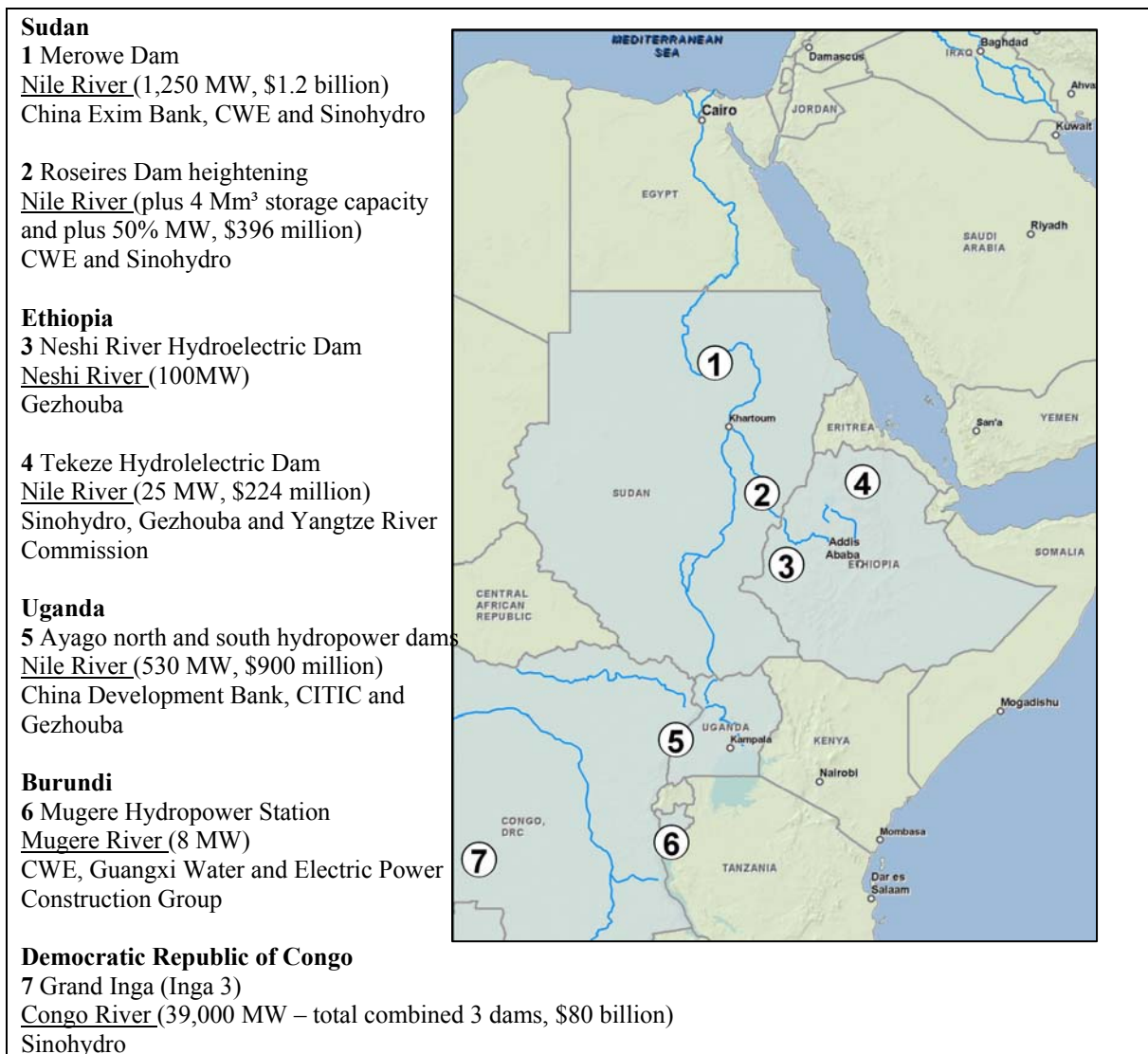
The state-centric nature of the HPC fails to recognise the influence that external non-state or supra-state actors have had on transboundary water governance in the Nile. Organisations such as the World Bank and the UNDP have had a long history of involvement in financing basin-wide activities. Waterbury argues that they have in fact become “entrepreneurs of co-operation” (Waterbury, 2002: 80). But arguably the most “economically liberating” development for NELSB countries has been the involvement of China in financing water development projects since 2000, a fact that represents “an emblematic shift in terms of access to funding and construction contracts for hydraulic infrastructure in the basin” (Cascao, 2009: 260). While the HPC may enable an understanding of China’s presence (as a nation state) in the NELSB as an example of overlay, it says little about the make-up of China and its influences. Referring to “China” may make sense heuristically, but ontologically, it is becoming increasingly problematic to speak of it as a monolithic entity (Brown, 2007; Taylor, 2009). In the era of globalisation particularly, China’s foreign-economic policies are influenced and shaped by a wide range of actors, who in turn, are pressured by a variety of interest groups and demands (Taylor, 2009; Zhang-Yongjin, 2005). Indeed, the involvement of “China” in infrastructural development projects in Africa is largely run by Chinese led multinational corporations.

Prior to Chinese involvement, the lack of external support for hydraulic projects had been a major constraint to the development of upstream infrastructure, and consequently, maintained the status quo of power relations in the Nile (Cascao, 2009). There has been reluctance on the part of international and regional financial institutions as well as bilateral donors, to support projects in Ethiopia and the NELSB countries. This reluctance can be attributed to a lack of political stability needed to secure investment in these countries but also unwillingness on the part of donors to fund controversial projects that could potentially affect the water availability to other countries (ibid.). The World Bank, for example, has declined to fund projects in upstream riparian states because the Bank’s Operational Directives stipulate that all downstream riparians have to concede to it for any project to be financed (WB, 1994). This policy is not unique to the World Bank, with the African Development Bank adopting similar directives. As Waterbury (2002)

argues, these directives have granted Egypt “veto power” which has been used to prevent project development in the upstream catchments.

According to the INGO, International Rivers, Chinese companies are currently involved in seven projects in the Nile basin countries: two projects in Sudan, two in Ethiopia, and three in Uganda, Burundi and the DRC with new projects still being negotiated currently (Brewer, 2008: 17). Although some of the seven ongoing projects in the region are located in river basins other than the Nile, China’s recent presence in the region is clearly substantial (see Map 4).

**Map 4: Chinese Support to Hydraulic Development Projects in the Nile (Adapted from Brewer, 2008: 17; Cascao, 2009: 261)**



The introduction of China as Africa's new hydraulic infrastructure financier has brought not only new opportunities for dam construction, but also new challenges for hydropolitical dynamics in the region. Chinese involvement, armed with favourable financial contracts, has given NELSB countries the financial freedom to move ahead with unilateral developments without requiring consultation or approval from downstream riparians (Cascao, 2009: 261). In essence, China has taken away Egypt's veto right to halt or stop hydraulic developments upstream.

The HPC, therefore, has little room for the burgeoning importance of external actors such as China in its hydropolitical conceptualisation. It provides more attractive contracts and speedier delivery of projects than its western competitors due in large part to having regional offices already in place in the basin. Additionally, China has different conceptions of good governance or human rights than the West, and NELSB countries may choose Chinese development projects over western ones. Equally significant, Chinese and African elites share similar norms and interests of economic prosperity. As such, the normative influence it will exert in terms of transboundary water governance, still remains to be seen, but will almost certainly, continue to grow.

## **5.6. TOP-DOWN NORM DIFFUSION**

As alluded to previously, top-down norm diffusion of the global transboundary norm set has not been a smooth process and some might argue that it has in fact not occurred. If one examines the influence the Nyerere Doctrine has had on opposing pre-existing colonial treaties based on historic rights and territorial sovereignty, and similarly, the unwillingness of Nile riparian states to sign and ratify the UN Convention, there is a clear distrust of external normative frameworks in this basin. Indeed, a normative clash is evident between the principles of equitable utilisation and no harm on the one hand favoured by upstream states; and absolute territorial sovereignty and acquired and historic rights on the other hand, favoured by downstream states. Given the fact that most Nile riparian states present at the adoption of the UN Convention abstained during the voting process, the contested principles in the UN Convention have not been able to be socialised by a critical mass. This is in large part, a function of the UN Convention and its inability to maintain equilibrium between the two principles despite the Convention's attempts to



neutralise them in Articles 5 and 7. According to Brunnée and Toope (2002: 152), the explanation for the voting pattern by Nile riparians (i.e. Ethiopia, Egypt, Rwanda, Tanzania abstaining; Burundi voting against; Eritrea, Uganda and the DRC absent; and only Kenya and Sudan voting in favour) lies in the deduction that if neither lower riparians nor upper riparians believed that the Convention adequately protected their divergent claims, the Convention may have been ratified by all riparians. Neither side was therefore left with any assurance that the Convention would uphold the legal priority of their respective positions.

That said however, the UN Convention represents a milestone in the development of international water law and does have a significant impact even if it does not enter into force (McCaffrey, 2001b: 315-317). Its influence is likely to draw from its status as the most authoritative framework of general normative principles and rules governing non-navigational uses of shared watercourses (McCaffrey, 2001b: 261). In the Nile Basin, its influence can be seen in the language used in NBI documents, which tries to reconcile the equitable utilisation and no harm principles (Brunnée and Toope, 2002: 152). A review of the policy guidelines for the Nile Basin Strategic Action Programme reveals that the foundations of the Shared Vision as well as the Subsidiary Action Programmes are in fact principles of equitable utilisation, no significant harm, co-operation in the management and development of the water of the Nile and its sustainable utilisation (NBI, 2009b). Another example of the institutionalisation of global principles, and therefore, the influence of the UN Convention in the Nile basin, is to be found in the works/texts undertaken on the formation of the Co-operative Framework (Project D3) of the NBI. The panel of experts (POE), in initiating this process, conducted a series of discussions for the Framework Agreement on the basis of the UN Convention. This elevates the UN Convention to strategic importance as an aid to help formulate future agreements, and has led scholars to predict that once drafted, the NBI's Co-operative Agreement would most likely embrace general principles as contained within the UN Convention (Wiebe, 2001: 750).

A similar process of indirect top-down norm diffusion as is occurring in the Orange-Senqu River basin is therefore at play: despite the fact that top-down norm diffusion from the global to regional and state levels has not occurred in the conventional manner i.e. when states ratify an international agreement and then implement it; indirect diffusion has occurred where normative principles are altered, or localised to reach broad

consensus and to bypass the battle of norms evident in the UN Convention. The NBI has essentially taken what it likes from this framework and incorporated it into its regional normative framework.

## **5.7. REGIONAL NORM CONVERGENCE**

As previously noted, the balance of power in the Nile River basin has undergone a significant shift. According to Cascao, the NELSB riparians are currently more determined, organised and integrated than they have ever been (Cascao, 2009: 253). The EAC is considered to be a key element in this unification and convergence process as they have enabled the East African countries to articulate their interests in, for example, Lake Victoria. This forum has given NELSB states greater bargaining power in basin-wide arrangements by allowing them the opportunity to define their sub-basin agenda first. Since the EAC's formation, the NELSB riparians have been able to affirm their rights to utilising the waters of the Nile (Cascao, 2009; Kagwanja, 2007). Additionally, while the White Nile (to which the Kagera River and Lake Victoria belong) only contributes 14% to the streamflow of the greater Nile, the potential for development upstream is a challenge for the regional hydraulic configuration and Egypt's position[ality] in the Nile (Cascao, 2009: 253). While abstraction will only be minimal (as compared to that projected for the Eastern Nile), the foundations for a new, stronger player is evident – the NELSB riparians are now ready to create and develop their own hydraulic missions (ibid.).

Normative convergence in the NELSB is also evident by the way in which upstream riparians have solidified their longstanding objections to colonial-era water treaties such as the 1929 and 1959 Agreements. These countries have not only stated their opposition to be bound to colonial treaties, but water authorities from this sub-basin have been the most vocal in expressing their interest in the ratification of the new Nile Co-operative Framework Agreement (TNV, 2008: 9 November), which if finalised and ratified, would be the first treaty to comprise all Nile riparian states, and would eventually lead to the Nile Basin Commission.

To summarise, political and economic changes in the NELSB have, to a certain degree, contributed to changes in the basin-wide balance of power (Cascao, 2009: 253). This development has ultimately facilitated normative convergence at the sub-basin level

with upstream NELSB riparians redefining their national agendas in a more collective manner than before. This has strengthened their bargaining power as they have become influential players in multilateral negotiations, and have some ability to influence the regional agenda “and even to pressurise downstream riparians over the legal issues” (ibid: 253). This can be viewed as a tremendous advancement particularly since the White Nile has always been regarded as less important than the Eastern (Blue) Nile, and as such, its riparians and their agendas played second fiddle. Indeed, the fact that the NBI Secretariat is housed in Uganda is also indicative of the increasing strategic importance the White Nile riparians have in multilateral arrangements.

## **5.8. BARRIERS TO NORM CONVERGENCE IN THE NELSB**

Challenges to state-to-state normative convergence at the sub-basin level do present themselves and can impede normative processes.

### **5.8.1. CAPACITY**

The issue of capacity proves to be a barrier to normative convergence in the sub-basin for two reasons. Firstly, the lack of capacity in the NELSB riparians has been a serious impediment to co-operative growth and development. Six of the ten Nile riparian states have undergone severe civil strife, which has resulted in a backlog of water-related investments, inadequate infrastructure management, and an institutional and human capacity vacuum (NBCBN-RE, 2009). Moreover, technical and resource capacities to address water quality and other transboundary (as well as national water) issues vary considerably between NELSB riparians. The number of senior water professionals, for example, varies from not more than ten in one riparian state (e.g. Rwanda), to over one hundred in another (e.g. Egypt) (ibid.). Water coordination between sectors of water use is still not integrated (ibid.). As noted in chapter four, the lack of capacity obstructs institutional capacity and tests institutional trust/confidence. Allan (1999a) has argued that the unequal distribution of capacity in the basin has exacerbated the historical power asymmetries, where downstream countries such as Egypt, have indeed enjoyed decades of water security as a result of upstream countries’ incapacity to control and dam their tributaries.

Capacity building has therefore been widely accepted as a key ingredient for sustainable development. Investment in human capital is critical, and up until recently, was limited in the Nile Basin. However, the NBI, in an attempt to promote capacity building in basin states, have identified three primary challenges regarding capacity: 1). lack of capacity on integrated water resources management; 2). uneven distribution of capacity between basin countries; and 3). little interaction among water professionals within the basin. If not addressed, these three challenges could impede normative convergence by obstructing social learning processes, preventing the levelling of the playing field and thereby perpetuating an imposition of norms by a discursive, economic or political elite, and prevent information exchange. The NBI, through one of its SVPs i.e. the Applied Training Project (ATP), has sought to address these challenges by assisting in the development of human resources and institutional capacity, however, it is perhaps too soon to evaluate what the successes are of this project in terms of bringing about normative convergence.

However, simultaneously, the increase in sub-basin stability, and recent donor-funded project trends focusing on capacity building could also be viewed as a barrier to normative convergence in the sub-basin. Indeed the growing awareness of the need for capacity building may exacerbate unilateral action by states that slowly become more capacitated to act in this way.

### **5.8.2. LACK OF TRUST**

A lack of trust has permeated riparian relations in the Nile since the inception of colonial water treaties. The lack of trust is related to fears of unilateral developments. This has also resulted in insufficient partnerships between riparian states on development projects. Joint development projects are made more challenging due to limited trade and exchange among riparian countries (NBCBN-RE, 2009). Political, economic, social, cultural and linguistic differences make partnerships all the more difficult (ibid.).

Additionally, the increased political and economic stability of NELSB states have catalysed a recent move towards unilateral development with substantial external financial support (Cascao, 2009: 263). Unilateral trends upstream are becoming all the more apparent, such as the construction of the Merowe dam in Sudan, the Tekezzé dam in

Ethiopia, as well as the highly contested Bujagali dam in Uganda. Two diverging trust processes are therefore, arguably at play: one *trust-building* process brought about by the increase in basin-wide multilateral co-operation in the form of the NBI and various sub-basin initiatives such as the EAC; and one *trust-breaking* process brought about by the increase in unilateral developments from non-hegemonic riparian states (ibid.). Current unilateral trends indicate that the Nile riparian states have not completely abandoned their “hydro-sovereignty” strategy (Wouters, 2000). These trends show that the NBI has in fact failed to materialise a “shared vision” and build a Nile water community engaged in information exchange, professional interaction and joint problem-solving in the basin (Cascao, 2009: 263; NBCBN-RE, 2009).

### **5.8.3. WEAK INSTITUTIONS**

Along with its history of institutional development, water governance on the Nile has had a parallel history of institutional failure. Several institutions, such as the KBO and former versions of the EAC, became defunct as a result of mismanagement, political and economic instability, and the inability of riparian states to “solve the collective action problem” as quoted by Waterbury, where domestic problems of riparian states ultimately led to its dissolution (Waterbury, 2002: 156). A host of factors allude to the KBO’s underperformance and eventual dissolution.

According to critiques of the KBO, its mandate was unclear. Its original mandate included overly ambitious activities that extended beyond the river basin and a lack of focus on priority areas, and reflected a development agenda expected more of a regional development agency, such as the EAC, than a River Basin Organisation (RBO) (Mbaziira, *et al.*, nd.; Mohamoda, 2003; Ncube, 2009). In this regard, Waterbury has referred to the KBO as “one of the most ambitious and coherent river organisations in Africa if not the world” (Waterbury, 2002: 155). However, none of its projects were in line with the core functions of a RBO i.e. hydrological studies, pollution control, environmental protection, or ecological conservation, and instead, included a telecommunications project, acting as a centre for regional economic documentation and a tsetse fly and trypanosomiasis control project (Mbaziira, *et al.*, nd.)

Secondly, inter-state rivalry, particularly the apprehension by Tanzania of Kenya's hegemonic role in institutions, was brought to the fore in institutional development of the KBO. In order to mitigate Kenya's leadership role, Tanzania championed the KBO in the wake of the EAC's collapse. Moreover, Uganda and Tanzania had long complained of favouritism in the distribution of benefits from the Union (*ibid.*). Additionally, Tanzania had just invoked the Nyerere Doctrine on State Succession, outlining its policy on the use of the waters of Lake Victoria and its catchment area, which had been adopted by the governments of Uganda, Kenya, Rwanda and Burundi (*ibid.*). Tanzania therefore hoped to have the KBO act as a replacement for the EAC, and Tanzania would then in turn facilitate trade and transport between landlocked Burundi, Uganda and Rwanda, and the outside world (*ibid.*).

Thirdly, personalised politics and tensions between riparian states played an important role in constraining activities of the KBO (Kagwanja, 2007). This was most evident when General Idi Amin Dada overthrew Uganda's President Apollo Milton Obote, a personal friend of Mwalimu Julius Nyerere of Tanzania. Nyerere refused to acknowledge Amin's leadership, and despite Uganda and Tanzania sharing a mutual dissatisfaction of Kenya's role in the EAC, Nyerere rejected Amin's nominated delegates to the EAC (Mbaziira, *et al.*, nd.). "Instead, he accused Amin of withdrawing the recognised delegates (nominated by Obote) without prior consultation. He made no secret of his wish to have no dealings with President Amin and, thus, Obote's fall arguably dealt the final blow to the EAC" (Mbaziira, *et al.*, nd.: 9).

In retaliation, Amin restricted Uganda's involvement in the KBO to an observer role, and in so doing, undermined the utility of the organisation, since studies could only be carried out in three of the four riparian countries (*ibid.*). Upon Uganda's eventual accession to the treaty, the organisation's administrative arrangements had to be restructured to accommodate the Ugandan delegation, which affected coordination activities (*ibid.*)

Fourthly, the Hutu-Tutsi friction, inherited from the Belgian-constructed microcosm, caused further cleavages in the KBO. Specifically, the tension between two founder members greatly affected organisational processes, resulting in such counterproductive measures as different delegations objecting to projects that seemed to be biased towards the politically dominant group in either country (*ibid.*). Individual states

also refused to send agreed upon delegations to donor countries and institutions to mobilise resources (ibid.).

