

SDGs and decentralizing water management for transformation: Normative policy coherence for water security in SADC river basin organizations

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Highlights

- The SDGs suggest that development should be realized through “transformation”.
- Theoretically, normative PCD and water security are compared, and how far they reflect IWRM principles.
- Empirically, harmonization and coordination of water policies of riparian states in basin organizations are highlighted.
- SADC's commitment to IWRM integrates core values essential for transformation in some of its key policy documents.
- The core values have not been translated into SADC river basins' water resources management strategies.

Conclusion

This paper engages in a normative analysis of water security, in view of the sustainable development goals (SDGs) and the call for transformation. It examines the role of river basin organizations (RBOs) and integrated water resources management (IWRM) to water governance, and the extent to which they are consistent with water security for development in Southern Africa. The paper uses Policy Coherence for Development (PCD) and addresses essential questions regarding the extent to which RBOs in the Southern African Development Community (SADC) insofar as concerns SDG 6 achieve water security for people at the grassroots. The theoretical contribution of the paper includes the comparative examination of normative PCD and water security structures at RBO level in Southern Africa, and the extent to which RBOs reflect IWRM principles. Empirically, the paper highlights regional water policies regarding harmonization and coordination in the respective riparian states of and the RBOs, in line with the SADC's developmental objectives. As RBOs seem to prefer conserving, developing and utilizing water resources over people, they would do well to shift their focus on to people by adopting normative PCD, if they are to witness transformation. This would also be consistent with regional goals, which seek to bring the transformation agenda to the ground.

Keywords: normative policy coherence for development; integrated water resource management; water security; river basin organization; SADC

Introduction

Located in debates that place water resources management and governance under the theme of water and society, this paper engages in a normative analysis of water security, in view of the sustainable development goals (SDGs) and the call for transformation. It addresses the political and socioeconomic aspects of water resources management, and human development. A combination of factors, such as urbanization, rapid population growth, increased water-use, variability in and climate change, affect water security. This impacts the availability of fresh water resources and has implications for the distribution and allocation of water. Related to this, are issues of water scarcity experienced by countries that might nonetheless have enough to meet agricultural, household, industrial and environmental needs. However, users are unable to access the resources because they lack the means (United Nations Development Programme (UNDP), 2006). For which cause, this paper critically examines the role of river basin organizations (RBOs) on one hand, and the integrated water resources management (IWRM) policy approach (Global Water Partnership (GWP), 2010) to water governance on the other hand, and the extent to which they are compatible with achieving water security for development in Southern Africa. The paper is thus relevant for IWRM and water resources management in the Southern African Development Community (SADC) region. To this end, it attempts to provide theoretical and practical contributions to issues of water security and regional integration.

In the post-2015 development agenda, the SDGs suggest that development should be realized through “transformation.” In that framework, SDG 6 aims to “Ensure availability and sustainable management of water and sanitation for all.” Specifically, Target 6.5 of that goal states that, “By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate”, and Target 6b says, “Support and strengthen the participation of local communities in improving water and sanitation management.” From the cited goal and related targets, it is evident that IWRM is integral to the SDGs. In the present post-2015 development agenda, it is reasonable to argue that SDG 6 actually builds on Millennium Development Goal (MDG) 7.C, which sought to halve the

proportion of the population without sustainable access to safe drinking water and basic sanitation, by 2015.¹ According to the United Nations (UN 2016a), this goal was achieved five years ahead of schedule. Approximately 2.6 billion people in the world gained access to improved drinking water sources between 1990 and 2015. If this is the case, safe drinking water should then be made available to at least 2.6 billion more people by 2030. In working towards this, cognizance should however be taken of the fact that, the period in which the UN claims to have achieved MDG 7.C exceeded the MDG timeframe by 10 years. This is because the goal was reportedly achieved between 1990 and 2015. The MDGs were only adopted in 2000. Cognizance should also be taken of the increase in global population, from approximately five billion in 1990 to seven billion in 2015 (World Bank, 2016), and the projected 8.5 billion by 2030 (UN, 2016b). According to the UN, this growth will largely occur in developing countries. Alongside this growth, therefore, demand for water due to urbanization, industrialization, irrigation for food production, variabilities in the environment and climate change, etc.—conditions expected to define the developing world—will have to be considered.

From MDGs to SDGs: Transition amidst mixed water security challenges

In addition to the foregoing, the reality of water in Africa, and particularly Southern Africa, presents mixed challenges. Figure 1 and Table 1 below display the 15 river basins shared between the 12 mainland members of the SADC, and managed by 12 RBOs or basin management authorities (BMAs)² (SADC, 2016a).³ Access to water resources in these internationally shared river basins might constrain future development of the riparian states' economies. For one, climate change and predicted impacts on Africa south of the Sahara is expected to affect the river basins (Intergovernmental Panel on Climate Change (IPCC), 2013). Estimated decline in rainfall across basins such as the Zambezi River Basin (ZRB), ranging from 10% to 15% over the next century (IPCC, 2007) threatens to, in turn, affect the livelihoods of basin inhabitants. This will increasingly become pronounced for those directly living off agriculture and water bodies. Droughts and heat stress too, threaten fish and crop production and, consequently, food security (IPCC, 2013). Further, being common pool resources, major rivers in Southern Africa are not constrained by state boundaries. Rather, they are, respectively, shared by at least two countries as Figure 1 and Table 1 show. This necessitates cooperation between riparian states, in the management of the water resources of those rivers.