Fifthly, Franco-Anglo competition and Cold War politics also affected the performance of the KBO by damaging internal cohesion. Tanzania's leading role in the KBO exacerbated French and Belgian fears of an Anglo-Saxon erosion of their positionality in the region (ibid.). Tanzania's socialist inclinations in Cold War politics did not help to alleviate these fears. The organisation, therefore failed to garner financial support and raise the funds to implement its ambitious project portfolio (Mohamoda, 2003; Ncube, 2009; Waterbury, 1979, 2002).

Sixthly, civil strife, political instability and non water-related disputes among riparian states led to the lack of political capacity to engage in the KBO (Ncube, 2009; Waterbury, 1979, 2002). The 1990 Rwandese Patriotic Front's (RPF) invasion of Rwanda from Uganda was arguably the primary exacerbating factor to political differences and mistrust between riparian states. Mbaziira *et al.* (nd: 10) aptly summarise this dynamic:

Since the majority of the invading forces had been members of Uganda's National Resistance Army (NRA), President Juvenial Habyarimana accused his Ugandan counterpart of having aided the invasion, and severed relations between them. With three...of the four member states harbouring deep suspicion of each other, the impact on the organisation's activities was such that timely decisions could not be taken on many KBO activities (Mbaziira, *et al.*, nd.). The invasion also marked the start of the civil war in Rwanda that paved the way for the 1994 genocide. Together with the internal conflicts in Burundi, this meant that it was impossible to continue with project studies and implementation work in about 55% of the KBO's territorial jurisdiction.

Finally, the lack of sustained political will and commitment also contributed to a lack of confidence in the organisation's effectiveness and functionality (Ncube, 2009). While the treaty provided for annual meetings between the organisation's three institutional organs (the Council of Ministers, the Intergovernmental Commission of Experts, and the Summit), the lack of political commitment was such that prior to its dissolution in 2004, the Summit last met in 1993 while the Council of Ministers only met twice in the same period (Mbaziira, *et al.*, nd.; Okidi, 1994). Furthermore, according to Mbaziira *et al.* (nd: 10), even these meetings were redundant, because they ended up being mere talk shops, for none of the resolutions taken were ever implemented.

These factors offer many lessons for the NBI's institutional strengthening initiatives. The NBI launched a US\$33 million institutional strengthening project funded by the World Bank in 2008 in an attempt to circumvent the challenges faced by former institutions. However, the absence of a basin-wide co-operative framework to date, and the inability of Nile riparian states to reconcile differences of water security, still pose major challenges to the NBI's sustainability. Institutional failure therefore prevents normative convergence since it severs institutional pathways that lead to the incremental shift towards a community of interests. Moreover, once these pathways are negatively affected, the time it takes to rebuild them is often longer than it took initially due to the need to do damage control and rebuild trusting relationships.

## **5.9. DRIVERS FOR NORM CONVERGENCE IN THE NELSB**

As previously noted, the last decade has seen greater co-operative arrangements of a multilateral nature, particularly at the sub-basin level. These have been facilitated by several key drivers for state-to-state and state-to-sub-basin-to regional normative convergence and integration.

### **5.9.1. TRUST AND CONFIDENCE-BUILDING**

There is broad consensus that one of the primary objectives of the NBI's Strategic Action Programmes (SAPs) is confidence-building. Questions, therefore, arise on whether these "confidence-building" measures stand a chance to improve the chronic state of mutual mistrust and suspicion that have characterised the development of the Nile.

The NBI's Confidence Building and Stakeholder Involvement (CBSI) Project, is one such project that is expected to increase public awareness and stakeholder involvement in the Nile Basin, expand understanding and confidence, and foster basin-wide ownership of the Nile Basin Initiative (NBI) and its programs.

### **5.9.2. POLICY ALIGNMENT**

A harmonised water governance framework enables transboundary co-operative projects to be implemented in a mutually beneficial way for all parties. Harmonisation in this sense refers to both the alignment of national legal and institutional frameworks with



that of other riparian states, but also institutional harmonisation and integrations of policies and procedures within specific organisations such as the NBI and EAC. As part of its recently launched institutional strengthening project, and to help facilitate basin-wide institutional integration and an eventual move towards the establishment of a basin-wide commission, a key priority for the NBI is to harmonise NBI policies and procedures across the basin. For instance, the SVP Nile Transboundary Environment Action Project (NTEAP) is enhancing and working towards harmonisation of the environment policies of the riparian countries to include transboundary dimensions (NBI, 2008).

The NBI has also encouraged riparian states to align national policies due to the lack of a harmonised institutional and regulatory framework to deal with transboundary watersheds. Whilst many countries have recently enacted new policies for water and environmental management, the degree to which they incorporate transboundary concerns or principles vary. The process of national policy alignment is a long-term one that involves harmonising water policies with a shared vision of good water management and defined goals for cross-border co-operation through ongoing technical implementation and co-riparian dialogue. This has, up until recently, been non-existent in the Nile basin.

### **5.9.3. NORM LOCALISATION AND SUBSIDIARITY**

As noted in chapter three, norm localisation furthers our understanding of norm congruence and aids in normative convergence by making external norms more acceptable to local contexts by “giving due agency to local actors” (Acharya, 2004: 269). This allows them to select, borrow, and jointly agree on modification in accordance with a pre-existing normative framework to build congruence with emerging global norms. According to Acharya (2004: 241), who coined the term, norm localisation goes beyond a mere assessment of the existential fit between domestic and outside identity norms and institutions. As such, the process of norm localisation does not only explain “strictly dichotomous outcomes of acceptance or rejection, localisation describes a complex process and outcome by which norm-takers build congruence between transnational norms (including norms previously institutionalised in a region) and local beliefs and practices” (ibid.: 241).

The principle of subsidiarity is one such principle that has been localised in the Nile. Subsidiarity, as an organising principle originating in Catholic social theory and European Union integration law is based on the notion that matters ought to be handled by the smallest, lowest or least centralised competent authority (Jordan and Jeppesen, 2000: 66). Subsidiarity is therefore, one of the primary elements of federalism used to allocate powers between different governmental levels (*ibid.*).

It is presently best known as a fundamental principle of European Union law and is politically, quite complex. The principle was established in the Treaty of Maastricht signed on 7 February 1992 and entered into force on 1 November 1993 (De Burca, 1998: 218; Jordan and Jeppesen, 2000: 66), and was also contained within the failed Treaty establishing a constitution for Europe. However, at the local level it was already a central principle codified, for example, in the European Charter of Local Self-Government, an instrument of the Council of Europe promulgated in 1985. The present formulation is contained in Article 3b, paragraph 2 of the Maastricht Treaty (formally, the Treaty on the European Union or TEU):

In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community (EU, 1992: Article 3b.2).

The principle therefore assumes and prioritises the autonomy and dignity of the individual, and holds that all other levels of society, from the family to the state and the international order, should be in the service of the individual. Subsidiarity also emphasises the role of small and medium-sized communities or institutions, such as the family, the church, and voluntary associations, as mediating structures which empower individual action and connect the individual with society as a whole.

According to Okurut, organisations such as the EAC, for example, are structured and based on the Treaty (For the Establishment of the East African Community) provisions where they emphasise the principle of subsidiarity.<sup>99</sup> This principle stipulates that action on the ground needs to be planned at the lowest appropriate level. Given the hydrological conditions of the Nile Basin, action on the ground will mainly be planned and implemented

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<sup>99</sup> Okurut, T. (2008) Interview: Appendix 2B.

at a sub-basin level. Okurut explains that “You agree what to do regionally, and you implement it nationally. And the regional bodies’ task is to ensure they will monitor compliance, [and ensure] the implementation of what was agreed.”<sup>100</sup>

The process of norm localisation of the principle of subsidiarity is still an on-going process where “idea recipients” shape and adjust the content of this “foreign” idea to make it congruent with local practices (Acharya, 2004: 245). This, according to Acharya is referred to as “pruning” a foreign idea (Acharya, 2004: 246).

The principle of subsidiarity, while being a World Bank condition, has been incorporated into guidelines for the NBI’s subsidiary action programs. According to the Policy Guidelines for the Nile River Basin Strategic Action Program, common understanding has been reached on the following guidelines for the implementation of subsidiary action programs (NBI, 2009b):

- The appropriate planning level needs to involve all those who will be affected. As such, countries involved will be a function of the location, type, and scale of activity, as well as potential upstream and downstream impacts.
- The role of the overall (basin-wide) framework is to ensure appropriate consultation and involvement of those affected on the one hand, and subsidiarity on the other.
- Subsidiary action programs will build on principles of equitable utilisation, no significant harm and co-operation.
- The range of development project options will vary depending on the nature of the needs and opportunities in the different geographical areas.
- Investigations will seek solutions that are beneficial to all involved and distribute benefits, costs, and risks equitably as well as use resources efficiently and protect the environment.

The above-mentioned policy guidelines point to the interpretation and “re-interpretation and re-representation” (Acharya, 2004: 244) of the external norm of subsidiarity in an attempt to make it congruent with a constructed local normative order of sub-basin importance. Due to the current trends to include public and stakeholder participation and community involvement in development projects, institutions such as the NBI have gladly borrowed norms, in this instance, subsidiarity, to gain credibility and prestige, from

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<sup>100</sup> Ibid.

external norm entrepreneurs, such as donors. However, they have also manipulated it to appeal to local constituencies/idea-recipients.

#### **5.9.4. THE BENEFIT-SHARING PARADIGM**

Finally, there has been a progression towards operationalising co-operation through benefit-sharing for the basin because it increases the benefits to riparian states e.g. electricity production, environmental preservation, and watershed protection, in addition to helping to minimise the impacts of natural disasters such as droughts or floods. Coordinated development and operation of multipurpose reservoirs among riparians, for example, can facilitate least-cost energy development, and optimise hydropower production, and provide a basis for power trade among countries.

Above and beyond the direct gains of co-operation, co-operation on international rivers also reduces risks of conflict because strong institutional channels are in place through which differences can be negotiated. Joint management, once strengthened with a clearly defined mandate, provides an alternative channel that states can go through other than unilateral development. It also holds them normatively accountable. The benefits from basin-wide co-operation could potentially lead to benefits beyond the basin such as food security and power trade that binds countries together within a framework that promotes peace and stability, this demonstrating how co-operative water resource management and development could enable economic and political benefits that far exceed those derived directly from the river.

#### **5.10. CONCLUSION**

This investigation has revealed that a study evaluating present normative convergence in the entire Nile River basin is perhaps premature. However, many stakeholders do believe that a community of interest *is* developing in the NELSB. Studies looking at normative frameworks are limited in their ability to make judgements as to the socialisation of norms and norm sets until these norms are in fact internalised and tangible evidence (which is in and of itself difficult to ascertain) exists to justify it. The utility of studies on normative frameworks, however, is in their ability to point out and track

normative pathways, and to highlight emerging trends as to standards of appropriate behaviour that may otherwise have been masked by state-centric realist analyses.

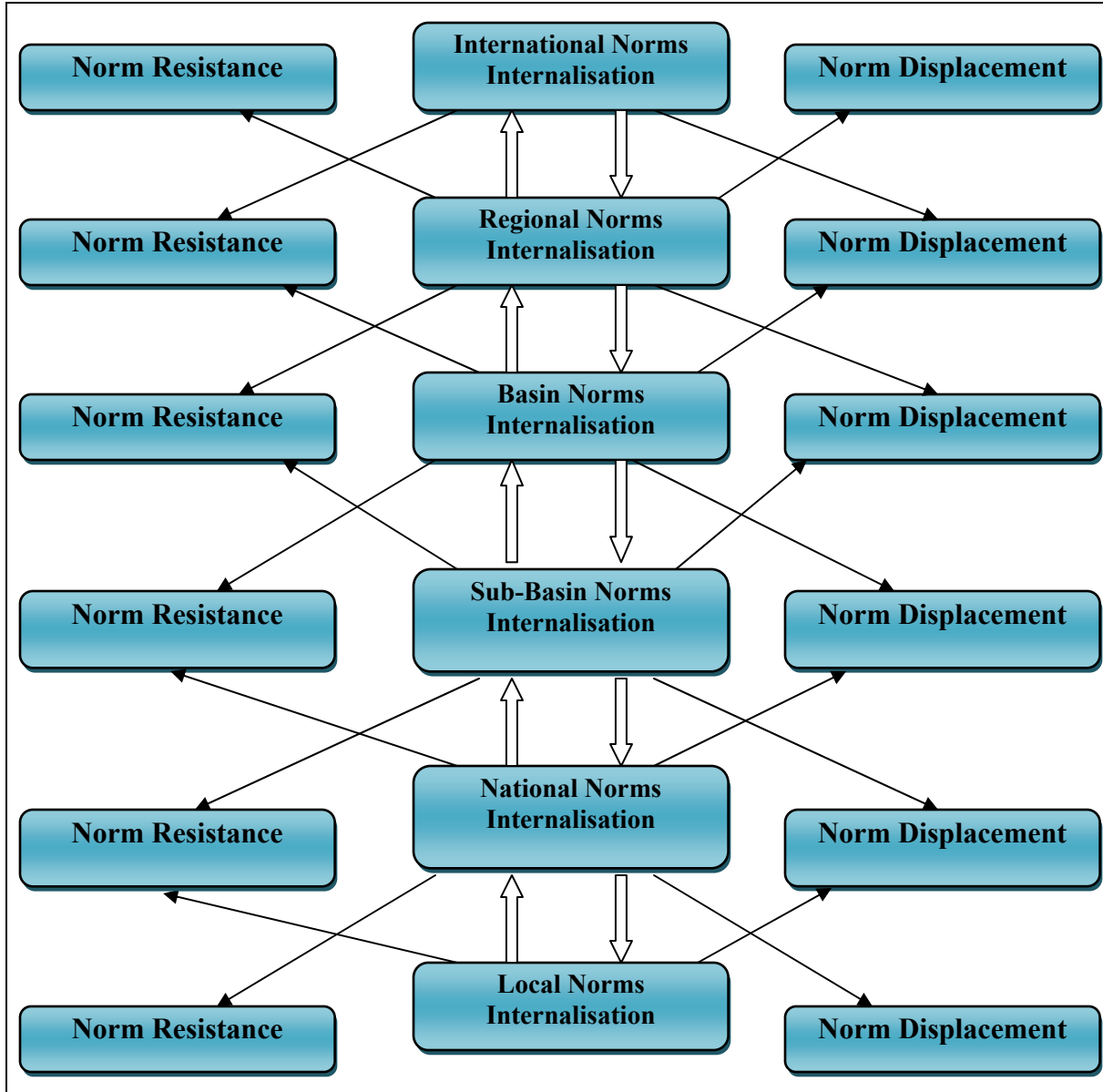
This chapter has revealed that non-linear norm diffusion from the global level is taking place, although some norms are highly contested, and local resistance to them is evident. Moreover, in the case of the Nile, global norms of no harm and equitable utilisation have clashed as a result of upstream-downstream differences. At the sub-basin level, there has been a movement towards normative convergence with NELSB states starting to articulate a joint development agenda for its resources as a result of political stability and economic growth as well as the support of new infrastructure financiers such as China. This is a tremendous achievement given the history of institutional incapacity, lack of trust, and varied levels of capacity.

## **CONCLUSION: CONSTRUCTING A MULTI-LEVEL NORMATIVE FRAMEWORK FOR WATER IN THE ORANGE-SENQU BASIN AND THE NILE EQUATORIAL LAKES SUB-BASIN**

In an attempt to construct a multi-level normative framework for water governance in the two case study areas, it is useful to first plot the pathways of ‘conventional’ norm development analysed in both the first wave of scholarship on normative change and the second wave as defined by Acharya (2004: 242). The first wave of scholarship comprises of three elements: norms being propagated are ‘universal’ or ‘cosmopolitan’ norms e.g. the struggle against racism, the campaign against landmines; transnational agents are the key norm entrepreneurs be they individuals or social movements; and it focuses heavily on Nadelmann’s (1990: 481) “moral proselytism” which resembles “norm colonisation” i.e. the conversion of local contexts that regard resistance to cosmopolitan norms as illegitimate or immoral. As such, it is concerned mainly with top-down norm diffusion from the global level, conceptualised by the downward arrows in Figure 7.

In examining the first wave, Acharya points out two unfortunate tendencies of this type of scholarship. First, it gives causal primacy to “international prescriptions” and therefore undermines the important agential role of “norms that are deeply rooted in other types of social entities – regional, national, and sub-national groups” (Legro, 1997: 32). As Checkel observes, this focus on the global, creates an implicit dichotomy between *good* global norms and *bad* regional or local norms (Acharya, 2004: 242; Checkel, 1999). For subscribers to this school of thought, universal norms advocating some sort of ‘good’ are considered to be more desirable, and subsequently, more likely to prevail than norms that are localised or particularistic (Finnemore, 1996; Finnemore and Sikkink, 1998). Secondly, Acharya argues that first wave scholarship establishes a moral superiority, by regarding norm diffusion as a process of “*teaching* by transnational agents” and in so doing, downplaying the agency role of local actors (Acharya, 2004).

**Figure 7: Conventional Norm Development (First and Second Wave)**



The second wave of scholarship on normative change looks beyond international prescriptions and prioritises the role of domestic political, organisational and cultural variables in conditioning the reception of new global norms (Acharya, 2004, 2007; Checkel, 1999, 2001; Cortell and Davis, 1996; Legro, 1997; Risse-Kappen, 1994; Williams, 2009). Concepts that fit with this wave of scholarship are: *congruence*, which describes the degree of fit between international and domestic norms (and not only the degree of fit between competing international norms) (Florini, 1996). Secondly, it includes

Legro's notion of *organisational culture*, which is defined "as a heuristic filter for perceptions and calculation" (Legro, 1997: 33, 36) that actors employ when evaluating and responding to external norms. And thirdly, it includes Checkel's concept of *cultural match* which examines situations where prescriptions reflected in an international norm are convergent with domestic norms, as reflected in discourse, the legal system, and bureaucratic agencies (Checkel, 1999). As such, second wave analyses examine the downward arrows but also the upward arrows in Figure 7.

However, Acharya argues that this wave is also limited in its ability to capture dynamic contexts. Since they are "confined to the domestic arena" they can be "unduly static" in their analyses of how historically constructed domestic norms prevent agent learning from occurring (Acharya, 2004). In response, Acharya (2004; , 2007) advocates for a dynamic process of *matchmaking* instead, through framing, grafting and localisation. This dissertation has built on Acharya's conceptual framework to look at the relationships between norms constructed at different levels of scale with different contexts and the ways in which both norms and contexts are transformed as a result of the other. Also, it has examined the non-linear process of norm diffusion from one level of scale to another that does not directly precede or proceed it. The discovery made is that almost all interests are redefined, although to varying degrees, when norms are socialised. Power relations are therefore imperative; between actors and also between norms. This chapter attempts to construct the normative framework based on this premise of norm, as well as context-specific dynamism. The following section summarises the findings of chapters four and five, and discusses the four categories of sub-questions: what, how, why and who. Various versions of these sub-questions are answered for each claim made to test normative convergence:

1. In the case of top-down global norm diffusion
2. In the case of lateral norm convergence from state-to-state or state-to-basin
3. In the case of bottom-up (local to national) norm convergence
4. In the case of norm dynamism or contestation



## **6.1. NORMATIVE CONVERGENCE IN THE ORANGE-SENQU RIVER BASIN**

### **6.1.1. IN THE CASE OF TOP-DOWN GLOBAL NORM DIFFUSION**

A review of factors in determining the manner in which this global norm set has been diffused reveals the importance of context (historical, political, power relations at play) and congruence. As Conca argues, a non-incremental change in policy in the 1990s in South Africa (but also Lesotho, Namibia and to a lesser extent Botswana) brought about frameworks of national water laws that incorporated norms legitimised in international policy circles. By scratching below superficial analyses, however, one finds that the precursors of those norms have their own history of domestic development that predate their arrival at the international level (Conca, 2006: 370). Indeed, South Africa's political transition impacted on its international water diplomacy: it wanted to be regarded as a good neighbour, or at least a better neighbour than was historically the case (ibid: 369). In this regard, it placed an emphasis on building multilateral co-operative structures to rebuild trusting relationships with its neighbours. The desire to rebuild friendly relations with its neighbours, and the world, instigated a wave of outward-looking considerations and deliberately created pathways for norm diffusion.

Moreover, water has been an instrument of social control in South Africa, Lesotho Namibia and Botswana, facilitated by the "hydrology of apartheid" (ibid: 312) in South Africa, the military government in Lesotho and colonial rule in Namibia and Botswana. The 1990s saw dramatic, democratising political and constitutional change, particularly for South Africa, and this created a window of opportunity for non-incremental reform in water related law, policy and practice (ibid.). In contrast to the pre-existing legal frameworks, (in which riparian rights that accrued to land ownership and the favourable intervention of the state were prioritised - arguably two pillars of the apartheid system i.e. racially discriminatory land laws and the intervention of the racially discriminatory state),<sup>101</sup> the new legal frameworks have a much greater emphasis on the international

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<sup>101</sup> Similarly, the 1970 Commission of Enquiry into Water Matters, mandated as a result of the droughts in the 1960s, 1970s and 1980s, diagnosed that "unless effective measures are applied in the planning and development of the Republic's water resources there may be serious shortages of water before the close of the century" (Commission of Enquiry on Water Matters, 1970), paid almost no attention to the international legal

dimension. The 1998 National Water Act of South Africa, for instance, identifies ‘meeting international obligations’ among its main priorities (ibid: 345). Additionally, South Africa and Namibia have been active in international water diplomacy, signing and ratifying several bilateral and multilateral accords, endorsing earlier efforts to articulate principles in international water law such as the 1966 Helsinki Rules, and more recently, spear-heading the drafting of the regional SADC Water protocols. The allocation of water licenses, the development of catchment management agencies and the national water strategy are all obliged to take international obligations into consideration (ibid.). This, according to Conca, has created “a path for the potential influence of international water law principles” (ibid: 345).

Local non-governmental groups have also been active in South Africa and Lesotho especially, and have networked with transnational environmental, water and human rights groups, particularly as it pertains to the LHWP and the issues that have affected local communities in this regard such as the resettlement of villagers, compensation etc. The INGO, International Rivers, is one such transnational advocacy group that have collaborated with the Transformation Resource Centre (TRC) in Lesotho on issues pertaining to the local impacts of large dams. There have therefore been ample opportunities for global norms to influence domestic practices. Local non-state actors have deliberately made themselves amenable to international considerations in an attempt to get their voices heard, once again, emphasising the agency of local actors in deliberately encouraging a suitable normative change. Indeed as Conca (2006) argues, marginalised national actors have often turned to international actors such as donors and NGOs because the state does not serve – and often harms – their interests. This logic also emphasises the agency of local actors in deciding what international norms get diffused and how this happens. Domestic proponents of particular norms (e.g. equitable utilisation) such as local NGOs or CBOs, have been able to pressurise governments to “make good on their promise” (Swatuk, 2005a: 878).

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context (Conca, 2006). The international dimension is summarised in two sentences: “Concerning use of waters from rivers in which other riparian countries have interest [referring particularly to the independent TVBC states or black homelands of Transkei, Venda, Bophuthatswana, and Ciskei] it seems that international law affecting use of the waters of such rivers is very loose. The use of such waters is generally fixed by agreement” (Commission of Enquiry on Water Matters, 1970: 1.37).

Non-state actor networks of experts, or epistemic communities are also well connected to their international counterparts (Conca, 2006). Conca (2006: 313) argues that even though apartheid created a pariah state of South Africa, many networks related to water issues felt relatively little impact, owing to the high degree of technical co-operation in the region. The South African National Committee on Large Dams (SANCOLD), for instance, remained an active member in the International Committee on Large Dams (ICOLD) throughout the apartheid era. The end of apartheid built on this strong foundation and saw a surge in new national expert networking on other water-related topics.

As found in chapter four, the global norm set of transboundary co-operation, has been diffused in a non-linear fashion. Although the UN Convention was not ratified by all SADC countries (except SA and Namibia), indirect adoption of the global norm set of transboundary co-operation has occurred through the ratification of the Revised SADC Protocol (2000). In this instance, regional instruments and agents were most instrumental.

Once emerged, global norm diffusion of the transboundary co-operation norm set, therefore, occurs largely as a result of norm congruence, or normative fit with domestic and regional dynamics brought about as a result of political change and the water reforms of the 1990s which took place in the region. The success, at which these norms have become incorporated into regional and national legislative and institutional frameworks, is arguably a result of its legitimating effect of new water reform policies post-independence and post apartheid, particularly in South Africa and Namibia. In this regard, the perceived adherence to global principles and standards, in turn, legitimises political regimes and the sovereignty of states. SADC states that have incorporated global norms of transboundary water governance into their national policies are therefore viewed favourably within the global arena. A normative element of “oughtness” is therefore at play.

Local actors have therefore displayed instrumental commitment to global norms. These state actors have undertaken cost/benefit calculations and publicly committed themselves to a norm only to the extent that it helped them achieve some other more fundamental, and usually, national objective: the desire to be seen as independent (in the case of Namibia), and democratic (in the case of South Africa, Lesotho and Botswana).

Finally, in terms of influential actors, global norms have in large part been created by pioneering, European states, for global coverage. However, the SADC, and specifically,

the Orange-Senqu case study, prove that global norms can, and usually are, successful only if there is normative fit with domestic norms and interests. Oftentimes, global norms are manipulated and transformed to push particular agendas. Grafting allows norms to be reframed to suit specific audiences. As already noted, ambiguous or vague norms such as equitable utilisation may be grafted to other norms such as “good governance” or reframed to appeal to a wider audience (i.e. ‘water as a human right’) in order to garner interest and support from national governments, constituencies and also transnational entities such as donors (Swatuk, 2005a). This argument complements the way in which norms and principles are phrased in international legislative frameworks. These principles are part of the language of protocols and, as such, are meant to be deliberately vague. It is left up to the interpretation of regional institutions and riparian states to articulate what these principles mean for specific basins and nations.

#### **6.1.2. IN THE CASE OF LATERAL NORM CONVERGENCE FROM STATE TO-STATE OR STATE-TO-BASIN-TO-REGION**

The degree of lateral normative convergence in the Orange-Senqu River basin is in large part a result of the near-simultaneous transitional nature of national institutional and legal frameworks since the 1990s in South Africa, Namibia and Lesotho (and now Botswana). This helped to facilitate state to state policy harmonisation and alignment, and regional normative convergence from the state to the basin level. This is not to say that policies are aligned at present, but it alludes to the potential for more harmonisation between state policies. Indeed, conflicting national interests and institutional inconsistencies still exist in some shared river basins and “complicate the challenge of reconciling the existing patchwork of international arrangements with the comprehensive vision of the SADC protocol” (Conca, 2006: 365). However, through processes such as the movement towards a paradigm shift from water-sharing to benefit-sharing, river basins such as the Orange-Senqu, and their multilateral coordinating commissions, such as ORASECOM, have begun to help redefine national interests by identifying the development opportunities to be shared from co-operation that go beyond the river and its water resources (these include hydropower trade etc).

The significance of regional mechanisms to the facilitation of normative convergence can also not be denied. The SADC Water Sector established in 1996, the establishment of the SADC Water Sector Coordinating Unit (SADC-WSCU) and the Water Resources Technical Committee (WRTC) were key drivers in the drafting of the Protocol and the regional institutional infrastructure.

However, the road to regional integration and normative convergence regarding transboundary water governance, has certainly not been a smooth one despite good intention. Examples of fragmented co-operative initiatives exist outside of the Orange-Senqu River basin including the lengthy and controversial process to establishing a river basin commission on the Zambezi River, the longer than anticipated time it took to establish the tripartite Incomaputo accord with Mozambique and Swaziland and the difficulties in establishing a Secretariat for the OKACOM. And while multilateral commissions have been formed for several river basins (e.g. the Cunene, Incomati, Limpopo, Orange-Senqu, Okavango, Umbeluzi and Zambezi basins), these commissions remain almost purely advisory in nature. Each country still conducts its normal processes of decision-making for managing the water resources within the boundaries of its sovereign territory (Turton, *et al.*, 2005). This could either suggest that the countries concerned are reluctant to delegate part of their sovereign responsibility to another party (in this case to an institution for the management of water resources), especially where these resources are critical for their future social and economic development (Turton and Ashton, 2008: 313). Alternatively, as is evident in the Orange-Senqu basin, it can also be the case that due to pre-existing bilateral regimes, multilateral regimes are slower to develop and their mandates are questioned as a result of project-based bilateral agreements conducting most operational functions i.e. infrastructural developments etc.

Barriers to normative convergence, therefore, exist at the basin level, due to constraints shared by all four countries. These include capacity constraints, skills flight and the lack of sustainable knowledge transfer policies. While most evidence points to the gradual development of a community of interests in the Orange-Senqu River basin and a slower progression at the SADC level, multilateral accords such as ORASECOM will be the litmus test with the newly institutionalised water laws that give priority to international commitments.

While Conca's Maryland School (2006:119) argued that cumulative basin to basin norm dissemination has not occurred significantly in recent years and therefore shows little evidence of regional norm convergence or basin to basin norm spread, the southern African case proves otherwise. The 1990s saw an upsurge in transboundary water diplomacy between SADC states, with a focus shifting to the creation of joint water commissions. Conca argues that this stark increase in regional co-operation predates the rise of the ANC to power in 1994 but was accelerated by this transition (ibid: 363). One of the ANC's primary objectives, upon obtaining power, was the goal of repairing the damage caused to regional relations during the apartheid era, with a particular focus on shared water resources as one element through which to achieve regional co-operation (ibid.). This stemmed from the increase in national water demand due to industrial and population growth, and the realisation that South Africa would need to tap into exogenous water supplies to meet this demand. This necessitated stable and adequate rules for shared water governance (Conca, 2006: 363). Normative fit therefore exists between national incentives to portray a country in a certain way (democratic, independent, good neighbourly etc), and regional objectives of better integration and coordination. Both have encouraged and even necessitated greater multilateral co-operation and information exchange.

Multilateral basin-wide agreements have therefore been signed in all of the SADC basins that have a significant level of development (Ashton *et al.*, 2005; Turton and Ashton, 2008: 312). Additionally, the wide range of bilateral and basin-wide agreements signed by the individual states within the SADC region, and their accession to important international agreements, suggest that SADC states are committed to strengthening levels of co-operation between states and reducing the potential for disputes and conflicts to occur (Ashton *et al.*, 2005; Turton and Ashton, 2008: 313). The region's shared water resources, has therefore been a central theme of SADC co-operative initiatives. Indeed, the SADC Water Division has played a central role in facilitating coordination and has encouraged the creation of a 'common understanding' between all Member States. Larry Swatuk attributes this to an emerging regional vision of sustainable economic development that combines elements of coordinated resource management, ecotourism and external neo-liberal pressures (Conca, 2006; Swatuk, 2002a; Swatuk, 2002b: 365).

In this regard, the HPC displays several weaknesses in conceptualising normative causal pathways. While it emphasises co-operative strategies due to the manner in which water is prioritised as a strategic resource within a basin and beyond a basin to the regional level, it displays a limited utility in explaining sub-national configurations and its relationship to basin and regional dynamics. Moreover, the HPC's emphasis on state sovereignty perpetuates the self-replicating 'territorial trap'. States with little or highly uneven capability to adequately deliver on services, such as water, resort to notions of sovereignty when it comes to international rivers. This provides a false sense of states as being capable, legitimate containers to society, and of acting in 'the national interest'. Additionally, it reinforces the realist narrative among SADC states. The conclusions drawn in chapter four on the 'weakness of the hegemon' highlight how flawed this narrative really is. Thus, constructivist theory allows us to see beyond the territorial trap and to ask better questions regarding 'water security' in southern Africa.

The strategic importance of the shared waters of the Orange-Senqu has necessitated the solidifying of basin-wide co-operative strategies, and as such, the norm set has been incorporated into regional, basin and national policy and behaviour. Through the establishment of ORASECOM, commitment to regional normative convergence has become institutionalised, which may raise the costs of norm-breaking behaviour.

There may also be an argument to be made for the South African desire to project its influence outside its borders. According to Conca, at the same time that international water law may be emerging as a path to the South African domestic sphere, the reverse is also true, in that regional and international agreements represent one way in which the changing character of South African water law, policy and normative codes of conduct can reach outward and influence neighbouring state behaviour (Conca, 2006: 368). For example, the South African Department of Water Affairs and Forestry's 1997 White Paper emphasised the goal of projecting emerging domestic water principles into regional water relations: "The objective in relation to our neighbours is the same as it is within South Africa's borders, to ensure that we adjust to the pressures and demands of the future through co-operation, not conflict, in harmony with the needs of our common developmental goals and the protection of our environment" (DWAF, 1997: 5).

Finally, in terms of the actors who create regional norms and those for whom they are crafted, transboundary water governance in the SADC region plays itself out amidst profound power asymmetries *within* SADC states (e.g. rural/urban; urban/peri-urban; white/black; male/female), *between* states (South Africa and ‘the rest of SADC’), and between the region and the world (SADC and the U.S., and SADC and the EU). While regional mechanisms such as the SADC WD, SADC Parliamentary Forum (SADC PF), have been the main proponents of regional norms, the normative framework has been influenced by a vast number of actors. It is therefore at this, the regional level, where multi-level normative influences are most felt. That said however, the sovereign nation state still reigns supreme as the primary norm creators, determining which norms gain acceptance at the regional level, and why.

The significance of key individuals, acting as norm entrepreneurs, have also given effect to regional norms in multilateral fora and nationally. The politically charged nature of institutional memory loss, particularly in Namibia and South Africa, as a result of experienced individuals retiring or leaving the water sector, has therefore been met with concern. Moreover, inadequate sustainable knowledge transfer policies have been institutionalised to retain this fleeting knowledge.

The hegemonic nature of South Africa’s transboundary governance has also greatly influenced the types of norms and principles discussed at the regional level. As Funke and Turton (2008) argue, the nature of South Africa’s relations with its fellow riparians post-apartheid, has seen a movement away from *puissance* (i.e. strength or force, particularly as it relates to military might in the case of states) to *pouvoir* ( i.e. the power over an outcome as a result of diplomatic interaction, persuasion, engagement and the mobilisation of public opinion).

However, norms created and institutionalised at the regional level by the SADC WD, SADC PF, Member States, with external donor influences, have been ambiguous or deliberately vague in wording (e.g. policy harmonisation and alignment). The onus is once again on Member States to give effect to these norms by defining it according to national contexts. For example, a key role of the SADC WD is to monitor the application of the SADC Protocol, the Regional Water Policy (RWP) for SADC and the Regional Water Strategy (RWS), and the facilitation of the harmonisation of water law and policies



between SADC Member States. The SADC WD does not have the mandate to implement and enforce the policy harmonisation imperatives in the Member States. This obligation falls on the Member States, whose national laws must ensure that obligations stemming from international agreements such as the SADC Protocol or basin-wide water management agreements are being met (Malzbender and Earle, 2009).

### **6.1.3. IN THE CASE OF BOTTOM-UP (LOCAL TO NATIONAL) NORM CONVERGENCE**

Little attention was given to this track of normative change in preceding chapters due to its perceived limits: perceived limits to research conducted on the effects of local influences on national water normative frameworks, perceived limits to the significance of local practices due to their particularistic nature, and perceived limits to how they can be scaled up to be applicable at a broader level of scale. An increasing body of research is however providing evidence for the importance of incorporating indigenous knowledge in contemporary national legal, institutional and policy frameworks because of its ability to facilitate communication and decision-making from the local level. These indigenous information systems are dynamic, in that they are continually influenced by internal creativity and experimentation as well as by contact with external systems and normative frameworks (Flavier, Jesus and Navarro, 1995: 479). Hence mainstream research tends to focus on the ways in which these local normative and knowledge frameworks have been transformed as a result of national or external influences, but less research has been conducted on what these local knowledge systems have to offer and how they may influence behaviour at higher levels of scale.

Despite limited determining factors, the degree to which local actors can articulate their interests in national fora (if those exist) is one way in which they have been able to successfully influence state/national policy. This involves capacity, and local actor awareness of institutional and political processes at other levels of scale. In the case of the LHWP, the Transformation Resource Centre (TRC) and the Survivors of the Lesotho Dams (SOLD) with the help of the INGO, International Rivers, for example, has become extremely active, focusing on social issues such as the resettlement of villagers and problems regarding the delivery of promised compensation, as well as the new social issues

created through reallocation and building projects (Kranz *et al.*, 2005a: 17). However, this is an isolated case, and in many other areas in SADC, researchers have reported little or no local awareness/knowledge of development projects or reform processes, and the impact it might have on affected peoples (Ngana, Mwalyosi, Madulu and Yanda, 2003; Nkhoma and Mulwafu, 2004).

Moreover, having well-articulated interests and voicing them is sometimes insufficient to have local norms infiltrate state policy and or behaviour. These local actors have to be present at discussions, and their voices incorporated into operational frameworks. As previously noted, due to the highly technical nature of water management in the region a technically-knowledgeable epistemic community usually dominate the production and application of knowledge (Swatuk, 2005b: 163). Their conservationist or technical interests therefore take precedence over that of local actors in that they are present at organisational platforms to convince policy-makers to embrace global environmental norms while local actors are not (*ibid.*). This point emphasises the power asymmetries at play in norm diffusion advancing the argument made for local agency – indeed, *some* local actors are privileged with more agency than others.

Additionally, incorporating indigenous and traditional knowledge raises a number of complex issues, such as, land tenure rights, genetic resource ownership,<sup>102</sup> intellectual property rights and benefit sharing that policy-makers prefer to sidestep (Ten and Laird, 1999). Even though there are clear benefits to integrating these knowledge systems and normative frameworks into western policy and practice, indigenous knowledge, norms and understandings of water are still misunderstood and are largely ignored in water projects to date (RAK, 2008). The complexity of causes centres on the lack of meaningful inclusion of these approaches in water policy and planning processes (*ibid.*). Moreover, customary access and rights to water are rarely ever recognised by state authorities that have obtained control of indigenous areas and sources of water (*ibid.*). These areas are now being developed and local actors find themselves impacted by outside forces beyond their control (*ibid.*).

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<sup>102</sup> Genetic resource ownership, in this case, refers to intellectual property associated with the traditional use of a biological resource e.g. the San peoples' intellectual property rights (or the compromise thereof) of hoodia, an appetite-suppressant used by the San for millennia, and which has now been commercialised for use in diet pills.

Another critically important factor determining the degree to which local norms get attention at the national level is the degree to which they help further national agendas. It needs to be recognised that norm entrepreneurs at the national level have displayed instrumental commitment to local norms in attempts to garner public and donor support, under the much used catch phrases of public participation, gender mainstreaming and HIV/AIDS mainstreaming. Public participation, for instance, has been used to legitimise changes already predetermined by central government in collaboration with donors in various parts of Africa (Dungumaro and Madulu, 2003).