[Figure 1 about here]

Alternatively, the riparian states could decline into conflict over the resources and fulfill predictions that water is going to be a major source of conflicts in the future (Öjendal, 2000, Böge, 2006). Though violent escalation seems unlikely, several SADC member and riparian states of the river basins displayed in Figure 1 and Table 1 face water scarcity, making the future escalation of water conflict a possibility (Böge, 2006:29). Actually, cases exist of tensions between riparian states over shared water resources in the SADC region. For example, the dispute between Botswana and Namibia, in which Namibia had planned, outside the Permanent Okavango River Basin Commission (OKACOM), to draw water from the Okavango River to satisfy the demand in Windhoek, its capital city (Henwood and Funke, 2002).

¹ <http://www.un.org/millenniumgoals/envIRON.shtml>, (Accessed 28 September 2016).

² Note that 11. Incomati, 12. Maputo-Uсутu-Pongola and 15. Umbeluzi river basins are, respectively, managed by Tripartite Permanent Technical Committee (TPTC), hence the apparent discrepancy between number of river basins and RBOs

³ The 12 mainland member states of the SADC include Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Malawi, Mozambique, Namibia, Swaziland, South Africa, Tanzania, Zambia and Zimbabwe.

[Table 1 about here]

The picture painted above makes it crucial for riparian states to cooperate, carefully plan and manage the water resources in the river basins of the SADC region. Member states of the SADC saw such challenges of shared rivers and basins and potential implications for regional prosperity and peace. Consequently, they deemed it necessary to develop legislation, policies and strategies for establishing RBOs to manage the regional water resources. SADC states have actually long coordinated regional initiatives to address challenges concerning shared water resources. Legislation and policies that demonstrate a regional approach to fostering cooperation in this respect include the Revised Protocol on Shared Watercourses in the SADC (1995/ 2000); the Regional Water Policy (RWP) (adopted in 2005); the Regional Water Strategy (RWS) (adopted in 2006); and the Regional Strategic Action Plan on Integrated Water Resource Management (RSAP-IWRM) (first implemented in 1999 and ran in subsequent five-year cycles), among others.

The SADC Protocol on Shared Watercourses was originally ratified in 1988, and then revised in the year 2000 (SADC, 2019). According to SADC (2011), this protocol was created with the understanding that integrated water resource management is better achieved beyond the confines of a single state's boundaries. The protocol thus aims to foster close and coordinated cooperation in the management, protection and utilization of shared watercourses, and to advance the SADC agenda of regional integration and poverty alleviation (*ibid*: 6). Taking the year when the protocol was first drafted (and the year it was ratified, even), it would seem that the SADC region started practicing and applying principles of integrated water resource management before the SDGs were adopted by the UN. In other words, the protocol acknowledged benefits of cross-border cooperation in managing water. van der Zaag, for instance, points out how much WaterNet and the Water Research Fund for Southern Africa (WARFSA) have achieved in the promotion of IWRM in Southern Africa, over the period 2000–2004 (2005: 867). But this, according to van der Zaag (2005: 867), “all started in Maseru, Lesotho, in May 1997 [...] a year after the SADC Water Sector Coordination Unit had been established, and at exactly the same time that in New York the Convention on the Law of the Non-Navigational Uses of International Watercourses was adopted by the United Nations General Assembly.” Ministers of Water from SADC member states and those from the EU, who had met at Maseru, reached consensus over the need for IWRM in the region, in view of the challenges faced in sharing international rivers. Still more, long before this, as van der Zaag (2009) argues elsewhere (and as explained below), local-level water management practices in Southern Africa were historically rooted in customary principles of local participation that reflect transboundary non-state actor collaborations. Because of this, this paper further posits that some principles of what is today IWRM in Southern Africa were applied or practiced before the official regional legislation cited above, which was created to bring the governance of water resources to people at the grassroots.

Yet, approximately 40% of the SADC region's 277 million people still lack access to safe drinking water, and approximately 60% lack access to adequate sanitation (SADC, 2016b). The challenge for the SADC is to convince relevant stakeholders that IWRM is compatible with an agenda for water security, sustainability and, indeed, development. That is, the SADC water sector should show that coherence exists between IWRM and development policies.

However, a contrary argument to the foregoing suggests that the SADC region does not really face an imminent water shortage, though many people lack access to water. In this respect, four aspects concerning availability, use and estimated dependence on water resources in the SADC region can be highlighted. It is noteworthy regarding these four aspects though that, although they are important to

the concept of water security, they are not enough to prove that the SADC region faces or can face water shortages. For example, water shortages can be periodic and occur part of the year, or once in a few years. And this cannot be captured by the annual data presented in the following aspects of availability, use and estimated dependence on water. A case in point is the recent El-Nino induced drought in the region.

Firstly, then, data on total annual renewable water resources per inhabitant for the 12 respective inland SADC states shows that, only South Africa faces absolute water scarcity. Lesotho, Malawi and Zimbabwe face chronic water scarcity, and Tanzania and Swaziland are potentially water-stressed. Accordingly, the Food and Agriculture Organization of the UN (FAO) shows that South Africa had less than 500 cubic meters per year (m^3/year) of total renewable water resources per inhabitant, while Lesotho, Malawi and Zimbabwe, respectively, had 500 m^3/year to 1000 m^3/year per inhabitant, and Tanzania and Swaziland, 1000 m^3/year to 1700 m^3/year per inhabitant, in 2014 (FAO - AQUASTAT, 2015c). The other six SADC states each had abundant water resources nationally. This was respectively reflected in the more than 5000 m^3/year total renewable water resources per inhabitant.