According to Swatuk (2005a: 874), a range of local actors, “From landless peasant to NGO operator to national elite – are engaged in a continuous dialogue with national, regional and especially global actors, be they mercenary, missionary or fellow traveller” Local norms could therefore impact global, regional as well as national-level water governance in various ways, which may in turn impact transboundary co-operative frameworks. Unfortunately, the few cases acknowledged where local, culturally-specific or historically based norms affect national-level water governance is when there is a sharp resistance to a national norm that has been forced upon local actors as the example of ‘water theft’ or illegal abstraction of water for farm use in the Upper Vaal exemplified.

However, Thrupp (1989) argues that the incorporation of indigenous knowledge and its accompanying normative frameworks into development projects may contribute to local empowerment and development, increasing self-sufficiency and strengthening self-determination. According to the Orange-Senqu River Awareness Kit, utilising this knowledge and being aware of local norms during the implementation of projects gives it legitimacy and credibility by local as well as outside actors; and this increases the sense of ownership by providing incentives to solve problems with local ingenuity and resources (RAK, 2008).

Moreover, while the instrumental adoption of local norms may help to legitimise decisions made at the national level, similarly, local norms may also be packaged in ways that appeal to national interests. In this regard, local norms may be reframed (e.g. water as a basic human right or the injustice of resettlement as a result of damming) to appeal to a wider national audience in order to force government’s hand and also attract interest from influential donors (Swatuk, 2005a).

Additionally, external norms may also face local resistance due to longstanding domestic norms. The issue of “water theft,” unlawful farm use or illegal abstraction aptly depicts the resistance of externally induced, in this case, new legal and normative principles constructed at the national level, by local historically constructed normative frameworks. This has been the result of poor implementation of the new water law in some areas where the requirement to obtain permits and its impact on farming practices was not adequately communicated to farmers, or properly enforced by authorities. Illegal water abstraction for farm use has become a critical management dilemma for South African water managers, who regard this as stealing from paid users. The main problem is a normative dispute between pre-existing land rights and newly institutionalised principles of water privatisation and equitable utilisation. Farmers argue that they are merely abstracting water which would have been available to them through the natural flow in the river. They have invoked historic land rights and therefore riparian rights to water. This problem remains unresolved, and while it is predominantly a purely national concern, it could indirectly impact on transboundary co-operative agendas, particularly, because the water being transferred comes from Lesotho, and for which the Government of South Africa pays royalties. The specifics of transboundary IBT schemes could potentially be reviewed to prevent this from occurring in the future, and this may affect how and where water is transferred.

Additionally, scholars researching the challenges to water reform processes (Tapela, 2002) have pointed out the difficulties in overlaying a new institution on top of a variety of other existing institutions with different jurisdictional boundaries (e.g. Rural Development Council, Provincial Government, District Council etc.). Swatuk (2005) further argues that new institutions have undermined existing forms of co-operation and conflict resolution. Evidence therefore shows that southern African governments have been reluctant to entrust stakeholders with too much power, rural dwellers have been generally suspicious of the motives behind reform and empowered actors have used the language of local norms to tout broad-based participation. This provides a suitable breeding ground for norm resistance. In this regard, local actors display resistance to norms that challenge longstanding (and entrenched) practices of how things are done.

Local norms have a variety of sources. In the Orange-Senqu River basin, these may include socio-cultural beliefs, pre-existing historical practices based on apartheid or colonial legacies. A wide range of actors have therefore also contributed to the creation of local norms that are context-specific. A more pertinent question however, relates to whose interests are accepted and whose are redefined when norm dynamism and/or contestation occurs. This will be addressed in subsequent sections.

#### **6.1.4. IN THE CASE OF NORM DYNAMISM OR CONTESTATION**

The southern African case illustrates that while the relationships between various norms may at times be antagonistic, they are in most instances able to co-exist, and may even be complementary. Oftentimes, the precursors of external norms have had their own history of domestic development that predates their arrival at the international level, thus allowing them to be congruent with pre-existing normative frameworks already in place or emerging (Conca, 2006). The ways in which these multiple norms and norm sets are institutionalised is also noteworthy. In some settings, such as transboundary river basins and transnational stakeholder collaboration, transnational agents and influences are directly present and immediately felt. They are able to push norm-based change through certain state channels.

However, in other avenues where normative change is orchestrated from within, a predominantly domestic or regional logic of appropriateness prevails. Regionally constructed normative convergence is politically prioritised and actively sought by norm entrepreneurs. The agency of state and basin actors is evident in their abilities to construct their own norms and identities e.g. the creation of river basin commissions as primary units of analyses in transboundary water governance. Indeed, for the Orange-Senqu River basin and its commission, the relationship between norms and identities are mutually reinforcing. As norms are standards of appropriate behaviour in individuals with a given identity, individuals adhere to norms because by behaving in a certain manner, it defines them as belonging to a certain group. Simultaneously, identities determine and reinforce conformity to a particular norm. Since ORASECOM (and other river basin organisations in the region), and the region itself in the form of SADC, are still defining their group identity, instrumental norm construction is occurring where local actors and external actors have

used this phase of identity creation to construct norms that reflect this desired identity. Similarly, in an attempt to push an agenda of regionalism, actors have conformed to emerging standards of behaviour because it helps define them as members of the region.

The norms that have become dominant in the SADC region, and in the Orange-Senqu basin specifically, have been those that have been able to be reframed to smaller or wider audiences, as well as those norms that are congruent with pre-existing norms.

Sovereignty and power asymmetries are still key drivers in determining which norms become dominant and how this occurs. However, due to the political emphasis placed on regional integration, regional accords have an increasing importance, as do the external donors that help to fund this. Therefore, while power and money drive normative agendas, so too does the desire by some local actors to form a regional community. Identities are in turn constructed around the notion of ‘regional team player.’

Additionally, when reviewing why some norms win out over others, their legitimating qualities are critical. Conca (2006) argues that most important to South Africa and also the region, norm dynamism is reflected in the controversies over how to value water and who may participate in its governance. This has been the primary drivers for creating new water-related practices and relationships. As Jacklyn Cock suggests, the most consequential form of social activism in South Africa today is the struggle of the poor majority for “social citizenship” in terms of clean water, electricity, public health and other survival and livelihood considerations in the face of the state’s neo-liberal inclinations and policy orientations (Cock, 2003).

Norms and principles that better capture these sentiments are most likely to receive broad-based acceptance in South Africa. In the Orange-Senqu River basin, norms need to have a legitimating characteristic for them to be accepted. There is however a complex and intricate balance that needs to be drawn between achieving national objectives (based on the need for reform and the political consequences of this) and local objectives (based on the need for adequate service delivery).

The case of the Orange-Senqu shows that although the global norm set of transboundary co-operation has been diffused in a non-linear fashion, regional and national interests have not had to be redefined. Instead, norm congruence with pre-existing national norms facilitated faster diffusion of these global norms. Similarly, commitment to regional

norms by SADC Member states helped to legitimise national policies, and good neighbourliness. It also helped to foster the incremental process towards a common understanding, prioritised in SADC's objective of regional integration. Resistance to particular national norms may have been experienced at the local level. It is at this level of scale, where interests are mostly redefined, as norms are reframed, repackaged, and grafted. Despite having a degree of agency (to mobilise transnational advocacy networks, to push their agendas by reframing norms to fit appeal to wider audiences), local actors are inherently disempowered, either excluded from organisational platforms where norms and principles are brought to the fore, lack the capacity and awareness of these political processes when they are present to articulate their interests, or are used to legitimise governmental decisions in the name of public participation. Until power asymmetries are recognised, and the playing field levelled (or the size of the players levelled, which is, by nature, a substantially more challenging task), local level interests will always be disadvantaged in multi-level normative frameworks.

## **6.2. NORMATIVE CONVERGENCE IN THE NILE EQUATORIAL LAKES SUB-BASIN**

### **6.2.1. IN THE CASE OF TOP-DOWN GLOBAL NORM DIFFUSION**

As found in chapter five, top-down norm diffusion of the global transboundary norm set has not been a smooth nor linear process in the NELSB, and some might argue that it has not occurred at all. If one examines the influence the Nyerere Doctrine has had on contesting pre-existing colonial treaties based on historic rights, and similarly, the unwillingness to sign and ratify the UN Convention, there is a clear distrust of external normative frameworks in this basin. These factors reiterate the assertion that regional identities are created more from within than from without. Global norm diffusion, in the NELSB context is therefore largely dependent on the ability to which global norms can be localised as well as the ability to which perceived contradictions in various external norms can be reconciled. These factors are both social and material.

For example, a normative clash is evident between the principles of equitable utilisation, on the one hand, favoured by upstream states; and the principles of no harm and

acquired and historic rights, on the other hand, favoured by downstream states. Given the fact that most Nile riparian states present at the adoption of the Convention abstained during the voting process, the contested principles in the UN Convention have not been able to be socialised by a critical mass in a direct and linear manner. This is in large part, a function of the wording of the UN Convention and its inability to reconcile the two principles.

Similar to the SADC example of the incorporation of the global norm set in the Revised SADC Water Protocol and the indirect adoption of these principles by SADC states, the NBI's organisational frameworks, such as the guidelines for the Nile Basin Strategic Action Programme, also include the principles of equitable and reasonable utilisation and no harm in its vision.

Additionally, the process of norm localisation has been critically important to institutional development on the Nile and in the NELSB particularly. Subsidiarity is one such externally induced principle brought about by WB conditions. In the NELSB, the principle of subsidiarity as an institutionalised norm has been incorporated into basin and sub-basin operational frameworks and instrumental commitment to it has been displayed on the part of local as well as external actors operating in the region. Organisations such as the NBI and EAC have based their organisational structure on this practice in the hope of facilitating buy-in from riparian states. Institutions have therefore attempted to foster institutional credibility within the sub-basin and region. In this regard, it has been incorporated into the guidelines for the NBI's subsidiary action programs. The subsidiarity principle has been interpreted, re-interpreted and re-represented (Acharya, 2004: 244) in an attempt to make it congruent with a constructed local normative order of sub-basin importance and applicability. Moreover, since norm localisation is also a process whereby the agency role of local actors is prioritised, "global norm transformers" within the NBI operational structure have borrowed the principle of subsidiarity, to gain credibility and prestige, both from local constituencies/idea-recipients and external norm entrepreneurs. The principle of subsidiarity has therefore facilitated the strengthening of the NBI's objectives of bottom-up development, public participation and stakeholder involvement. Secondly, it has strengthened the roles and bargaining power of previously disenfranchised



voices in river basin management (such as the riparian states of the NELSB), and local actors have actively used it to do so.

Still, several criticisms of the way in which subsidiarity has been implemented (predominantly through formal channels), have argued that traditional, informal institutions and customary law may be a more realistic starting point for implementing this principle, and obtaining public participation in an equitable and efficient manner (Maganga, 2003; Maganga, Kiwasila, Juma and Butterworth, 2004; Sokile, Kashaigili and Kadigi, 2003; Sokile and van Koppen, 2004). However, these authors also point out the challenges to using informal mechanisms. Sokile and van Koppen (2004: 1354) show how formal courts nullify the rulings of traditional, informal mechanisms. Maganga *et al.* (2004) further elaborate that in Tanzania, local people who know how the new water architecture works, deliberately turn to formal courts when informal decisions have gone against them.

Instrumental commitment to the global norm set of transboundary co-operation i.e. equitable and reasonable utilisation, no harm and prior notification have also been incorporated into basin, regional and sub-basin policy through the NBI frameworks, that have used the language of this norm set to orchestrate global credibility. Instrumental commitment to global principles is therefore, encouraged due to the desire of Nile riparians to maintain good relations with their international donors, particularly the World Bank.

Additionally, international donors, such as the World Bank, and donor states, such as China have played significant roles in influencing the normative framework in the NELSB. The international norm set dominant in this sub-basin has therefore been created by global frameworks (i.e. UN Convention pushed by European pioneering states), donors, and imperatives formulated in the AU, AMCOW and NEPAD. Moreover, the global norm set in the NELSB is not different to that existing in the greater Nile and as such, the recipients of this norm set are not confined to NELSB states.

#### **6.2.2. IN THE CASE OF LATERAL NORM CONVERGENCE FROM STATE-TO-STATE OR STATE-TO-BASIN-TO-REGION**

Regional norm convergence has been deliberately orchestrated in the Nile Basin, and consequently also, in the NELSB. It is arguably the case that the NBI has orchestrated the socialisation of specific norms through its Strategic Action Programme (SAP). This

approach can be regarded as an attempt to facilitate trust, create ownership by all riparians and local communities, and propel and steer regional norm convergence in a particular direction. Collectively, SVP activities have helped to promote common understanding of the interaction between national policies, regional needs and co-operative development, forming a more effective basis for co-operation at the regional and sub-regional levels (Waako, 2008: 5).

Regional norm convergence has also been facilitated by several drivers such as trust and confidence building, policy alignment and the progression towards a benefit-sharing paradigm. The NBI has focused on policy harmonisation within its institutional frameworks and practices in all riparian states through its institutional strengthening project (ISP). It has also encouraged riparian states to align national policies due to the lack of harmonised institutional and regulatory frameworks to deal with transboundary watersheds. Most riparians have developed new policies for water and environmental management, however, the degree to which they incorporate transboundary concerns or principles vary from country to country. The process of national policy alignment is a long-term one that involves harmonising water policies with a shared vision of good water management and defined goals for cross-border co-operation through ongoing technical implementation and co-riparian dialogue. This contributes to a gradual progression towards norm convergence.

Additionally, the shift in power asymmetries due to increased political and economic stability of NELSB riparians over the past decade has facilitated norm convergence at the sub-basin level. The EAC and NBI have been instrumental in facilitating this power shift, enabling East African countries to better articulate their interests in a collective manner, and in so doing, giving them bargaining power in basin-wide arrangements.

Normative convergence in the NELSB is also evident by the way in which upstream riparians have solidified their long-standing objections to colonial-era water treaties such as the 1929 and 1959 Agreements. They have done this by constructing national norms (embodied, for example, in the Nyerere Doctrine) to legally oppose external norms such as historic rights that favour downstream countries.

Regional norm convergence in the NELSB has therefore occurred almost by way of necessity. Sub-basin co-operation was required for equatorial states to increase their

bargaining power in basin-wide fora. Moreover, NELSB countries have done this by advocating strongly for the establishment of a multilateral treaty agreement governing all ten Nile riparian states. Additionally, NELSB countries have also formed sub-basin institutional arrangements that articulate interests specific to the sub-basin such as economic development relating to Lake Victoria, and the impact of future factors on them specifically, such as climate change, changes in the flow of the water itself, infrastructural development and the growing pollution problem.

Much like the SAHPC, the shift in power relations in the past decade makes the HPC view outdated, and proves that it is too static a lens to address the dynamic nature of transboundary water governance and normative frameworks. Additionally, the state-centric nature of the HPC is similarly limiting. Finally, it adds little to our understanding of external actors and their influence, and sub-national configurations; and how both affect the normative environment within which transboundary water governance is embedded.

Important donors such as the WB as well as China are also influential in this sub-basin and have, to varying degrees, influenced state behaviour by providing financial resources and capacity to enable water infrastructural development projects (China) and facilitate institutional development (WB). However, they have also helped to determine what acceptable behaviour is and what it is not.

### **6.2.3. IN THE CASE OF BOTTOM-UP (LOCAL TO NATIONAL) NORM CONVERGENCE**

The multitude of values and norms at the household and community level may not represent a homogenous national identity. NELSB states consist of a multitude of actors, cultures and different layers of identities. These identities often transcend or divide political and territorial units. Taking the theoretical framework into account, the multiplicity of actors at the local level does not translate into a louder voice, or the inclusion of several local voices at the negotiating table where norms are debated. This raises significant questions about who the most important actors are, and at first glance, may be regarded as a weakness to this study's critique of the realist approach. Indeed, state actors still determine the regional normative agenda, however, this is not to say that local non-state actors are in fact powerless or redundant. Rather, the multiplicity of local actors

dilutes efforts to be heard as a single voice. Moreover, the NELSB exists within the greater Nile region, which adds another degree of complexity in terms of local heterogeneity. Due to this diversity, it is difficult to track normative development from the local level to the national level. Research on African languages indicates that there could have been as many as 400 languages spoken within the Nile River basin (RAK, 2006). Factors that determine the success to which local culturally-specific norms are infiltrated into state policy and behaviour therefore include the degree to which institutions are sensitive to cultural diversity by actively exploring ways in which to integrate this into internal and external processes as described above.

The NBI has made provisions within its programmes for stakeholder engagement and public participation. The Nile Basin Discourse (NBD) is the representative umbrella NGO network operating within the basin to facilitate dialogue between the NBI and civil society in order to promote dialogue on poverty eradication, sustainable and equitable development, peace and mutual understanding regarding issues pertaining to the basin (Kameri-Mbote, 2005). In essence, the NBD was created to “bring the voices of stakeholders other than government to the process of the development of the Nile basin” (ibid: 7). However, despite the existence of the NBD, the issue of civil society engagement and representation is still contentious.<sup>103</sup> Some scholars have argued that the NBD is indeed not representative enough of civil society (Kameri-Mbote, 2005). As Kameri-Mbote (2005: 8) notes, “given the open nature of dialogue and the involvement of diverse entities, the challenge of meaningfully putting in place an agenda that is not captured by the interests of powerful groups’ remains. Moreover, providing adequate resources for the dialogue continues to be a challenge.”

Moreover, if one takes a historical perspective, the geographical, cultural and historical barriers separated the Nile’s cultures, and this separation not only magnified their distinctive identities but also impeded co-operation, the exchange of experiences, and mutual understanding. According to Erlich and Gershoni (2000: 2), the myths, mysteries and misconceptions took over where direct communication lagged behind. A quote from their closing chapter is apt: “Only by recognising diversity and legitimising pluralism can

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<sup>103</sup> Interview with Oweyegha-Afunaduula, F. (2008) Nile Basin Discourse (NBD) Chairman, Entebbe, Uganda, 8 October 2008: Appendix 2B.

regional co-operation and unity of action be achieved” (Erlach and Gershoni, 2000: 271). This captures the essence of the importance of local norms and values. While they may be underrepresented, their absence in state, sub-basin and basin policy mystifies and estranges them from political processes where regional norm convergence is negotiated. This has contributed to the separation of peoples of the Nile.

Cultural adaptations and the livelihoods they create are therefore linked to the languages, social systems, customs knowledge systems and local histories of the Nile basin, they create what is referred to as cultural diversity (RAK, 2006). The question then is: how is cultural diversity incorporated into national-level water governance? Recently, there have been major developments in exploring various policy initiatives to develop an integrated approach to the role played by cultural diversity in sustainable development and the protection of biodiversity (Hazeltine and Bull, 2003; RAK, 2008; Visscher, 2006; Visscher, Pels, Markowski and de Graaf, 2006). The process of institutionalising culturally-specific norms is evident in the progression towards Cultural Diversity Mainstreaming, which involves an awareness of cultural diversity and integrating it at all levels of the project management cycle. This ensures that culturally-specific issues are identified in the analysis of programmes and projects and are subject to specific interventions whenever appropriate (UNESCO-IHP, 2007, 2009).

Local resistance to external norms in the greater Nile and the NELSB has largely been as a result of the contradictory nature of external norms and incompatibility of interests. Unless external norms are able to be localised, the uptake of these norms will not occur. External norms face local resistance in so far as infrastructural development projects have not taken into consideration the effects these projects have had on local cultural practice and belief systems. Local resistance to external norms also reflects local actor suspicion of particular external actors and their motives in funding development projects. While states are still the main proponents and receptors of norms regarding transboundary co-operation, the role and influence of the donor community, particularly the World Bank, in crafting the NBI institutional structure and objectives has been met with concern by many local actors (Kameri-Mbote, 2005). Local actors are therefore less likely to support external (be they global or regional) norms that are perceived to be crafted and pushed by ‘distrusting’ external actors.