Secondly, in terms of water withdrawal within a country, Swaziland had the highest per inhabitant among inland SADC member states in 2014, recording more than 1000 m^3/year (FAO - AQUASTAT, 2015d). South Africa and Zimbabwe recorded 250 m^3/year to 500 m^3/year . Botswana, Namibia, Tanzania and Zambia each recorded 100 m^3/year to 250 m^3/year . The other five SADC states recorded less than 100 m^3/year each. Based on a combination of these two sets of evidence, the conclusion can be made that the extent to which water is used in the region under discussion is generally low.

Thirdly, further analysis of available water-related data compounds the understanding of challenges concerning water resources in the SADC region. A case in point is the ratio of renewable water resources withdrawn versus the proportion of water used for irrigation in the region. The proportion of renewable water resources withdrawn actually served as an MDG water indicator of water resources used (see MDG 7.5). It could, otherwise, reveal pressure on water resources. Of all the inland SADC states, only South Africa, Swaziland and Zimbabwe had proportions of 10 to 25 renewable water resources withdrawn and the other nine, a proportion of less than 10 each (FAO - AQUASTAT, 2015b). Compare this with proportions of water used for irrigation. These ratios vary in the SADC region's major basins, from under 2% in rivers that are lightly harnessed for irrigation, such as the Congo and Zambezi, to 15% to 20% in moderately harnessed rivers, such as the Orange (FAO, 2016). From this, the conclusion can be made that a limited proportion of available water resources across the SADC's major basins is generally used.

Fourthly, FAO (2015a) provides data that show the contribution of transboundary water to the total renewable water resources. From this can be derived a country's dependence on its regional neighbors, for its total water resources. The data shows Botswana and Namibia as the most dependent on neighbors for their respective total water resources at a ratio of 75% to 100%. Mozambique has a dependency ratio of 50% to 75%; the DRC, Lesotho and Zimbabwe, 25% to 50%, respectively; while the dependency ratio of Angola, Malawi, South Africa, Tanzania and Zambia, respectively, ranges from 0% to 25%; and Lesotho's, 0%. This, together with the preceding data in this section, suggests that generally, the SADC region and respective countries do not currently face extreme water-stress.

This picture, of a relatively water-resource-rich SADC region, contradicts the reality of many people who lack access. This is also amidst the continued implementation of IWRM (consistent with SDG 6 as it may be) as a strategy for water governance, reflected in the trending establishment of RBOs.

Without undermining their significance—some of which is highlighted in this paper—this paradox raises a fundamental question. This is regarding the extent to which SDG 6 and Targets 6.5 and 6.5b, insofar as RBOs in the SADC region and respective water regimes are concerned, achieve water security for people at the grassroots. Hence, do the policies and structures of RBOs in Southern Africa reflect coherence with IWRM? What commitments have riparian states, through RBOs, made to the water security norm for ordinary citizens of SADC member states? Do their approaches to water security reflect coherence with transformative change? Based on the findings and discussion contained in this paper, it shows that SADC has significantly committed itself to integrated water resources management and integrates core values essential to transformation in some of its key policy documents. However, most of these values have not been translated into the RBOs' water resources management strategies. They are weakly translated at the basin level. In view of the foregoing, it is necessary to set the framework in which to approach water security and governance in Southern Africa, starting with an explanation of the methods employed to answer the research question.

A framework for understanding water security and governance in Southern Africa

This paper focuses on RBOs in the SADC region and attempts to analyze consistency of RBOs and IWRM in achieving water security for development and regional integration. This is motivated by two factors. Firstly, the observation that the creation of RBOs represents a move towards decentralizing or democratizing the management of water resources. For example, Abers and Keck (2006) cite the example of Brazil to point out that the two decades up to 2006 saw numerous international conferences and organizations promoting participatory forums in decentralized management systems at river basin level. According to Abers and Keck, the process in Brazil required *multi-directional power transfers* between various policy actors and arenas, as well as among local, state, national and river basin institutions. Similarly, Taddei (2010) assesses social participation in Jaguaribe Valley of the Northeast Brazilian state of Ceará and points to the heavy influence of the general symbolic and ideological contexts in which participatory approaches and, specifically, the way in which participants understand what is happening in water management. Taddei describes the pervasive presentation of economic development in Brazil as modernization, and participation in water management as part of general modernization. In the SADC region, Fatch et al. (2010) speak of the way in which IWRM-led water reforms emphasize the creation of new institutions for stakeholders where water management should be undertaken at the lowest possible level of society through the principle of subsidiarity. They investigate the conceptualization and application of the principle of subsidiarity in the Limpopo river basin and analyze the way in which state-led frameworks at local, national, regional and basin level make provision for local participation. As Fatch et al., (2010: 847) conclude, the understanding of transboundary water management as best achieved through “a bottom-up institutional model [that] can enhance the conceptualisation and application of the subsidiarity principle” has apparently contributed to the proliferation of RBOs in Southern Africa, after the introduction of the IWRM approach. The approach thus assumes democratization, through the promotion of stakeholder participation in order to achieve development. IWRM was introduced in Southern Africa where states generally undertook neoliberal reforms in the late 1980s and early 1990s. The reforms were purported to uphold democratic norms including, among others, democratic participation and respect for human rights.