#### **6.2.4. IN THE CASE OF NORM DYNAMISM OR CONTESTATION**

The relationships between particular norms are more contentious in the Nile River basin than in the Orange-Senqu. However, the normative power battle mirrors the power asymmetries and the change thereof in the past decade. The normative framework once reflected the status quo entrenched under colonialism, with Egyptian interests defined and met in historic agreements.

Sub-basin norms have therefore had both a regulative and constitutive effect. As constitutive instruments, norms of sub-basin co-operation (through sub-basin organisations such as the LVBC and the LVFO) have legitimised goals of economic development, given greater voice to NELSB riparians, and have therefore acted as motives (Klotz, 1995). And as motives, they have also helped to determine the goals towards which NELSB states should strive i.e. economic growth through the sustainable utilisation of sub-basin resources, e.g. Lake Victoria.

As examined in chapter five, the most notable clash between principles: sovereign ownership and exclusive rights over ones resources vs. the principle of shared ownership of an international river, plays itself out in the hydropolitics of the Nile. While the principles of equitable utilisation and no harm have been codified in basin and sub-basin institutional frameworks, implementation at regional and domestic levels is more challenging. The fact that the 1997 UN Convention is yet to enter into force can largely be explained by the reluctance of certain states to sign away their various hard-line stances. The process of normative reconciliation and convergence, in this regard, will be a long process and involves the complex task of analysing the different needs of the water users in each riparian state and how they can be amicably met. However, while the competition between sovereign ownership and exclusive rights over ones resources vs. the principle of shared ownership is ongoing and the winners are still to be determined, the NELSB countries have begun to organise themselves and articulate their interests in a joint manner.

The example of the NELSB case study shows that despite norm contestation, norms can co-exist. While Waterbury (2002: 167) argues that a community of riparians does not exist in the Nile, and that no accepted norms of group behaviour that could shame riparians into complying with a particular code of conduct, this study has shown that first an identity

of a community of interests/riparians needs to be created. This has been actively and deliberately orchestrated by various local and external actors. Waterbury also argues that the main frameworks that can promote and sustain co-operation are contract and hierarchy, with the catalysts to co-operation being third-party entrepreneurs located in the donor community (Waterbury, 2002: 167). From this point of view, nation states pursuing their strategic and national interests are still the most senior players, and any action between them will be based on contract and hierarchy (ibid.). However, this study attempted to highlight the gradual change in the balance of power and sub-basin identity creation through the articulation of joint interests in the Nile Equatorial Lakes sub-basin. While the position of the hegemon in the Nile is not contested, a new voice, that of the NELSB states has to be considered, brought about by normative convergence. Once again, power asymmetries permeate all levels of scale.

### 6.3. THEORETICAL CONCLUSIONS

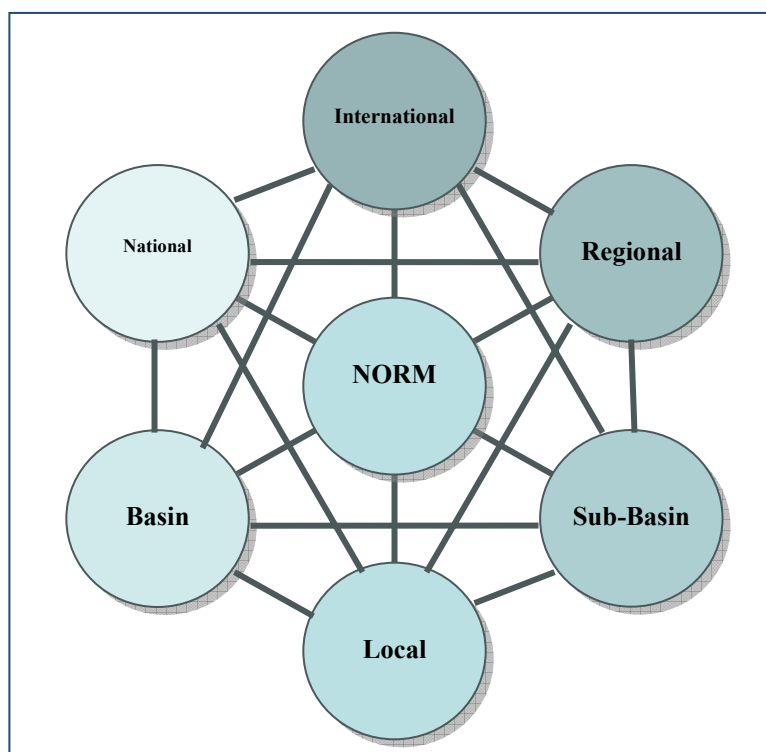
Based on the previous analysis of the Orange-Senqu and the NELSB case study areas, four primary conclusions are drawn, which are illustrated in Figure 8:

- *A norm and/or norm set created at a particular level of scale/context (e.g. international, regional, national) can interact and diffuse directly to any other level of scale and need not go through a linear top-down or bottom-up track.* As was the case in the SADC regional, global norms were not socialised through the ratification of the UN Convention. Instead, these principles were entrenched in the Revised Water Protocol, thus allowing SADC Member States to side-step the deliberate vagueness of the UN Convention. Similarly, local actors, such as NGOs and other interest groups, are now able to further their agendas through transnational networks with other NGOs and INGOs worldwide, made easier as a result of the accessibility of the internet. As such, norms do not need to cascade down from one level to the next lower level of scale, or diffuse up sequentially.
- *A norm/ norm set can penetrate several levels of scale simultaneously.* The subsidiarity principle is a case in point. In the NELSB, this norm has interacted with regional, basin, sub-basin, and national levels, and has been accepted (in various

ways) in these configurations. Indeed, the applicability and flexibility of norms at multiple levels and contexts contribute to its strength and legitimacy.

- ***Contexts will change as a result of norm diffusion.*** The impact norms have on contexts varies depending on the degree of specificity of the norm, the degree to which it can be localised, the congruence it displays with pre-existing norms, the ability it has to be reframed or grafted. That said however, this study has found that even the most ambiguous norms (such as equitable utilisation), or the most contentious (such as water privatisation or historic rights), display an agential capability. They are therefore able to not only change behaviour, but also, change the environment.

**Figure 8: Multi-level Contextual Norm Development**



- ***Norms will change as a result of contexts.*** In parallel to the above-mentioned conclusion, norms are inevitably transformed in the context in which they are internalised.
- ***Norms will change as a result of the existence of other norms*** as well as the interaction between them.



- *The multi-level normative framework advanced in this dissertation reveals that norms existing at different levels of scale are not always antagonistic and can at times be complementary, particularly if they help to further interests at other levels of scale.* The pervasiveness of instrumental commitments to norms by actors cannot be overlooked. Norms are therefore used, shaped, framed, grafted, manipulated, and packaged in ways that further the interests of those powerful enough to dictate and/or influence behaviour.

#### 6.4. IMPLICATIONS FOR AFRICA

An analysis of global, regional, basin-wide and local norms is useful and has implications for the rest of Africa, because it illustrates the significance of their interconnectedness in terms of the processes of interaction at play as well as how their content is affected. Theoretically, this dissertation has argued for a more systemic and integrated interpretation of normative transboundary water governance because each level of scale forms part of an international normative framework regarding the governance of transboundary water, and various norms interact and function in the context of the system as a whole (De Chazournes, 2009). Each layer gives meaning to how norms are translated and socialised. In this regard De Chazournes describes the phenomenon of a double process of nurture, which occurs at the global level (ibid.). In other words, while international agreements such as the 1997 UN Convention, act as guiding instruments for the establishment of treaties at the regional and basin levels, providing comprehensive codifications of global norms, they also offer a frame of reference or a basis for the development of more specific legal instruments that can address specific characteristics of individual watercourses (ibid.). Global agreements therefore facilitate the harmonisation and integration of norms and practices relating to the management and protection of freshwater resources at other levels. In this regard, global norms have helped to shape the content of instruments adopted at the regional and basin levels (ibid.).

Regional and basin-specific agreements give better effect to the geographical and sociological particularities of a specific watercourse because these agreements take into consideration the norms, interests and concerns of riparian states. As such, regional and

basin-specific norms define the content of the ‘rules of the game’ more precisely and allow for the adjustment of the general framework to the specificities of a watercourse (ibid.).

In terms of the interaction between these various levels of scale, the governance and law applicable to transboundary freshwater resources includes the problematique of the articulation between general (global) norms, and context-specific rules (ibid.). Norms established at the global, regional, basin and local levels therefore have to be read together in an integrated manner.

#### **6.4.1. INTERNATIONAL CONTEXT**

Internationally, there has been an increased realisation in recent years of the importance of effective transboundary governance and unified multi-actor, multi-sectoral and multi-level approaches to normative convergence. This concern has been directly and indirectly captured in various international and regional fora (which have resulted in both hard and soft law) including the following:

- ***The Global Consultation on Safe Water and Sanitation for the 1990s, New Delhi, 1990*** – This conference resulted in the New Delhi Principles, which is based on the premise of “some for all rather than more for some” and community management (UNDP, 1990).
- ***The International Conference on Water and the Environment, Dublin, 1992*** – This conference resulted in the Dublin Principles, which emphasises the economic value of water, gender, participation and the need for the integrated management of water (ICWE, 1992).
- ***The International Conference on Environment and Development (Earth Summit), Rio de Janeiro, 1992*** – This emphasised the economic value of water as a social good as well as an economic good. IWRM was put firmly on the international agenda at this conference. The Earth Summit also resulted in several significant documents which included: the Rio Declaration on Environment and Development, and Agenda 21, to mention a few (UNEP, 1992a, 1992b).
- ***Earth Summit + 5 programme of action, 1997*** – Taking place five years after the Earth Summit, the Earth Summit +5 re-emphasised the principles of IWRM. It also stressed the role of technical transfer and financial support from developed

- countries to assist with the development of IWRM. Additionally, it stressed the important role of greater cost recovery in developing countries with respect to water and sanitation services (SADC, 2003).
- ***World Water Vision, Second World Water Forum (WWF) and Ministerial Conference, The Hague, 2000*** – This conference resulted in the Ministerial Declaration of The Hague on Water Security in the 21st Century, and was signed by Ministers and Heads of State on 22 March 2000. It called for full cost recovery, massive increases in investments, and a much greater role for the private sector as key stakeholders (though this was heavily contested at the conference) (ibid.). Additionally, it recognised water as a basic need and proposed targeted subsidies for the poor. It also challenged governments to act as enablers and regulators rather than players (ibid.).
  - ***Water for the 21st Century: Vision to Action, 2000*** – This was a process that fed into the Second WWF. The central Vision was prepared under the guidance of the World Water Commission on Water for the 21st Century, a World Water Council initiative. The Vision to Action focused on the right to basic services and appeared soft on the issue of pricing and cost-recovery although it did promote the “polluter pays” principle. The subsequent development of regional Action plans (i.e. southern Africa, North Africa, West Africa etc.) that corresponded with this vision was executed by the Global Water Partnership (GWP).
  - ***The Millennium Summit and the Millennium Development Goals (MDGs), September 2000*** – The Millennium Summit stressed the importance of substantially reducing poverty and improving conditions in urban slums and resulted in the MDG targets.
  - ***International Conference on Fresh Water, Bonn, December 2001***. The resulting Bonn Ministerial Declaration re-emphasised many of the previous themes but focussed particularly on the important role of good governance and the responsibility of governments to promote and ensure IWRM, improved transboundary management of water and access to basic services (Bonn, 2001). The need for capacity building and technology transfer was stressed, along with the role of the international community and the importance of participatory approaches to

transboundary water management that includes gender aspects (Bonn, 2001; SADC, 2003). The role of the private sector was again heavily contested at the Bonn conference.

- ***The World Summit of Sustainable Development (WSSD), Johannesburg, September 2002*** – A significant commitment was made at this conference, that by 2015, the number of people in the world without adequate sanitation would have reduced by half. It was also stressed that sanitation needed to be integrated into IWRM strategies. Two key documents were drafted: a Political Declaration that expressed commitments and direction for implementing sustainable development (WSSD, 2002a); and a negotiated programme of action (referred to as the Johannesburg Plan of Implementation) to guide government activities. The Johannesburg Plan of Implementation aimed to develop IWRM and water efficiency plans by 2005 (WSSD, 2002b). Several actions to be taken are listed in this Plan, prioritising satisfying basic needs and protecting fragile environments (ibid.).
- ***Third World Water Forum and Ministerial Declaration, Kyoto, March 2003***

These international and regional events, along with legal instruments such as the UN Convention, have set the international agenda for transboundary water governance and the normative framework for transboundary water governance at the global scale. As is evident from the description above, this international agenda has slowly changed over time to include participatory and integrated approaches for managing transboundary rivers. Global normative frameworks therefore are flexible, and normative convergence is an incremental and often slow process that evolves over time.

Additionally, it is significant to note that developing countries (including African countries) have also been involved and have participated in these international and regional events (SADC, 2003). These international and regional events and resulting plans and declarations, have to a large degree, influenced the agenda for national policies and strategies, especially within developing countries. Indeed, the New Delhi and Dublin Principles have become socialised at various levels of scale and codified into global, regional and national agreements and treaties. When aware of the multi-level interactions

between normative frameworks, governments and policy-makers are better able to understand socio-political, socio-economic and institutional asymmetric power and influences at play.

#### **6.4.2. AFRICA-WIDE CONTEXT**

It can also be argued that the attention to normative convergence at the continent level springs from the priority placed on regional integration. Normative convergence including its drivers (such as policy harmonisation, sustainable knowledge transfer, trust and confidence building etc.) is a tool through which a common understanding on specific issues can emerge. This commitment has been articulated at the following events and their resulting declarations:

- ***Water and Sustainable Development in Africa – Regional Stakeholders’ Conference for Priority Setting (Accra Declaration), Accra, 15-17 April 2002*** – The primary goals of this conference were to help increase awareness by Africa’s political leaders of the central importance of water in sustainable development; to identify African water problems that can constrain the contribution of water resources to the goals of NEPAD; to agree on priorities for water development in Africa; to agree on a concrete Action Programme; as well as to develop a plan for mobilising financial resources needed to implement the action plans (AU, 2002). The main outcome of the Conference was the Accra Declaration based on identified challenges and issues in the African water sector and recommendations for action plans to address these challenges (ibid.). The Accra Declaration was signed on the 17 April 2002.
- ***The African Ministerial Conference on Water (AMCOW, Abuja), 29-30 April 2002*** – This conference followed the Regional Stakeholders Conference, and emphasised the need for African states to assess, and where appropriate, adopt best practices in global and regional programmes dealing with water and sanitation (AMCOW, 2002). This conveys a high-level political commitment to adhering to global norms and principles regarding water governance. At this conference, ministers signed the Abuja Ministerial Declaration on Water.

- **NEPAD** - The New Partnership for Africa's Development recognises water's important role in development, endorses the Africa Water Vision and the implementation of IWRM best-practice principles, and supports the promotion of knowledge transfer (SADC, 2003). Additionally, NEPAD's Water Sanitation and Infrastructure Programme aims to develop regional infrastructure, harmonise sectoral procedures, enhance financial flows towards investment in infrastructure, and developing skills and knowledge for the installation, operation and maintenance of water and sanitation infrastructure. Both a Short-Term Action Plan (STAP) and a Medium-to Long-Term Strategic Framework (MLTSF) have been drafted.

These broad Africa-wide goals and commitments indicate that there is an awareness of the importance of multi-level normative frameworks, with importance given to both global principles and participatory and integrated approaches. If one considers normative convergence as the institutional software required to sustain political will, then policy harmonisation strategies can be referred to as the institutional hardware that provides an enabling environment for the institutionalisation, internationalisation and/or socialisation of various norms. Therefore, both normative convergence and policy harmonisation exist in a symbiotic and mutually reinforcing relationship.

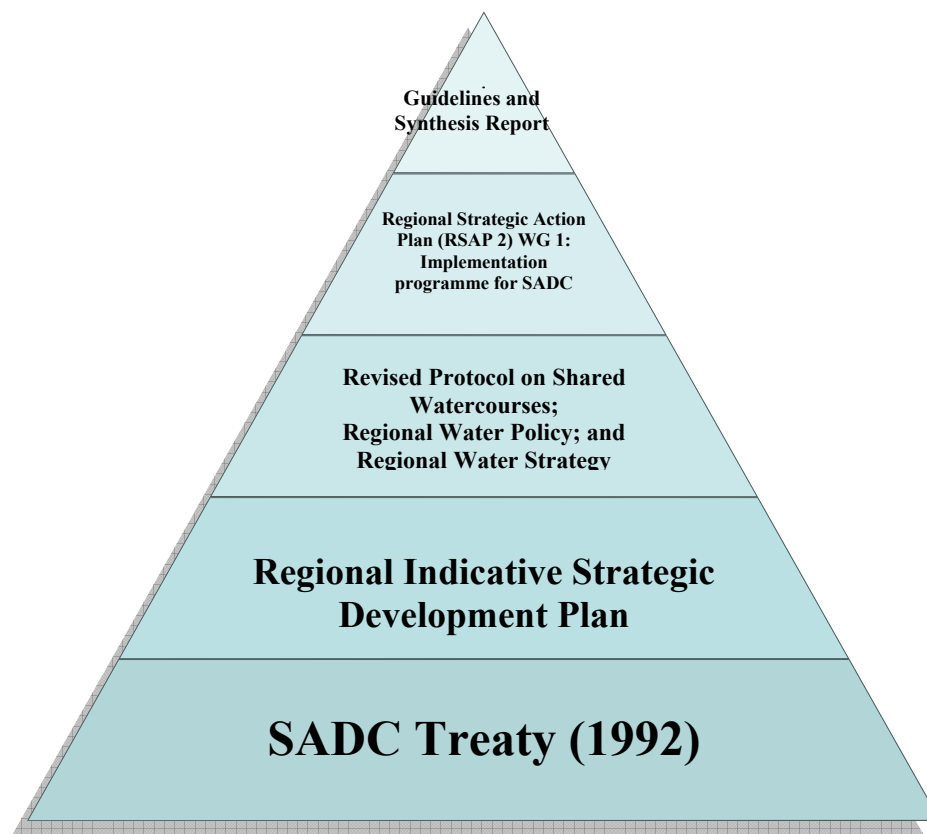
#### **6.4.3. BROADER SADC CONTEXT**

At the SADC regional level, institutional hardware becomes hard wired into developmental strategies for regional integration. This is reflected in the SADC Treaty establishing SADC, signed in Windhoek in August 1992 as well as in the Regional Indicative Strategic Development Plan (RISDP). The SADC Treaty's programme for action includes the commitment to "promote sustainable and equitable economic growth...through regional integration"; to "harmonise political and socio-economic policies and plans of Member States"; and to "eliminate obstacles to the free movement of capital and labour, goods and services, and of the people of the Region" (SADC, 1992).

The starting point for harmonisation in the SADC water sector is to ensure full compatibility of national policies and strategies with the objectives of the Revised Protocol (2000). Guideline documents such as the Regional Water Policy (RWP) and the Regional

Water Strategy (RWS) reiterate this commitment and encourage Member States to promote harmonisation of their water policies and legislation with the RWP. In order to assist Member States to achieve harmonisation of their national policies, the Regional Strategic Action Plan (RSAP 2) spells out concrete regional projects. Under the project WG 1: Implementation programme for SADC Protocol on Shared Watercourses, the completion of a study on harmonisation of legislation, policies and strategies is proposed. These documents form the policy harmonisation framework for the SADC water sector as conceptualised in Figure 9.