A second factor motivating the focus on RBOs is the fact that, they are created through agreements and they come in different forms and shapes. In reality, RBOs can, indeed, be formed for a specific project and expire in a matter of months or years. For instance, it commonly explained in many countries is that RBOs are created in view of the negative effects of human activities on the environment and, therefore, that, water is not only home to and sustains vegetable and animal kingdoms but water bodies and watercourses also constitute a special biological whole (Axel, 2001). Levine's (2007) examination

of the institutional arrangements for managing water in Mexico's largest river basin, the Lerma–Chapala basin, clearly reveals the need for river basin-level coordination mechanisms in basins that are facing closure. Wester et al. (2005) show how well the institutional arrangements for managing water in that same river basin deal with basin closure. They show how, despite closure in the mid-1980s, due to

“the water crisis in the basin, several institutional changes have occurred in the basin since 1989, including the signing of a river basin coordination agreement (1989), the creation of a River Basin Council (1993) and the establishment of aquifer management councils (1995 onwards). Water reforms at the national level, such as the creation of a national water agency (1989), the decentralization of domestic water supply and sanitation to state and municipality levels (starting in 1983), the transfer of government irrigation districts to users (1989 to present), the creation of state water commissions (from 1991 onwards), and a new water law (1992), have also significantly altered institutional arrangements for water management in the basin” (Wester et al., 2005: 137).

In Africa, Saruchera and Lautze (2016) have compared the extent of governance instruments for enabling effective transboundary management of water contained in treaties between secretariat-based and non-secretariat-based RBOs. Their analysis shows that RBOs that have secretariats achieve stronger governance and obtain more investment than those without secretariats.

The rest of the paper is structured as follows. The next section explains the methodology employed in the study including a brief theorization of PCD as well as limitations to this approach and an explanation of the *normative* PCD analytical framework—what it is and how one can use it. The argument in favor of applying normative PCD to the examination of the significance of IWRM and RBOs in achieving water security in SADC is also included. The second section defines water security, giving a brief overview of the literature and theorization of approaches to water governance as practiced in the SADC region. The rationale and introduction of IWRM as a means of decentralizing the governance of water resources in the region is specifically discussed. The third section presents results based on examination of security and water security-related data obtained from the SADC and the 15 river basins shared by the 12 mainland SADC members, and managed by 12 of the region's RBOs or BMAs (See methods below and Figure 1 and Tables 1, 2 and 3). This is followed by presentation of the findings and discussion in the fourth section. The fifth section concludes with recommendation.

Methodology

In order to achieve its objective, this paper employs an adapted Policy Coherence for Development (PCD) similar to Koff's (2016)⁴ normative approach and other variations of the analytical framework used by Fritz and Raza (2017) and England et al. (2018), among others. As explained shortly below and in the results and discussion section, *normative* PCD is important for establishing 'transformative' development; in a way that satisfies the water security needs of especially vulnerable people (Koff and Maganda, 2015; Koff 2016). Transformative development is consistent with the SDGs. This makes the normative PCD approach adapted in this paper appropriate for understanding the extent to which IWRM addresses the governance of water resources for development, with water security and regional integration in mind, in the SADC region. It is also suitable for identifying potential gaps to be filled by

⁴ See also, Koff, H. and Maganda, M. 2015. The EU and the Human Right to Water and Sanitation: Normative Coherence as the key to Transformative Development, *European Journal of Development Research*, 28(1), 91-110.

normative PCD, in order to maximize the impact of developmental efforts for those who need water the most. Such an understanding of transformative development requires the realization of “change in the power relations and structures that sustain poverty and inequality” (Siitonen, 2015).

Normative PCD is an adaption of PCD, which academics (e.g., Grabel, 2007; Carbone, 2008; Koff and Maganda, 2016; Fritz and Raza, 2017), civil society practitioners working in areas such as the environment or development and policy analysts in think tanks (e.g., ECDPM/ESRF, 2015, Knoll et al., 2013, Organisation for Economic Co-operation and Development, 2015, Organisation for Economic Co-operation and Development., 2005) recognize as a paradigm for, among other things, achieving coherence between various policies and, of late, implementing the SDGs. It provides lessons on the ways in which the SDGs can be achieved in view of its origin and aim to address the need for achieving coherence between the policies of developed countries that impact on developing countries. That is, PCD recognizes the existence of negative externalities of the policies of developed countries that might not have any direct concern with development, and draws attention to those policies. For instance, the Common Fisheries Policy of the European Union (EU) is said to undermine development in West Africa, leading to migration of youths from that region to neighboring countries and Europe (Nshimbi, 2018). Consequently, a group of developed countries acting collectively through the Organisation for Economic Co-operation and Development (OECD) has been actively spearheading PCD as a policy agenda (see, e.g., OECD, 1999, 2005, 2015, Diakosavvas, 2006). On its part, the EU has been in the forefront of implementing PCD since 2005, when it issued its European Consensus on Development policy statement (see, e.g., European Commission, 2015). And, besides the fact that the EU’s political commitment to PCD can be traced back to its Maastricht Treaty, the regional organization has come up with a new, ambitious collective development policy that speaks to and focuses on the SDGs (European Union, 2017). In view of this, the lack of academic literature and use of PCD to examine IWRM in and on the SADC region, in which the EU and a considerable number of its member states—which are also generally part of the OECD—are active is rather puzzling considering the central stage and importance the EU and the OECD’s Development Assistance Committee (DAC) have placed on PCD (Fritz and Raza, 2014). The puzzle lies not so much in the fact that PCD is prominent in the EU’s global affairs than that the EU (and its member states) is a significant player in IWRM and the Water Sector of the SADC and RBOs (see, e.g., Table 1 column 4). This paper is thus the first to attempt employing policy coherence as an analytical framework in the SADC region, with the aim that, besides making theoretical and empirical contributions to the understanding of developments in RBOs, it will attract interest in employing and applying the approach to other areas of development in African regions and countries.

Policy coherence for development as an analytical framework

PCD has a relatively short history. Still, research has been conducted on various types of policy (in)coherence (e.g., horizontal coherence, vertical coherence, donor-recipient coherence, multilateral coherence, inter-organizational coherence), institutional mechanisms for PCD, coherence in specific areas such as migration, and empirical country studies (Siitonen, 2016:1-2). In a special issue of the *European Journal of Development Research*,⁵ Siitonen (2016) and others move investigations into PCD further. They do this by considering it as an element of transformative development, which is otherwise viewed as strategies dedicated to promoting human rights and social justice locally, and addressing power imbalances in the global political arena (Maganda and Koff, 2016, cited by Siitonen (2016)). In so doing, the various authors in that special issue of the journal contend that a normative aspect of PCD exists that focuses on power relations and structure between countries in the world which impact developing countries, their people’s needs and interests (Siitonen 2016:2). To illustrate the power

⁵ *European Journal of Development Research*, Volume 28, Issue 1, 2016.

relations and structure, and impact on developing countries, in the context of PCD, the article by Koff and Maganda (2016) in that special issue examines EU development programs in the water sector. They show that incoherence exists in the way in which the EU, which is a major global donor and big player in water technology business, conducts water projects in developing countries. The EU simultaneously promotes privatization in the same developing countries, suggesting that its commitment to PCD is only in as far as it is a technical tool, and not so much normative coherence based on such principles as democracy and human rights. This, according to Koff and Maganda, diminishes transformative power and global legitimacy. According to each of the contributing authors to that special issue, the normative aspect of PCD is yet to be examined in academic literature on development.

The OECD (2005: 28) defines PCD as “working to ensure that the objectives and results of a government’s (or institution’s) development policy are not undermined by the other policies of that same government (or institution), which impact on developing countries, and that these other policies support development objectives where feasible”. The OECD, further, admits that its member country governments face the policy coherence for development challenge of doing “no harm” in delivering on their commitments and systematically promoting mutually supportive policies across government that would help in the achievement of mutually agreed international goals (2005: 23). As concerns this paper, therefore, the issue would be the ways in which members of the SADC (and the donor community and development partners) can systematically promote mutually supportive policies to help with the achievement of goals that are mutually agreed in RBOs. Ideally, PCD proposes that the needs and interests of developing countries should be considered by donor countries when formulating non-aid policies. This is because such policies have an impact on developing countries. Taking the developing countries’ needs and interests into account will ensure that the non-aid policies avoid two things. They will not undermine the objectives of the donor country’s development policies, and will support the objectives of development (European Commission 2005; Siitonen, 2016). The treaties of EU—particularly, Maastricht (Article 130u; 132v) and Lisbon (Article 208)—make provisions for the EU to consider the objectives of its policies that potentially affect developing countries. However, the treaties merely stipulate rather than specify requirements or prescribe tangible measures by which success at coherence should to be attained (Carbone, 2008:330). Moreover, PCD has itself been criticized for being a misleading paradigm, mere political talk which donor countries rarely implement and for wrongly focusing on consistency between policies instead of their overall impact on poor people and countries (Theede, 2013, Barder, 2013).

Adapting PCD to cater for water security needs for transformative development in SADC RBOs

For the reason cited above, and in view of the fact that PCD focuses on the intended outcomes of policies and, thereby, leaves out the process aspects of policies, this paper proposes an adaptation of PCD. The *normative PCD* approach is proposed in order to build on and form an alternative to the traditional approach. It enables this paper to shift from focusing on the institutional structures of donor countries (Siitonen 2016) and depart from the conventional technical approach to policy coherence and the confusion over the way in which PCD tends to be characterized as either a process or an outcome. The emphasis on policy coherence and achievements through the choices and decisions of (mostly state) actors relates to the view that PCD is an outcome (Carbone, 2008; Siitonen 2016). Focusing on processes of global development which create and sustain poverty and inequality, however, projects the view that PCD is a process. According to Siitonen (2016:5), the conventional approach only focuses on the weak type of policy coherence that remains politically irrelevant, and the thinking behind the approach is based on models of development that depict people and institutions/organizations as rational actors.

But, policies and the outcomes of policies occur in the context of politics and institutions. They are also shaped in those contexts. These activities all happens “on the political side”, in “the murky waters of politics”, emerging from “clashes between actors and their pretended interests” (Siitonen, 2016:5). This process shows that PCD constitutes coordinated policies that serve as instruments through which Western donor countries control poor countries. Thus, development is said to be only attainable under prescribed economic and political conditions such as free market economy, free trade, good governance and democracy. PCD, which emerged just after the end of the Cold War and accompanied by structural shifts in power at the global level from the United Nations (UN) to Breton Woods international financial institutions, thus enables Western donors to coherently signal a hegemonic truth in which the market economy is secured, and security and stability in developing countries are attained. A critical approach to PCD reveals these hegemonic interests behind PCD. However, it makes a simplistic dichotomous view of the world (i.e., the West versus the rest).