**Figure 9: SADC Water Sector’s Policy Harmonisation (PH) Imperatives**



## **6.5. PRACTICAL CONCLUSIONS**

For transboundary water governance at the regional and basin levels, policy harmonisation is a primary facilitating tool to foster incremental normative convergence and promote regional integration. Policy harmonisation therefore aims to align national

policies with joint co-operation goals. Harmonisation also refers to the alignment of national systems for managing and administering the water sector in a way that reduces differences in the operating environment between countries in the region. This entails the establishment of common arrangements, simplification of processes and sharing experiences and facilities for the common good of the region, while maximising the benefits accruing to each country from its shared water resources (UNECA, 2008). In this regard, it seeks to effect an approximation or co-ordination of different legal provisions or systems by eliminating major differences (de Cruz, 1999). It is therefore the co-operation between governments to make laws/policies more uniform and coherent. The view of SADC WD is that this is best achieved through the work of the different water commissions who have an interest in harmonised policies at the basin level in the various states involved.<sup>104</sup>

In essence, policy harmonisation does not attempt to make national water policies of Member States identical. Rather, harmonisation entails improving the compatibility of national policies and strategies with one another (both within and between countries) so that they do not hinder the sharing of international water resources for mutual benefit (SADC, 2003).

#### **6.5.1. A RATIONALE FOR POLICY HARMONISATION IN AFRICA**

Most policy harmonisation processes stem from the need to reduce potential trade conflicts arising from different standards rather than from the need to achieve environmental goals (Stevens, 1993). There has however been a slow progression towards convergence on government regulations of production methods, technologies and practices; economic instruments; quality standards; and systems, which have been applied particularly to global environmental problems (ibid.). Due to this increasing awareness of the interdependence of the environment with human activity, the time is right to explore the harmonisation of different types of environmental policies. In the future, the purpose of harmonisation will be to preserve the global environment as well as to facilitate global

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<sup>104</sup> Heyns, (2009) e-mail correspondence: Appendix 4.



trade (ibid.). The following points, highlighted in a discussion on policy harmonisation with the SADC WD, is noteworthy<sup>105</sup>:

**a). Co-operation-enabling characteristic**

The rationale for harmonisation therefore rests on its co-operation-enabling characteristic. Policy harmonisation helps states work together to achieve poverty alleviation using the water sector as a vehicle. A harmonised environment facilitates the creation of a sustainable water sector; helps in the reduction of the costs and risks of doing business across the region; assists in the advancement of transparent, simple and transferable best practice systems; and, helps facilitate economic growth through the reduction of incompatibilities of rules and regulations (UNECA, 2004). Considering that the water sector is one of the region's strategic sectors, in terms of the dependency of other sectors on its successful management and governance, harmonisation of water policies indirectly enables regions (southern Africa and East Africa) to consolidate their positions as global players in the world economy. Yet, harmonisation may be unpopular in some countries, which already enjoy the benefits of water abundance economies and have therefore had no need to develop an outward-looking approach to water security; have recently revised national policies; who regard it as an added administrative burden requiring time, money and capacity; or who regard it as too nebulous an objective.

**b). Policy Harmonisation as a strategic imperative**

The harmonisation of policy regimes has however been identified as a strategic imperative within SADC, the EAC, NEPAD and the African Union as it helps deepen regional integration. A harmonised policy environment will enhance regional human capital and technological development through the exchange of lessons learned, facilitate regional infrastructure development and enhance the efficient development of natural resources. Regions can, in a timely and adequate manner, respond to environmental and sustainable development challenges in a harmonised environment (ibid.).

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<sup>105</sup> Discussion on Policy Harmonisation with the SADC Water Division, Gaborone, Botswana, 20 October 2009: Appendix 5.

**c). Policy Harmonisation as a leveraging tool**

Globalisation and the increasing prevalence and popularity of economic blocs in the international political economy, implies that successful policy harmonisation practices in regional blocs may increase their negotiating powers in their dealings with other economic groupings, will help reduce prospects for marginalisation (ibid) and encourage funding prospects. Today, open regionalism is considered to be an important step towards globalisation and the strengthening of regional activities (AFDB, 2003). Successful policy harmonisation in other African regions would achieve this same objective in the long-term (UNECA, 2004).

**d). Facilitates the evolution of a shared vision**

For the water sector, policy harmonisation facilitates the evolution of a shared vision regarding specific issues and development priorities. This enables policy harmonisation to become the vehicle through which benefits, costs and risks of transboundary river basin co-operation can be quantified and shared. This is at the centre of normative convergence. Moreover, it emphasises that agency rests with all states, and that this is an inclusive process of the identification of joint priorities.

**e). Policy Harmonisation: A necessity due to the nature of the resource**

Policy harmonisation is essential for all regions in Africa, because of the nature of the resource – strategic and shared, which heightens the need to co-operate and harmonise standards in order to prevent jeopardising river health.<sup>106</sup> As water stress increases over time, conflicts arising out of policy differences, and more importantly out of differences in the intensity of the implementation of policies, are likely to become both more severe and longer lasting (SADC, 2003).

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<sup>106</sup> Discussion with Phera, R. (2009) Senior Programme Manager, SADC Water Division, Gaborone, Botswana 20 October 2009: Appendix 5.

#### **f). Need for Policy Harmonisation at different levels of scale**

The need for policy harmonisation at different levels of scale is articulated in Table 19. This includes harmonisation of policies between countries, between sectors, between shared watercourse institutions (SWIs) and between regional institutions.

**Table 19: Harmonisation at Different Levels of Scale**

<b>According to the <i>Guidelines for the Development of National Water Policies and Strategies to Support IWRM</i> (SADC, 2003), the following needs/justification for policy harmonisation were crafted:</b>	
<b>Harmonisation of policies between countries</b>	Based on the studies conducted between 1999-2003 funded by German Development Co-operation (PCN 9 and 10 Phase 1), significant policy inconsistencies or inter-state policy contradictions were not found in the text of existing water policy statements (SADC, 2003). However, as noted in the Guidelines (ibid.), these conclusions were reached within the time and budget constraints of this project (AAA.9 and AAA.10 Phase 1). The policy review conducted then did not extend to a detailed SADC-wide analysis of all Member States' legislation (ibid.).
<b>Harmonisation of policies between sectors</b>	There are likely to be conflicts of interest between significant water using sectors (for example, between agriculture and hydropower, between power production and flood control and between a protected environment and other water users) at both the policy and operational levels, nationally and regionally (ibid.).
<b>According to a multi-sectoral study on best practice and lessons learned (Jacobs, Chikozho and Funke, 2009) the following needs/justification for policy harmonisation were crafted:</b>	
<b>Harmonisation of policies between regional institutions</b>	The institutional quagmire of states' multiple membership to various regional integration agreements (RIAs) poses challenges for SADC Member States in terms of policy harmonisation. Within the water sector, this implies the consideration of harmonisation of inter-state water policy, but also, the harmonisation of inter-RIA policy (e.g. SADC and the EAC), as well as policy harmonisation between river basin organisations. It is therefore proposed that any policy harmonisation implementation in the water sector be multi-level in approach (Jacobs, <i>et al.</i> , 2009).
<b>Harmonisation of policies between SWIs</b>	

#### **6.5.2. THE BENEFIT OF POLICY HARMONISATION FOR REGIONS IN AFRICA AND ITS CHALLENGES**

While harmonisation is a fundamental requirement for regional integration and co-operation, as well as for the creation of a bigger economic space capable of consolidating the regions' positions in the global economy, there are many other benefits expected to accrue to Member States (UNECA, 2008). A primary benefit includes the promotion of sharing and free movement of capital, labour, technology, capacities for development, ideas and norms. These factors are critically important, particularly given that capacities for

human and knowledge development, as well as sources of capital, are unevenly distributed across the SADC and NELSB regions.

Successful implementation of policy harmonisation is however, a challenging endeavour. This is compounded by the institutional quagmire of states' multiple membership to various regional integration agreements (RIAs), which pose challenges for policy harmonisation within a particular institution or regional bloc. Characteristic in both southern and East Africa is the evidently large number of overlapping regional integration agreements as indicated in Table 20. These include SACU, SADC, COMESA, EAC, IOC and IGAD as well as other regional arrangements such as RIFF and the MMA. With the exception of Mozambique, all the other SADC countries belong to at least two of these regional groups (Kritzinger-van Niekerk and Moreira, 2002). Botswana and South Africa, for example, are members of both SADC and SACU, while South Africa is also part of the common monetary area. Namibia and Swaziland are both members to five RIAs, including SACU, SADC, COMESA, and MMA as well as RIFF (*ibid.*).

**Table 20: SADC Member States' Memberships in Selected Regional Integration Agreements (Adapted from Kritzinger-van Niekerk and Moreira, 2002)**

	SADC	COMESA	SACU	EAC	IOC	IGAD	MMA	RIFF
Angola	•	•						
Botswana	•		•					
Burundi		•						•
DRC	•	•						
Kenya		•		•		•		•
Lesotho	•		•				•	
Madagascar		•			•			•
Malawi	•	•						•
Mauritius	•	•			•			•
Mozambique	•							
Namibia	•	•	•				•	•
Rwanda		•						•
Seychelles	•	•			•			•
South Africa	•		•				•	
Swaziland	•	•	•				•	•
Tanzania	•			•				•
Uganda		•		•		•		•
Zambia	•	•						
Zimbabwe	•	•						•

Additionally, the on-going negotiations on the EPAS (Economic Partnership Agreements) with the EU have been challenging for the same reason. The EU EPA negotiations were launched in July 2004 in Windhoek, Namibia. Since the EU prefers to negotiate EPAS with regional groupings, this requires various regional groupings to make significant progress in their internal regional integration projects (Hurt, 2003, 2004). SADC Member States are party to four configurations, with each configuration negotiating separately with the EU. According to Hurt, “These are externally imposed and do not in most cases correspond to existing regional organisations” (Hurt, 2003: 173). The implication of having four FTAs established with the EU within a single REC, will have serious implications for SADC’s own integration agenda (Tralac, 2008). Trade policy experts foresee technical challenges with respect to overlapping membership and the costs related to the implementation of these various EPAS (ibid.). Within the water sector, this implies the consideration of harmonisation of inter-state water policy, but also, the harmonisation of inter-RIA policy (e.g. SADC and the EAC), as well as policy harmonisation between river basin organisations. It is therefore proposed that any policy harmonisation implementation in the water sector be multi-levelled in approach (Jacobs, et al., 2009).

Barriers to normative convergence, such as the lack of capacity, financial resources, and sustainable knowledge transfer to mention a few, are equally as detrimental to policy harmonisation processes. Specifically, promoting and increasing political will remains a key challenge. In essence, social as well as technical ingenuity are required to foster normative convergence in transboundary water governance. Despite the clear need for policy harmonisation in the water sector in Africa, the lack of capacity to implement policy harmonisation processes is a primary constraint to effective policy harmonisation. *“Countries differ significantly in the intensity and effectiveness of their implementation of national policies. Therefore the main constraints to the effective implementation of national policies in regard to managing transboundary waters appear to be related to capacity constraints, available resources and strictness of implementation (and enforcement) of written policies rather than the policies themselves”* (SADC, 2003).

It should also be noted that policy harmonisation, on its own, is not a sufficient condition for better regional integration or normative convergence. It should be

implemented as part of a whole basket of mutually reinforcing initiatives contributing to the same objectives (Jacobs, *et al.*, 2009). This includes an awareness of the impact norms have on behaviour and contexts, and in turn, how they can be changed according to context. Understanding “the way we do things” allow us to change what should be changed, and preserve what should not be changed.

## **6.6. CONCLUSION: THE APPLICABILITY OF MULTI-LEVEL GOVERNANCE BEYOND WATER RESOURCES AND AFRICA...**

This dissertation has sought to argue for the importance of holistic and integrated analyses of governance, and the complexities of these systems. A multi-level normative framework was sketched based on a comparative analysis of two African regions: SADC (using the Orange-Senqu River basin case study) and the Greater Nile but also East Africa (using the NELSB case study). Normative convergence, acting as institutional software, focuses on the environment of norms that shape actor behaviour and sustain political will, while policy harmonisation strategies provide the institutional hardware needed to institutionalise, socialise or internalise these norms.

Since this dissertation has focused very specifically on the multi-levelled nature of *water resources governance in Africa*, wider geographical relevance to other regions in the world is undetermined and beyond the scope of this study. Additionally, it may also be difficult to compare specific trends found in water governance with other resources due to water’s unique characteristics (finite, for which there is no substitute, and scarce) and dual importance: both societal (for human consumption) *as well as* economic (for economic gain). Many other resources are more easily used as a sole means for economic gain, such as oil, diamonds, coal etc., and their societal value is less prioritised or secondary.

However, the issue of multi-level governance certainly has utility in a wide range of natural resource governance spheres. In reflection, governance structures for the environment are found on a multiplicity of levels, from the global to the local. Norms and other regulatory/constitutive mechanisms are therefore closely linked, and make up the complex institutional architecture. An important debate in global environmental politics gaining ground pertains to the advantages and disadvantages of an increasing

decentralisation or fragmentation of environmental governance structures (Biermann and Bauer 2005; Vogel 1997). This discourse seeks to provide a better understanding of the role of regions in vertically and horizontally linking different governance systems operating at various levels of scale. In this regard, Oran Young's examination of the linkages between regime effectiveness and the 'fit' and 'scale' of environmental regimes, is theoretically apt. (Young, 2002). Economic analyses based on game theory have also produced an alternative perspective – one that assesses the effectiveness of different “climate coalitions” influencing the construction, restructuration, and circulation of climate change knowledge, all of which feed into the global climate change debate (Eycksmann and Finus 2007; Sugiyama and Sinton 2005). Further, the applicability of multi-level governance is also relevant if one considers discussions about security and economic integration at the regional level, where regions have been perceived as either “stumbling blocks” or “building blocks” to free trade and socio-economic development. Now, a third actor (environmental security) enters this discussion - is the regional level the most appropriate level in addressing environmental security concerns?

The implications of fragmentation and multi-level approaches can also very easily span resources and issue areas such as forestry and climate change, for instance, where actors are able to operate across horizontal and vertical levels of social organisation and jurisdictional authority in other regions, such as North America. The challenge for multi-level governance strategies however, is avoiding the dilution of effort and efficacy. Policy-making at multiple North American governance levels is becoming more ambitious in terms of scope and mitigation goals, but in the climate change example, many green house gas emissions trends are still rising (Van Deveer and Selin, 2008).

The practical justification for the need to explore alternative models of environmental governance (regional approaches, multi-level approaches) stems from the concern with increasing transaction costs of global regimes and the resultant “global convention fatigue.” These concerns are producing a shift in the locus, impetus, implementation, and innovation to regional levels. Additionally, the theoretical applicability of alternative approaches relates to the observation that studies of regional politics now require an expansion beyond traditional preoccupations with economic

integration and security cooperation, to areas of environmental security and sustainable development.

In addressing these and other environmental governance challenges, and advancing the understanding of alternative approaches, important research questions deserve further investigation. These relate to the emergence and manifestation of regions from the environmental perspective; the evolution, desirability, effectiveness, and efficiency of regional environmental governance; the applicability and role of existing regional institutions in addressing environmental challenges in addition to economic and socio-political realities; relationships within, among, and beyond regions in multi-level arrangements; and the repercussions of regional environmental governance for democratic legitimacy, accountability, and transparency. In essence, global change necessitates the exploration of new and alternative approaches to the way we govern natural resources. This requires us to look at issues of environmental governance from a multi-level lens, one which emphasises the multiplicity of actors, scale, power, knowledge and agency.



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## **APPENDICES**

## **APPENDIX 1: GLOSSARY OF PRIMARY TERMINOLOGY USED IN THIS INVESTIGATION**

***Basin closure:*** Defined as the situation where all available and utilisable waters in a river basin have already been allocated to some productive activity and therefore insufficient water is available for allocation to new water developments (Seckler, 1996; Svendsen, Murray-Rust, Harmancioglu and Alpaslan, 2001: 184). This definition of basin closure differs from standard hydrological definitions of ‘closed river basins’ pertaining to an endorheic basin that does not flow into an ocean but instead terminates in an inland sea, lake or other sink (Wester, Burton and Mestre-Rodriguez, 2001: 161).

***Benefit-sharing Paradigm:*** In the transboundary water resources sense, benefit-sharing refers to a paradigm or policy tool that identifies the gains of inter-state co-operation beyond merely the sharing of water, but incorporates the sharing of opportunities that water brings to a country, a basin and a region.

***Desecuritisation:*** Defined as the deliberate or gradual shifting of specific (strategically important) issues out of emergency mode and into the formal bargaining processes of the political sphere (Buzan, Waever and de Wilde, 1998: 4).

***Endogenous Water:*** The portion of the total water resources of a country or region, consisting of precipitation that falls within the geographic area of that country or region, which does not evaporate, and which feeds aquifers and surface water drainage basins (Falkenmark and Lindh, 1993: 82; Turton, 2003d: 9).

***Endoreic:*** An endoreic river system is one that terminates inland, rather than into the sea (exoreic) due to several changes that could occur over time be they geological, climatic i.e. the formation of a desert (Seely, *et al.*, 2003).

***Hydropolitical Complex (HPC):*** As defined by Turton, a hydropolitical complex is a derivative of Buzan’s regional security complex. It is a conceptual lens that shows the

linkages between riparian states by a series of hydropolitical inter-state arrangements at a level other than the river basin, showing the extent that water issues have become drivers of cooperative international relations in their own right (Turton, 2003d, 2005, 2008a, 2008b; Turton and Ashton, 2008). The Southern African Hydropolitical Complex (SAHPC) is one such HPC.

***Hydropolitical Security Complex (HSC):*** A hydropolitical security complex, as defined by Schulz (Schulz, 1995: 97) is a particular rendition of a regional security complex that exists when states that are both “owners” and “users” of shared rivers begin to view the shared water resources as an issue of national security, and where water becomes securitised e.g. MENA Hydropolitical Security Complex. The HSC is a derivative of security complexes which is defined as a set of units whose major processes of securitisation, desecuritisation or both are so interlinked that their security problems cannot reasonably be separated from one another (Buzan, *et al.*, 1998: 201; Turton, 2003d: 17).

***International/Transboundary/shared River Basin:*** An international river basin (used interchangeably with transboundary or shared river basin) is the area that contributes hydrologically (including both surface and groundwater) to, and forms part of, a stream when any of its perennial tributaries crosses the political/national boundaries of two or more states (Turton, 2003d: 12; Wolf, *et al.*, 1999: 389).

***Norms:*** are “collective expectations for the proper behaviour of actors with a given identity” (Katzenstein, 1996: 5). They provide standards of appropriate conduct and prescribe social practices (Dimitrov, 2005: 3).

***Norm Aggregation:*** Cumulative and lateral norm diffusion (state to state and state to basin) as defined by Conca, reflected in a notable increase of new international basins subscribing to normative elements present in other international basins (Conca, Wu and Mei, 2006). Conca *et al.* argue that if this process was occurring, one would see a marked increase in basin-specific agreements. In other words, norm aggregation would take place

horizontally from basin to basin, and thereby form a unified global normative approach/framework (Conca, 2006; Conca, *et al.*, 2006).

**Normative Convergence:** Defined as the process whereby riparian interests are transformed from unilateral agendas to multilateral co-operative agendas and as such, converge on a normative trajectory that moves towards amity.

**Norm Diffusion:** The process where norms cascade/filter up or down and get integrated into other levels of scale or contexts.

**Norm Emergence:** The first step in Finnemore and Sikkink's norm life cycle is norm emergence, where norm entrepreneurs present new ideas as potential norms. They do this by persuading a critical mass of the moral appropriateness of this potential norm (Finnemore and Sikkink, 1998: 895-896). They oftentimes compete with existing constellations of norms in order for the norms which they advocate to gain acceptance (*ibid.*: 897).