This raises the need for an approach that allows for an examination of “the ideas, rules, norms and discourses” as well as the and institutional power structures (that is, the global dominance of the EU, including in the OECD and the DAC) that gave rise to PCD, and pushed it onto the development agendas of Western donor countries and made it a matter of practice in their activities and engagements (Verschaeve et al., 2015). Verschaeve et al argue that in this way, the EU has actually “been able to place PCD on top of the agenda” (2015: 53). The need for examination of the forces behind PCD is necessary, especially considering “transnational processes [that] empower citizens and civil society organizations to counterbalance the parochial nationalist interests, particularly in emerging democratic powers... [where the] ...transmission of norms such as legal principles, human rights and equality (including gender equality) plays a major role in these transnational processes” (Siitonen, 2016:6). The normative approach to PCD thus builds on the critical approach, but as an alternative. It aims to overcome the latter in order to contribute to PCD as a component of transformative development. Overall, policy coherence is not just a significant theme in the development agenda vis-à-vis the SDGs worldwide. Normative commitment to transformative and sustainable development (or at least contributing to that) is, rather, a priority of the SDG agenda. The transformative development promoted by normative PCD places developing countries in a position where they can play more prominent roles in development at the international level.

Regarding the dominance of ideas, rules, norms and discourses that place PCD in development agendas mentioned above, the normative approach seeks changes that will foster commitment to norms to guide all policies in all policy spheres. Policies that reflect such values—e.g., democracy and the legal principles, human rights and equality mentioned earlier—are better and more likely to contribute to transformative development. Therefore, the approach employed in this paper considers PCD as a *normative commitment* to democratic norms as the guide in all policies. It focuses on the analysis of the politics behind such policies and does this, in order to understand the way in which the policies impact the ideas, norms, rules and discourses as well as the institutions in and through which they are structured in order to achieve development in the SADC region in general and the RBOs in particular. The approach goes further than decentralization of decision making, ensuring stakeholder participation, or the emphasis placed on the centrality of gender in the provision, management and safeguarding of water. It progresses to emphasize the principles, values and norms that guarantee successful transformation, all of which are listed in Table 2 and 3. Transformation is especially achievable if these three fundamental ideals are integrated into the conception of and in national, intra- and regional policies. The ideals inform the interests of regional economic communities (RECs) such as the SADC and sub-regional organizations like the RBOs. The ideals fundamentally impact the agendas of the RECs. Transformation is thus achievable insofar as a follow-through exists from one ideal to the other, as

concerns development. For instance, where a REC such as the SADC adopts the ideal of development as a general value, this must be translated into a principle or constitutional standard or cultural tradition and, thereafter, yield formal policy or actual practice. The policy or practice would then represent the norms that are transmitted between the values and principles as impulses of what is required in the region. The values in this case would be notions that are stated by leaders at regional summits, for example. They are compatible with principles (which constitute a collective adoption of values) and norms. The norms on their part, constitute the actual implementation of values. These fundamental ideals are outlined for the wider SADC region and the respective RBOs in the results and discussion section. The outlines there are accompanied by a discussion of implications for transformation (based on whether the ideals are applied or not).

Study sample, data, data handling and analysis

All 12 RBOs depicted in Figure 1 and Table 2 provide the data (where available) for the analysis contained in this paper. Though the paper focuses on transboundary RBOs, cognizance is taken of the fact that, Southern Africa, let alone Africa as a whole, is endowed with many river basins--some local, others national and yet others international. Because the current study is actually an exercise in regional integration, the paper restricts itself to or focuses on transboundary river basins, which by nature evoke the necessity or provide the option and opportunity to riparian states to cooperate towards enhancing relations between them and/but also to engage in optimal regional management of water resources. In view of this, the paper does not consider national or local RBOs in the various and respective member states of the SADC. Admittedly, such basins are all of academic and research interest. But they are not included in the present study and, instead, recommended for future examination; with the same method and analytical framework employed in this paper. The analysis of the RBOs vis-à-vis water security and transformative potential is qualitatively conducted, within a broad discussion of water governance and policy under the theme of water and society in the SADC region. And the analytical framework employed for this purpose is normative PCD, explained above.

Like Fritz and Raza (2014), Koff and Maganda (2015), Koff (2016, 2017), Koch (2018), and England et al (2018), among others, the paper draws on qualitative content analysis. Qualitative Document Analysis (QDA) allows for the consideration of the implications and meaning of text and has been used to make the analysis of policy documents possible (England et al., 208: 2061). Like England et al (2018) and Koff (2016), this paper adopts an approach that follows several steps that improve consistency and rigor of the method of analysis employed. These include: a) establishing criteria for document selection; b) obtaining documents; c) document analysis; d) validation; and e) finalization. The documents forming the sample for the qualitative analysis included the SADC Treaty, protocols, SADC agreements and those establishing the RBOs and their policy documents. The data drawn from these documents is depicted in Table 2 and Table 3. The paper, therefore, relies on and uses qualitative secondary sources in the same way that the studies cited above do, for the analysis. The paper also consulted policy documents from the security arenas formulated in/by the GWP, SADC and the RBOs, as well as existing literature and data on policy coherence. Other secondary literature from non-government organizations (NGO), member state governments and donors were also consulted. Attention was given to the mention of 'water security' and the 15 normative values listed in Table 2, in the text of the SADC and RBO's policy instruments and other documents consulted. This was done in order to understand the place of water security and the commitment to the barest minimal level of development that focuses on and seeks transformation for the most vulnerable and underrepresented, in the agendas of the SADC and RBOs. The normative analysis informed by this approach provides a unique opportunity to present findings and analysis early on, following the adoption of the SDGs in 2015 and official enforcement on 1 January 2016.