**Norm Internalisation:** This is the third and final stage of Finnemore and Sikkink's (1998) norm life cycle model. When a new norm becomes socialised to such an extent that it is taken for granted, and conformance with its dictates is no longer (or at least rarely) questioned. If socialisation is successful, the actor internalises the expectations of behaviour i.e. beliefs and practices, imparted to him by its social environment, and the norm is viewed as a constitutive element in the identities and interests of socialised norm recipients (Finnemore and Sikkink, 1998: 904-905; Schimmelfennig, 2000)

**Norm Socialisation:** The two-way process where an actor being socialised accepts beliefs and practices from the world and adopts them as its own. Simultaneously, the actor being socialised may well reflect on what it internalises during the socialisation process and even alter its content (Schimmelfennig, 1994: 339 cited in Boekle, *et al.*, 1999: 9). Two types of socialisation are identified in this study and elaborated upon in chapter three: transnational socialisation and domestic socialisation.

**Problemshed:** As defined by Allan (2001: 337), the term encapsulates the operational context and the problems that exist within it. The term watershed defines a tract with limited and variable water resources. When the water resources of a particular watershed become insufficient to meet the demand for water, a management system has to look beyond the watershed for solutions. According to Allan (2001) it is within the 'problemshed' that these solutions can be identified, e.g. virtual water and other benefit-sharing opportunities.

**Riparian:** A sub-national entity or a nation state which is directly adjacent to a river i.e. has a river bank on a flowing river, and also refers to groundwater bodies (Allan, 2001: 337).

**Securitisation:** According to Buzan, securitisation is constituted by the inter-subjective establishment of an existential threat with a saliency sufficient to have a substantial political effect (Buzan, *et al.*, 1998: 16). In this study, securitisation also refers to the deliberate elevation of an issue into a national security concern through framing.

**Transboundary:** That which crosses or flows along national (political) borders. International rivers are either successive (crossing) or contiguous (flowing along the boundary, which is then normally the "Thalweg" or deepest part of the watercourse). ("Thalweg" = German for "deepest valley" under the water).

**Watercourse:** A "system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus" (UN, 1997: Article 2). The UN Convention also recognises that as an international watercourse, parts of it are situated in different states (*ibid.*).

**Watershed:** The edge of a natural river basin. Sometimes means the same as the river basin being the area drained by a river system as defined by Allan (2001: 339).

## APPENDIX 2: LIST OF SEMI-STRUCTURED INTERVIEW PARTICIPANTS WITH WRITTEN CONSENT

### 2A: ORANGE-SENQU INTERVIEWS

	Interview #	Interview Type	Name of Interviewee	Position and Affiliated Organisation	Date of Interview	Place of Interview
1	2	Individual, semi-structured	<b>Prof. Ashton, Peter</b>	Aquatic Ecologist and Principal Researcher - Council for Scientific and Industrial Research (CSIR), South Africa	07/ 07/ 2008	CSIR, Pretoria, South Africa
2	16	Individual, semi-structured	<b>Mr. Biggs, Dudley</b>	Former Deputy Director: Planning, MAWF, Namibian Technical Task Team Member of the ORASECOM Technical Task Team, Namibia	1/09/2008	7 Rossini Street, Windhoek West, Namibia
3	40	Individual, semi-structured	<b>Adv. Bokang, Makututsa</b>	Legal Advisor: Water Commission (also assists on ORASECOM Legal Task Team), Lesotho	24/11/2008	Sentinel Park, Water Commission, Maseru, Lesotho
4	15	Group, Focus Group/ Roundtable Discussion	<b>DRFN Staff:</b> <b>1. Dr. Seely, Mary (DRFN Associate)</b> <b>2. Ms. Roberts, Carole (ERB Project Manager/Coordinator)</b> <b>3. Ms. Kinyaga, Vivianne (Water Desk Coordinator)</b>	Staff of Desert Research Foundation, Namibia	1/09/2008	7 Rossini Street, Windhoek West, Namibia
5	14	Individual, semi-structured	<b>Mr. Heyns, Piet</b>	Former Under Secretary, Department of Water Affairs, and Namibian delegate to the ORASECOM and the OKACOM, Namibia	1/09/2008	2 Esterbrand Straat, Olympia, Windhoek, Namibia

	Interview #	Interview Type	Name of Interviewee	Position and Affiliated Organisation	Date of Interview	Place of Interview
6	22	Individual, semi-structured	Mr. Karuombe, Barney	Regional Integration and Inter-Parliamentary Officer, SADC Parliamentary Forum, Namibia	11/09/2008	SADC PF, Parliament Gardens Love Street/off Robert Mugabe Ave, Windhoek, Namibia
7	42	Individual, semi-structured	Mr. Khathibe, B.	Commissioner on Lesotho Delegation: Lesotho Highlands Water Commission, Lesotho	25/11/2008	LHWC, 5th floor, Lesotho Banks Tower, Kingsway Road, Maseru, Lesotho
8	17	Individual, semi-structured	Mr. Luyanga, Shadrack	Development Planner, MAWF, Namibia	2/09/2008	Government Office Park, MAWF, 2nd floor, Windhoek, Namibia
9	10	Individual, semi-structured	Dr. MacKenzie, Ronnie	Director, WRP (Pty) Ltd, Pretoria, South Africa	23/07/2008	WRP, 27 George Storrar Drive, Groenkloof, Pretoria, South Africa
10	11	Individual, semi-structured	Mr. Malzbender, Daniel	Director African Centre for Water Research, South Africa	05/08/2008	47 on Strand, Cape Town, 8000, South Africa
11	19	Individual, semi-structured	Ms. Namene, Laura	Chief Hydrologist (Water Quality Scientist) Department of Water Affairs and Forestry, MAWF, Namibia	3/09/2008	Government Office Park, MAWF, 2nd floor, Windhoek, Namibia
12	39	Individual, semi-structured	Mr. Nthathakane, Peter	Technical Task Team Member: ORASECOM and Water Commission, Lesotho	24/11/2008	Sentinel Park, Water Commission, Maseru, Lesotho
13	43	Individual, semi-structured	Mr. Phakoe, Masilo	Chief Executive: Lesotho Highlands Development Authority (LHDA), Lesotho	25/11/2008	Lesotho Bank Tower, Kingsway Road, Maseru, Lesotho
14	21	Individual, semi-structured	Adv. Philander, Ruben	Attorney, LorentzAngula, Former Principal Legal Officer for ORASECOM, Ministry of Justice, Namibia	10/09/2008	LorentzAngula Incorporated Attorneys, Notaries & Conveyancers LA Chambers, Windhoek, Namibia

	<b>Interview #</b>	<b>Interview Type</b>	<b>Name of Interviewee</b>	<b>Position and Affiliated Organisation</b>	<b>Date of Interview</b>	<b>Place of Interview</b>
<b>15</b>	3	Individual, semi-structured	<b>Mr. Pyke, Peter</b>	Chief Engineer: Options Analysis (Central), Department of Water Affairs and Forestry (DWAF), South Africa	09/ 07/ 2008	DWAF offices, Sedibeng Building, 185 Schoeman Street, Pretoria, South Africa
<b>16</b>	45	Individual, semi-structured	<b>Dr. Roberts, Paul</b>	Former Deputy Director General: Water Resources, DWAF, South Africa	19/12/2008	Interviewees home: 158 High Street, Ashlea Gardens, Pretoria
<b>17</b>	41	Individual, semi-structured	<b>Adv. Sekoboto, Lucy</b>	Commissioner: ORASECOM, Chief Legal Advisor, Lesotho	25/11/2008	Government Office Park, Ministry of Natural Resources Headquarters, Maseru
<b>18</b>	20	Individual, semi-structured	<b>Mr. Shilomboleni, Andreas</b>	Chief Hydrological Technician, Namibian Hydrological Services, MAWF, Namibia	3/09/2008	Government Office Park, MAWF, 2nd floor, Windhoek, Namibia
<b>19</b>	24	Individual, semi-structured	<b>Mr. Thamae, Lenka</b>	Executive Secretary: ORASECOM	17/09/2008	ORASECOM Offices, 185 Schoeman Street, Sedibeng Building, DWAF, Pretoria
<b>20</b>	44	Electronic	<b>Mr. Thamae, Mabusetsa Lenka</b>	Head of 'Water for Justice' Program at Transformation Resource Centre (TRC), Maseru, Lesotho	Date sent: 28/11/2008 Date received: 6/12/2008	NA but representative of Lesotho NGO Lesotho
<b>21</b>	18	Individual, semi-structured	<b>Mr. Van Langenhove, Guido</b>	Head of Hydrological Services, MAWF, Namibia	2/09/2008	Government Office Park, MAWF, 2nd floor, Windhoek, Namibia



## 2B: NILE EQUATORIAL LAKES SUB-BASIN INTERVIEWS

	Interview #	Interview Type	Name of Interviewee	Position and Affiliated Organisation	Date of Interview	Place of Interview
22	1	Telephonic, unstructured	<b>Mr. Granit, Jakob</b>	Project Director Stockholm International Water Institute	30/06/2008	Telephonic – South Africa/Sweden
23	28	Individual, semi-structured	<b>Mr. Hakizimana, Gabriel</b>	Director of National Institute for the Environment and Nature Conservation, Burundi	25/09/2008	Imperial Botanical Hotel, Entebbe, Uganda, Symposium on Science and Policy Linkages, 24–26 Sept 2008
24	25	Individual, semi-structured	<b>Mr. Mutayoba, Washington</b>	Director of Water Resources, Ministry of Water and Irrigation, Tanzania	25/09/2008	Imperial Botanical Hotel, Entebbe, Uganda, Symposium on Science and Policy Linkages, 24–26 Sept 2008
25	27	Individual, semi-structured	<b>Dr. Mwinzi, A. Muusya</b>	Director General: National Environment Management Authority (NEMA), Nairobi, Kenya	25/09/2008	Imperial Botanical Hotel, Entebbe, Uganda, Symposium on Science and Policy Linkages, 24–26 Sept 2008
26	32	Individual, semi-structured	<b>Mr. Ndayizeye, Audace</b>	Former Executive Director of NBI	30/09/2008	NBI Secretariat, Plot 12, Mpigi Road, Entebbe
27	38	Individual, semi-structured	<b>Mr. Niragire, Antoine</b>	Nile Basin Initiative, Water Resources Planning and Management Project (WRPM), Decision Support Systems (DSS) Rwanda	14/10/2008	WRPM offices, Government departmental buildings, Kigali, Rwanda
28	26	Individual, semi-structured	<b>Mrs. Nyeko, Joyce</b>	Senior Fisheries Officer, Lake Victoria Fisheries Organisation (LVFO), Entebbe, Uganda	25/09/2008	Imperial Botanical Hotel, Entebbe, Uganda, Symposium on Science and Policy Linkages, 24–26 Sept 2008
29	30	Individual, semi-structured	<b>Mr. Okurut, Tom</b>	Head of Lake Victoria Basin Commission (LVBC), East African Community (EAC), Arusha, Tanzania	26/09/2008	Imperial Botanical Hotel, Entebbe, Uganda, Symposium on Science and Policy Linkages, 24–26 Sept
30	36	Individual, semi-structured	<b>Mr. Olet, Emmanuel</b>	Programme Officer, Water Resources Management and Development in the Nile Equatorial Lakes Subsidiary Action Programme (NELSAP), Rwanda	13/10/2008	NELSAP Headquarters, Kigali, Rwanda

	<b>Interview #</b>	<b>Interview Type</b>	<b>Name of Interviewee</b>	<b>Position and Affiliated Organisation</b>	<b>Date of Interview</b>	<b>Place of Interview</b>
<b>31</b>	35	Individual, semi-structured	<b>Prof. Oweyegha-Afunaduula, F.C.</b>	Nile Basin Discourse (NBD) Chairman, Plot 7/9 Hill Lane, Entebbe, Uganda	8/10/2008	Botanical Hotel, Entebbe, Uganda (was attending the NBD Annual Regional Conference)
<b>32</b>	34	Individual, semi-structured	<b>Ms. Sekyana, Irene</b>	National Coordinator: Greenwatch, Uganda	8/10/2008	Plot 6, Colville Street, Airways House, Ground Floor Suite #5, Kampala, Uganda
<b>33</b>	37	Individual, semi-structured	<b>Mr. Sikubwabo, Adelard</b>	Coordinator: AREDI (l'Association Rwandaise pour l'Environnement et la Développement Intégré	13/10/2008	AREDI Offices, Kisimenti, Kigali, Rwanda
<b>34</b>	33	Individual, semi-structured	<b>Dr. Tindimugaya, Callist</b>	Commissioner, Water Regulation: Directorate of Water Resources, MWE, Entebbe, Uganda, also one of the two TAC members for Uganda	1/10/2008	Directorate of Water Resources, Entebbe, Uganda
<b>35</b>	29	Individual, semi-structured	<b>Mr. Waako, Tom</b>	Programme Officer, NBI Secretariat	26/09/2008	NBI Secretariat, Plot 12, Mpigi Road, Entebbe, Uganda
<b>36</b>	31	Individual, semi-structured	<b>Ms. Wondimu, Hamere</b>	Senior Program Officer, Shared Vision Program, NBI, Uganda	30/09/2008	NBI Secretariat, Plot 12, Mpigi Road, Entebbe, Uganda

## 2C: GENERAL INTERVIEWS

	Interview #	Interview Type	Name of Interviewee	Position and Affiliated Organisation	Date of Interview	Place of Interview
37	46	Individual, semi-structured	<b>Dr. Claassen, Marius</b>	Competence Area Manager (CAM) Water, Research Group Leader: Water Resource Governance Systems, Council for Scientific and Industrial Research (CSIR)	12/2/2009	Building 21, CSIR, Pretoria, South Africa
38	5	Individual, semi-structured	<b>Mr. Cornwell, Richard</b>	Senior Research Fellow: African Security Analysis Programme, Institute for Security Studies (ISS)	16/07/2008	ISS Block C, Brooklyn, Pretoria, South Africa
39	23	Individual, semi-structured	<b>Dr. Goldin, Jacqui</b>	Head, African Water Issues Research Unit (AWIRU), University of Pretoria Water Institute Pretoria	17/09/2008	My office, Building 21, Rm AB 24, NRE, CSIR Campus, Pretoria, South Africa
40	4	Individual, semi-structured	<b>Mr. Havenga, Beyers</b>	Director: Special Projects (Water) ARCUS GIBB(Pty) Ltd. Former Chief Engineer of National Water Resource Planning (North), DWAF	09/07/2008	36 Alkantrand Road, Lynnwood Manor, Pretoria, South Africa
41	9	Individual, semi-structured	<b>Dr. Hendricks, Cheryl</b>	Senior Research Fellow, Security Sector Governance Programme, Institute for Security Studies (ISS), Pretoria	23/07/2008	ISS Block C, Brooklyn, Pretoria, South Africa
42	8	Individual, semi-structured	<b>Dr. Mpanyane, Tanana (Saki)</b>	Senior Researcher, African Security Analysis Programme, Institute for Security Studies (ISS), Pretoria	23/07/2008	ISS Block C, Brooklyn, Pretoria, South Africa
43	12	Individual, semi-structured	<b>Mr. Ngcozela, Thabang</b>	Project Officer, Environmental Monitoring Group, Cape Town	07/08/2008	10 Nuttal Road, Observatory Cape Town, South Africa
44	6	Telephonic Interview/Skype	<b>Ms. Pottinger, Lori</b>	Director, Africa Program, and Editor, World Rivers Review, International Rivers	18/07/2008	Telephonic - South Africa/ USA
45	7	Individual, semi-structured	<b>Mr. Van Rooyen, Johan</b>	Director/Strategic Planner: National Water Resource Planning, Department of Water Affairs and Forestry	22/07/2008	DWAF offices, Sedibeng Building, 185 Schoeman Street, Pretoria, SA
46	13	Individual, semi-structured	<b>Mr. Van Wyk, Niel</b>	Chief Engineer: National Water Resource Planning (East), Department of Water Affairs and Forestry, Pretoria	13/08/2008	DWAF offices, Sedibeng Building, 185 Schoeman Street, Pretoria, SA

### APPENDIX 3: LIST OF INFORMAL DISCUSSION PARTICIPANTS

Interview Type	Interviewee, Position and Affiliated Organisation	Date of Interview	Place
Informal	Anonymous - Subsistence Farmer	October 2008	Farm in Jinja, Uganda – near Bujagali Dam Construction Site
Informal	Anonymous - Employer at Nile Explorers River Company	October 2008	Jinja, Uganda
Informal and project related	Dr. Chikozho, Claudious – Senior Researcher (Development Studies), Water Resources Governance Systems, Natural Resources and the Environment, CSIR	February 2009 – present	CSIR, Pretoria, South Africa
Informal and project related	Dr. Claassen, Marius – Research Group Leader, Water Resources Governance Systems, Natural Resources and the Environment, CSIR	August 2008 - present	CSIR, Pretoria, South Africa
Informal and project related	Mr. Earle, Anton – Project Director, Capacity Building, SIWI	May 2009	Stockholm International Water Institute, Stockholm, Sweden
Informal and project related	Ms Funke, Nikki – Senior Researcher (Political Scientist), Water Resources Governance Systems, Natural Resources and the Environment, CSIR	May 2008 – present	CSIR, Pretoria, South Africa
Informal and project related	Mr. Ginster, Martin - Environmental Advisor: Water and Cleaner Production, SASOL, South Africa	25-26 June 2009	CSIR Workshop – Tools and Approaches to Strengthen Transboundary River Basin Organisations in SADC
Informal and project related	Professor Gooch, Geoffrey – Centre for Water Law, Policy and Science, University of Dundee, Scotland, UK	12 – 15 November 2007	CAIWA Conference, Basel Switzerland, and Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa
Informal	Mr. Granit, Jakob – Project Director, SIWI	August 2008 – August 2009	Stockholm International Water Institute, Stockholm, Sweden, and Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa
Informal	Dr. Grover, Velma – Freshwater Ecosystem Programme and WVLC Coordinator, United Nations University (UNU-INWEH)	24-26 September 2008	Imperial Botanical Hotel, Entebbe, Uganda, Symposium on Science and Policy Linkages

<b>Interview Type</b>	<b>Interviewee, Position and Affiliated Organisation</b>	<b>Date of Interview</b>	<b>Place</b>
Informal and project related	GTZ: Transboundary Water Staff Dr. Meinier, Bertrand (Water Policy Advisor) Dr. Qwist-Hoffman, Peter (Capacity Building) Dr. Vogel, Horst (Programme Manager)	August 2008 – August 2009	Pretoria, South Africa, and Gaborone, Botswana
Informal	Mr. Hughes, Simon - Manager, Geomatics, Hatfield Consultants, Canada	August – December 09	World Water Week, Stockholm 2009, and South Africa
Informal	Dr. Jagerskog, Anders – former Project Director, Stockholm International Water Institute	May 2009 and 25-26 June 2009	Stockholm International Water Institute, Stockholm, Sweden, and Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa
Informal and project related	Ms. Kgole, Mpetjane - Generation: Primary Energy – Water, Manager: Water Strategy, Eskom	25-26 June 2009	CSIR Workshop – Tools and Approaches to Strengthen Transboundary River Basin Organisations in SADC
Informal	Ms Kranz, Nicole – PhD Student and Research Associate, Ecologic, Germany	July – August 2008	CSIR, Pretoria, South Africa
Informal and project related	Ms. Lofgren, Rebecca - Project Officer, SIWI	August 2008 – August 2009	Stockholm International Water Institute, Stockholm, Sweden, and Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa
Informal and project related	Ms. Nienaber, Shanna – Masters Studentship, Water Resources Governance Systems, Natural Resources and the Environment, CSIR	February 2009 - present	CSIR, Pretoria, South Africa
Informal and project related	Ms. Nortje, Karen: Senior Researcher (Social Anthropologist), Water Resources Governance Systems, Natural Resources and the Environment, CSIR	May 2008 – present	CSIR, Pretoria, South Africa
Informal	Dr. Phillips, David - Managing Director of Phillips Robinson and Associates (PRA), Windhoek, Namibia	May and 25-26 June 2009	Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa
Informal and project related	Mr. Pule, Rapule - Water Resources Specialist, ORASECOM Secretariat	25-26 June 2009	CSIR Workshop – Tools and Approaches to Strengthen Transboundary River Basin Organisations in SADC
Informal and project related	Dr. Rascher, Jeanette –Former Researcher Group Leader (Social Anthropologist), Water Resources Governance Systems, Natural Resources and the Environment, CSIR	May 2008 – August 2008	CSIR, Pretoria, South Africa
Informal and project related	Dr. Said, Maryam – Senior Researcher (Water Quality), Water Resources Governance Systems, Natural Resources and the Environment, CSIR	February 2009 - present	CSIR, Pretoria, South Africa

<b>Interview Type</b>	<b>Interviewee, Position and Affiliated Organisation</b>	<b>Date of Interview</b>	<b>Place</b>
Informal and project related	Mr. Thamae, JM Lenka - Transformation Resource Centre, Water for Justice Programme, Maseru, Lesotho	25-26 June 2009	CSIR Workshop – Tools and Approaches to Strengthen Transboundary River Basin Organisations in SADC
Informal	Dr Turton, Anthony – former CSIR Principal Researcher and personal mentor, Currently Director of Touchstone Resources	June 2008 – December 2009	Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa
Informal and project related	Mr. Van Niekerk, Pieter - Water Resource Engineering Expert, Department of Water and Environmental Affairs	25-26 June 2009	CSIR Workshop – Tools and Approaches to Strengthen Transboundary River Basin Organisations in SADC
Informal and project related	Ms. Van Wyk, Ernita – Researcher (Social Ecological Systems), Water Resources Governance Systems, Natural Resources and the Environment, CSIR	May 2008 – October 2008	CSIR, Pretoria, South Africa
Informal and project related	Ms. Van Wyk, Jo-Ansie – Lecturer, University of South Africa, Department of Political Science	April 2009	UNISA, Pretoria, South Africa

## APPENDIX 4: LIST OF EMAIL CORRESPONDENCE

Correspondence	Responder	Position and Affiliated Organisation	Dates of Interaction	Topic Discussed
Email	<b>Ms. Cascao, Ana</b>	PhD Research Student, Kings College London	23 June 2008 – 4 July 2008	White Nile Institutional Development
Email	<b>Mr. Heyns, Piet</b>	Former Under Secretary, Department of Water Affairs, and Namibian delegate to the ORASECOM and the OKACOM, Namibia	19 November 2009 – December 2009	Namibia's policy/law review process
Email	<b>Dr. Nicol, Alan</b>	Director of Policy and Programmes at the World Water Council	12 June 2008 - 19 June 2008	White Nile
Email	<b>Mr. Pyke, Peter</b>	Chief Engineer: Options Analysis (Central), Department of Water Affairs and Forestry (DWAF), South Africa	2 – 9 July 2008	Pyke's Law
Email	<b>Dr. Turton, Tony</b>	Former CSIR Principal Researcher and personal mentor, Currently Director of Touchstone Resources	April 2008 – present	HPC and other
Article Review	<b>Dr. Swatuk, Larry</b>	Associate Professor and Director, International Development Program, University of Waterloo, Canada	May 2009 – September 2009	Critical Engagement with the HPC, Sub-national configurations in transboundary water governance in southern Africa
Email	<b>Prof. Vale, Peter</b>	Nelson Mandela Chair of Politics, Rhodes University, Grahamstown, Eastern Cape, South Africa	26 March 2009 – 27 March 2009	Hydropolitics as a sub-discipline of IR

## **APPENDIX 5: LIST OF SADC WATER DIVISION PARTICIPANTS ON POLICY HARMONISATION DISCUSSION**

**Date of Meeting: Tuesday 20 October 2009**  
**Venue: SADC House, Gaborone, Botswana**  
**Facilitator: GTZ, Transboundary Waters**

<b>Name of Participant</b>	<b>Position and Affiliated Organisation</b>
	Communications Specialist, SADC Water Division
	Water and Sanitation Specialist, SADC Water Division
<b>Mr. Dlamini, Enoch</b>	Programme Manager – Regional Strategic Water Infrastructure, SADC Water Division
<b>Ms. Jacobs, Inga</b>	PhD Research Student, St. Andrews University, and Council for Scientific and Industrial Research, South Africa
<b>Mr. Maheri, Christmas</b>	RSAP Water Coordinator, SADC Water Division
<b>Dr. Meinier, Bertrand</b>	Water Policy Advisor, GTZ, Botswana
<b>Mercusur</b>	GTZ Intern
<b>Dr. Msibi, Kenneth</b>	Water Policy and Strategy Expert, SADC Water Division
<b>Dr. Qwist-Hoffman, Peter</b>	Capacity Development Advisor, GTZ, Botswana
<b>Mr. Ramoeli, Phera</b>	Senior Programme Manager, SADC Water Division



## **APPENDIX 6: LIST OF CLOSED MEETING PARTICIPANTS**

**Subject: Closed Meeting Exploring the Next Frontier in Transboundary Water Research in Africa**

**Date of Meeting: Tuesday, 18 August 2009**

**Venue: Room 275, Stockholm International Fairs, World Water Week, Stockholm, Sweden**

<b>Name of Participant</b>	<b>Position and Affiliated Organisation</b>
<b>Ms. Atallah, Mirey</b>	Regional Team Leader and Regional Technical Advisor, UNDP Environment Finance Group, UNDP, Slovak Republic
<b>Dr. Claassen, Marius</b>	Research Group Leader. Water Resources Governance Systems, NRE, Council for Scientific and Industrial Research, South Africa
<b>Dr. Daoudy, Marwa</b>	Lecturer, Department of Political Science, Graduate Institute for International Studies, Switzerland
<b>Mr. Granit, Jakob</b>	Project Director, Stockholm International Water Institute, Sweden
<b>Ms. Jacobs, Inga</b>	PhD Research Student, St. Andrews University, and Council for Scientific and Industrial Research, South Africa
<b>Ms. Kistin, Elizabeth</b>	Research Associate, Duke University, United States
<b>Ms. Lofgren, Rebecca</b>	Project Officer, Stockholm International Water Institute, Sweden
<b>Dr. Qwist-Hoffman, Peter</b>	Capacity Development Advisor, GTZ, Botswana

## APPENDIX 7

# Proceedings

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## Closed Meeting Exploring the Next Frontier in Transboundary Water Research in Africa

**Tuesday 18 August 2009, World Water Week  
14:00 – 16:30 Room 275, Stockholm International Fairs**

**Inga Jacobs and Marius Claassen**

**9/14/2009**

## CLOSED MEETING: EXPLORING NEW FRONTIERS IN TRANSBOUNDARY WATER GOVERNANCE

*The aim of this meeting was to "harness the intellectual capacity" of international experts in transboundary water governance (particularly in Africa) in an attempt to explore the next frontier for transboundary research by brainstorming key issues and creating space for inputs from some great minds.*

### Key Points:

- *Where should the focus lie? - Hydrological basin vs. "Problemshed", other sectors or regional development?*
- *Importance of scale (spatial and temporal)*
- *Need for cross-sectoral co-operation and learning*
- *Need to understand constraints to development (e.g. do the same things better or do different things)*
- *Importance of people in the process (e.g. the right people as drivers, importance of perceptions)*

The meeting commenced with short summary presentations on research developed within the CSIR/SIWI/PRA research consortium. This included benefit-sharing tools such as the Transboundary Waters Opportunity (TWO) Analysis, Barrier Analysis, and culturally-embedded approaches to transboundary river basin management. The topics were selected for their attempts to push the boundaries of transboundary governance, but also their attempts to push the scientific boundaries of the discourse that have been predominantly focused on understanding the relationship between biophysical (this refers to the biological, physical and chemical sciences) research and economic impacts. It has, however, become apparent that social and political sciences should also be deployed to ensure effective implementation of development strategies.

Following short discussions on the above-mentioned topics, a plenary discussion followed, exploring new frontiers and key issues in transboundary water governance that aimed at trying to develop a new research agenda, but also a new way of doing things. This discussion centred around three focal questions:

1. Why are we *really* looking at transboundary water co-operation?
2. What are the drivers of co-operation for countries?
3. What are the opportunities to accelerate development from a water perspective?

## Why are we really looking at transboundary water co-operation?

This first question aimed at (re)defining transboundary water governance in plenary, exploring the context, as well as the barriers and the focal points in terms of transboundary water governance.

### *Barriers to Transboundary Water Governance:*

- Is it really an issue of not achieving said objectives *or is it a matter of fatigue?*

### *The Spatial Scale:*

- Is/should the focus be on transboundary water governance in Africa or in the SADC region?
- Is there a fixation on *spatial scale* when defining transboundary governance?
- *Basin focus may not be appropriate. We should rather focus on regional development*, and therefore, regional economic co-operation.
- Need to understand the role that national and transboundary water play in development.

*A key question in this regard: Does 'transboundary' only refer to national (and therefore political) boundaries?*

- It depends at which scale you are working. Different capacities are therefore required. At the REC scale, for instance, there is a need for system level analysis and outlook (in terms of capacity development).

### *The Temporal Scale:*

- With some things, we cannot wait until they naturally resolve or achieve themselves.

### *Moving Beyond Sectoral Boundaries:*

- The perception of some national ministries and/or departments in several SADC river basins is that the primary barrier to transboundary water governance is that “other ministries do not understand our water issues.”
- The *role of perceptions* is important
- There is a need for cross-sectoral/inter-ministerial interventions that are not only resource-based, but also departments of finance, foreign etc.
- There is a need for cross-sectoral learning i.e. the applicability of best/worst case scenarios in sectors other than water that can be applied to the water sector. Examples listed included transfrontier parks and transboundary oil.

*Other key points of discussion regarding the focus on transboundary water governance:*

- A need was expressed to ‘instrumentalise’ basins to support development.
- There is also a need to understand the drivers for the establishment of transboundary-specific institutions such as river basin organizations (RBOs) to avoid redundancy.

### **What are the drivers of co-operation for countries?**

- Need to differentiate implicit goals from explicit goals as determinants for action at the national level.

*Institutional Constraints:*

- Institutional constraints within countries impede co-operation. This includes, as previously stated, an overlap or the lack of coordination between sectors and/or ministries.
- There is a need for a methodological tool for establishing the drivers for development. *Do countries want development or do they just/also want their share?*

*Is water THE key driver/constraint for development?*

- In terms of the contribution of water to national/regional development, is water was the key driver/constraint for development?
- The epistemic community (at world water week) over-emphasizes water as the integral and strategic resource for economic development. The danger in this outlook was the tendency to develop strategies and research agendas in isolation from other resource, sector, or issue-based strategies. There is a shift in global trends of the water discourse i.e. insufficient focus on water and environmental issues in development studies, to environmental and water as the most important drivers to co-operation. Now, the shift should move towards viewing water and other resources such as land, oil, human capital etc. in an integrated and interconnected manner. This entails a paradigm shift in how water professionals see themselves.

*Key questions in this regard: are there other resources/strategic issues that can drive development? How is water viewed/researched in relation to these?*

- Once again, the role of perceptions was emphasised i.e. surface vs. groundwater (invisible so ignored because people cannot see it), and how these perceptions influence how we view drivers to co-operation.

**What are the opportunities to accelerate development from a water perspective?  
(what we could do differently in the future?)**

- There is a need to better understand how regional development happens, and the role of water in that. For this, he questioned what type of institutions will best serve this.
- Need for more research on project-specific barriers.
- Need *more innovative thinking on linking water and energy*. The regional demands for energy and water should be assessed, with clear reference to the dependencies. Strategies in these sectors should pay particular attention to the water-energy nexus. At a programmatic level, specialists from the water and energy domains should collaborate to ensure that interventions achieve optimal benefits in both sectors.

*The importance of individuals to the success or failure of projects:*

- *The importance of individuals to the success or failure of certain projects must be recognised.* A critical opportunity to accelerate development from a water perspective in this regard is the need to train leaders that can speak different (technically-specific) languages. This also speaks to the importance of interdisciplinarity and the use of multidisciplinary teams to better understand the interlinkages of resources.
- The benefits of social psychological research and profiling are important. A discussion followed on whether there was a particular personality type or personal profile for transboundary managers.
- There is also a need for capacity development at different levels e.g. individual, organisational, institutional etc.

*Linking theory to practice:*

- Several opportunities to accelerate development were identified that link theory to practice.
  - Firstly, there is a need to document the effects of the current processes and organizations.
  - Secondly, when linking theory and practice through policy formation, processes need to allow for a specific focus. For example, bringing climate change on the policy agenda necessitates the identification of triggers and change in water policy.
  - Thirdly, there is a need to study other regimes to learn from best/worst practice in other fields.

- Fourthly, a need was expressed for scaling up/commercialisation/implementation i.e. taking concepts further into day-to-day.

## **PRIORITY AREAS FOR TRANSBOUNDARY RESEARCH**

Based on the plenary discussion, new priority research areas for transboundary water governance research could include the following:

- ❖ When defining priority areas, the spatial and temporal scales of transboundary water governance need to be ascertained.
- ❖ When defining transboundary governance projects, we also need to be cognizant of sectoral boundaries and try to facilitate cross-sectoral learning as a means to bridge this divide.
- ❖ Mechanisms for effective dialogue should be developed and implemented. These can range from the participative development of shared visions, to objectives and strategies and decisions on which development options to jointly pursue. Such dialogue should extend from the highest political levels, through technical and private sector involvement to communities and individuals. The dialogue should also cut across horizontally to bring together different sectors and disciplines. Such joint action will create a fertile environment for the effective implementation of results from other areas of development support. The importance of individuals to the success or failure of certain projects must be recognised.
- ❖ Another research area is in the explicit identification of barriers to development. This new approach (Granit and Claassen, 2009) is aimed at addressing issues that commonly lead to the failure of seemingly sound plans. These barriers could be political (e.g. Zimbabwean political situation), policy (e.g. uncoordinated trade negotiations of SADC countries with the EU), social (e.g. mass immigration into South Africa), economic (e.g. access to finance), technical (e.g. lack of technical capacity) or operational (e.g. poor maintenance of infrastructure). This is also linked to vulnerability mapping and profiles. Response strategies for vulnerable areas and communities should be developed to shape development co-operation to mitigate the impacts of rapid global change.
- ❖ The availability of reliable, comparable and relevant data across the region remains a key constraint to effective planning and development. This ranges from biophysical data on surface and groundwater resources to social and economic data that should be key criteria for selecting the best development options.

## APPENDIX 8

**Agreements, Treaties and Protocols established solely between the basin states of the Orange-Senqu River (Adapted from Kistin and Ashton, 2008: 392, 395; UNEP, 2005: 112)**

Year	Signed by	Agreement/Treaty/Protocol	Scope	Institution
1930	Lesotho, SA	Agreement between Kingdom of Lesotho and the Republic of South Africa to set up the Lesotho Highlands Development Authority	The LHDA was established to implement and operate the portion of the LHWP that falls within the borders of Lesotho	LHDA
1983	Botswana, SA	Agreement between the Government of the Republic of South Africa and the Government of the Republic of Botswana establishing the Joint Permanent Technical Committee		Joint Permanent Technical Committee (JPTC)
24/10/1986	Lesotho, SA	Treaty on the Lesotho Highlands Water Project with 6 protocols listed below	The signing of the LHWP Treaty by Lesotho and South Africa established the Joint Permanent Technical Commission to represent the two countries in the implementation and operation of the LHWP. The Joint Permanent Technical Commission was later renamed the Lesotho Highlands Water Commission with a secretariat in Lesotho to monitor and oversee the carrying out of the treaty.	Establishment of the Joint Permanent Technical Committee
1987	South West Africa (Namibia and SA)	Agreement between the Republic of South Africa and the Interim Government of the National entity of Southwest-Africa/Namibia concerning the control, development and utilisation of the water of the Orange River.	Focused on the management of the Lower Orange River between South Africa and Namibia	Joint Technical Commission (JTC), replaced in 1992 by the Permanent Water Commission (PWC)
1988	Lesotho, SA	Protocol I to the treaty of the Lesotho Highlands Water Project: Royalty Manual	Expanded the methodology for calculating the net benefit of the project and specified royalty payments	LHWC
1988	Lesotho, SA	Protocol II to the treaty of the Lesotho Highlands Water Project: SACU Study	Examined the Lesotho share in the common revenue pool of the Customs Union (Between SA, Botswana, Lesotho and Swaziland) and specifies the advance payment to Lesotho as a fixed percentage of the present value of the total cost of initial development	LHWC
1988	Lesotho, SA	Protocol III to the treaty of the Lesotho Highlands Water Project: Apportionment of the Liability for the Costs of Phase 1A Project Works	Specifies the responsibility of payment by country for the construction costs of water delivery and hydropower infrastructure	LHWC
13/11/1990	Botswana, Namibia	Agreement on the Establishment of a Joint Permanent Water Committee	Established the Joint Permanent Water Committee	Joint Permanent Water Committee (JPWC)
19/11/1991	Lesotho, SA	Protocol IV to the treaty on the Lesotho Highlands Water Project: supplementary arrangements regarding phase IA	Established the processes and clarified expectations of the Cost Allocation Reports, royalty payments, reimbursement, loans and insurance.	LHWC



<b>Year</b>	<b>Signed by</b>	<b>Agreement/Treaty/Protocol</b>	<b>Scope</b>	<b>Institution</b>
3/08/1992	Lesotho, SA	Ancillary agreement to the deed of undertaking and relevant agreements entered into between the Lesotho Highlands Development Authority and the Government of the Republic of South Africa		LHDA, South Africa
14/09/1992	Namibia, SA	Agreement between the government of the Republic of Namibia and the government of the Republic of South Africa on the establishment of a Permanent Water Commission	Established the Permanent Water Commission (PWC)	PWC
1992	Namibia, SA	Agreement on the Vioolsdrift and Noordoewer Joint Irrigation Scheme	Established the Joint Irrigation Authority (JIA)	JIA
1992	Lesotho, SA	Protocol V to the treaty of the Lesotho Highlands Water Project: Supplementary Arrangements with Regard to Project Related Income Tax and Dues and Charges Levied in the Kingdom of Lesotho in respect of Phases 1A and 1B of the project	Categorised the different types of water-related contracts in Lesotho and the need to track the amount of income tax paid; also specified ways in which income tax can be regarded as project costs	LHWC
1/03/1994	Namibia, SA	Agreement on Water related Matters pertaining to the Incorporation of Walvis Bay in the Territory of the Republic of Namibia	Walvis Bay	
1999	Lesotho, SA	Protocol VI to the treaty on the Lesotho Highlands Water Project: supplementary arrangements regarding the system of governance for the project	Redefined the functions and responsibilities of the Board of Directors of the LHDA, the TCTA and the JPTC. JPTC renamed LHWC; also redefined hierarchical structure of LHDA, TCTA and LHWC, and between the LHWC parties. Established that LHWC is the overall legal institution to which the LHDA (development organisation on Lesotho side) and TCTA (development organisation on South Africa side) report.	LHWC
3/11/2000	Bots, Les, Namibia, SA	Agreement on the Establishment of the Orange-Senqu River Commission	Establishes ORASECOM, the first RBO to be established in terms of the SADC Protocol.	ORASECOM