Water security for development: A brief overview

This paper focuses on the concept, water security although it also uses several other important concepts employed in development, international political economy and international relations discourses. The UN-Water's (2013:1) working definition of water security is "the capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability." So far, this paper has highlighted issues regarding 'access' to water, which is captured in the UN-Water's definition. The definition also importantly includes 'quality' and 'protection', which are essential to the health, among other things, of consumers. The definition also underscores the importance of both social and environmental issues in pressing for development. The balance between these issues along with economic growth, as commonly advocated, is crucial. Actually, this better captured by Grey and Sadoff (2007:547-548), who define water security as "the availability of an acceptable quantity and quality of water for health, livelihoods, ecosystems and production, coupled with an acceptable level of water-related risks to people, environments and economies". Thus, the GWP (2009, 2012) argues that sustainable development will only be achieved with a water secure world. This is one that integrates a concern for the intrinsic value of water with a concern for its use for human survival and well-being. In working towards such a world, the UN-Water, GWP, governments, donors and other stakeholders propose various policies and strategies. A case in point is IWRM, which considers participation by various stakeholders in managing water resources to be important.

IWRM and RBOs: A step towards decentralizing water governance in Southern Africa

IWRM promotes the democratization of water management, encouraging stakeholder participation (with planners and policymakers, etc.) through decentralization in water development and management (GWP-TAC (Global Water Partnership-Technical Advisory Committee), 2000). But this paper posits that some principles of integrated water resources management were applied in the Southern African region even before the practice was formalized. This is despite the modern nation-state. It is also because water in Southern Africa's major rivers does not respect national boundaries. White (1998:23) actually argues that globally, member states of the UN gave attention to ideas behind integrated water management from the mid 1900s. In Southern Africa, van der Zaag (2009:247) posits that local-level water management practices in Southern Africa are historically part of and consistent with customary principles. His description of the evolution of water sharing arrangements (at the grassroots level) suggests they were firmly embedded in local culture. They reflect core values of communities and are based on shared values and customary practices. In this way, the governance of transboundary water resources in Southern Africa evolved based on a grassroots geographical logic that establishes a natural milieu for transboundary non-state actor collaborations.

Such cooperation continued, even with the advent of colonialism and accompanying formations of states over territories claimed by various colonialists. For example, on 5 July 1956, Lord Llewellyn (1956) announced to a joint meeting of the Royal African Society and the Royal Empire Society that the first electricity current from the then new hydroelectric scheme on the Zambezi to meet the demand of the Copperbelt in Zambia (then Northern Rhodesia) would be available in 1960. This scheme represented cooperation between Zambia and Zimbabwe (then Southern Rhodesia) in harnessing the Zambezi River for hydroelectric power generation. It dated back to 1951, when the Inter-Territorial

Hydro-Electric Commission “recommended the development of a dam at Kariba and hydro-electric power station” (ZRA, 2005).⁶

IWRM is based on four principles. These include: (a) fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment; (b) water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels; (c) women play a central part in the provision, management and safeguarding of water; and (d) water has an economic value in all its competing uses and should be recognized as an economic good (GWP-TAC, 2000). These principles underscore the aim of IWRM to enhance water security, development and sustainability. This aim is accomplished through coordinated implementation, based on appropriate governance structures, in which all users including women, planners and policy makers engage to ensure benefit sharing and resource access. IWRM is largely donor sponsored, leading some (e.g., Shah and van Koppen, 2006) to suggest that there might be agendas and vested interests behind the approach. An examination of the websites of the RBOs studied in this paper and as Table 1 (column 4) shows, their projects (including the websites) were donor-funded. The normative analysis of RBOs’ policy strategies in the next section of this paper will thus be revealing of their intended impact on, especially, actors that are in most need of water. As they seem to be created as part of reforms designed to facilitate the implementation of IWRM, Southern African RBOs make for an ideal proxy in which to examine the extent to which policies and strategies with a focus on human rights vis-à-vis access to water are crafted and rolled out. Therefore, the theoretical contribution of this paper consists in the comparison of normative PCD and water security and how far they reflect IWRM principles in the SADC region as the next section seeks to show.

Results and discussion

Normative PCD is here used to analyze policies in the security and, specifically, water security arenas. This is meant to examine the consideration (or non-consideration) of human rights in the adoption of policy strategies by SADC RBOs.

SADC RBOs and water security—The normative PCD approach

Of the 15 shared and major Southern African watercourses and river basins listed on the SADC website (SADC 2016a), only six were shown to have had established RBOs or BMAs.⁷ However, the results presented in this section are based on an examination of the water security-related information of all 12 RBOs and the 15 major transboundary river basins in SADC depicted in Figure 1.

Water and security in SADC and SADC RBOs

At the regional level, the SADC demonstrates commitment to core democratic norms. Through the 1992 Declaration and Treaty of the SADC, member states commit to act in accordance with such values as human dignity and gender equality. The whole range of these norms to which the region and some of the 12 RBOs subscribe is listed in Table 2. The table shows that the SADC region is committed to all core values, with the only exception of three. These three include, pluralism, tolerance and good

⁶ A brief history of the Zambezi River Authority (ZRA) is available on the ZRA website, <http://www.zaraho.org.zm/history.html>, (accessed 14 April 2014).

⁷ The six included the Commission Internationale du Bassin Congo-Oubangui-Sangha (CICOS) on the Congo River, the Permanent Joint Technical Committee (PJTC) Kunene on the Kunene River, the Permanent Okavango River Basin Water Commission (OKACOM) on the Okavango River, the Orange-Senqu River Commission (ORASECOM) on the Orange-Senqu River, and the Zambezi Watercourse Commission (ZAMCOM) on the Zambezi River. See Figure 1, Table 1 and SADC website: <http://www.sadc.int/themes/natural-resources/water/> (accessed 3 October 2016).

governance. However, SADC's commitment to 12 of the 15 core values is noteworthy, considering that the water governance-related policies, legislations, strategies, and programs, etc. formulated and implemented by the region, riparian states and organizations therein, emanate from the Treaty, or they at least use it as a basis. The principles to which the region commits itself, as listed in Table 2, are enough to warrant the suggestion that the Southern African region is fundamentally committed to normative coherence in its deliberations on development. The intention to decentralize water governance by creating RBOs as a strategy to achieve stakeholder participation, among other things, is evident at the SADC level. This is realized through its instruments such as the Revised Water Protocol, 2000. Equally evident is the desire, at the regional level, to harmonize and coordinate water policies and legislation of riparian states and in RBOs (see Table 3).

[Table 2 about here]

Whether these core values have been translated into the water strategies of the SADC RBOs, is also evident in Table 2. To start with, the Revised Water Protocol, 2000 is seen to commit to a selection of the core values, but not all of them. Only seven of these values out of the 12 to which the SADC Treaty commits itself are translated into the Water Protocol, from which the region's water strategies are, arguably, drawn. The seven values include human dignity, freedom, equality, rule of law, justice, gender equality and peace. The list of core values translated into strategies grows narrower as one goes down from the SADC regional level to the RBOs. For example, only five of all listed RBOs in Table 2 including the Okavango River Basin Water Commission (OKACOM), the Orange-Sequ River Commission (ORASECOM), Cuvelai Watercourse Commission (CUVECOM), Incomati and the Zambezi Water Commission (ZAMCOM) adopt a total of three core values each, in their respective strategies, as shown in Table 2. Between them, the seven core values which the five RBOs integrate in their respective basin plans or programs include equality, equity, rule of law, tolerance, justice, gender equality and peace. But, as Table 2 shows, the importance of core values in the plans or programs of RBOs could be said to be low. This is in view of the fact that, for most RBOs shown in the table, the majority of the values do not make it into their respective agreements, policies, plans and programs. Generally, about 13 of the 15 core values listed in first column of Table 2 are not adopted by seven of the 12 RBOs listed in Table 1. In fact, RBOs such as the Nile Basin Initiative (NBI) and the Kunene adopt only a core value each, in their plans or programs. The main goal of the RBOs rather seems to be the conservation, development and utilization of the basins' water resources, as Table 3 (column 2) shows.

Still, it could be argued that the RBOs are located in the SADC region. For which cause, the principles or core values subscribed to by the mother body could be considered covering the sub-regions. This argument is more pronounced when the security agenda is considered.

[Table 3 about here]

In terms of the security agenda, all the RBOs, with the only exception of the NBI, are subsumed by the SADC Organ for Politics, Defense and Security, as the respective states in the RBOs are all members of the SADC. As shown in the third column of Table 3, therefore, none of the RBOs except the NBI had explicitly committed to any security agenda. The SADC region does address the security issues, in which the commitment to water security identified includes the protection of human rights (Table 3).

The right to water in SADC and SADC RBOs

The right to water at the level of the SADC is reflected in the region's desire to promote *equitable* utilization of watercourse systems. This norm is also translated into the water agendas of nine RBOs for which data is available, as shown in the second column of Table 3. Besides this, most of the RBOs for which data is available and shown in the second column of Table 3 seem to also emphasize conservation in their water agendas. Actually, the SADC region and all RBOs generally seem to emphasize the conservation, development and utilization of water resources. It is also evident from Table 3 that the region has declared intentions to harmonize and coordinate policies and legislation for the development and management of water resources. The extent to which this is translated into a commitment at the RBO level is, however, limited.

Nevertheless, the evidence seems to suggest two things. First, that the SADC region has embraced the IWRM approach and officially shown the political will to democratize the governance or management of water resources. Second, the basin (RBO) in Southern Africa is well positioned to address issues regarding the conservation, development and utilization of water. The principles of IWRM provide the means through which these issues can be effectively addressed, while ensuring the participation of all relevant stakeholders.

Conclusion and recommendations

This paper has attempted to contribute to debates on development and the achievement thereof through transformation in the context of the SDGs. The theoretical contribution of this paper includes the comparative examination of *normative* PCD (based on the OECD building blocks for PCD) and water security structures at the RBO level in Southern Africa, and the extent to which the RBOs reflect IWRM principles. All the RBOs included in the paper are geographically located in the SADC region. This permitted the analysis of PCD at regional, basin, inter-basin, inter-state and state levels. Empirically, the paper highlighted regional water policies regarding harmonization and coordination in the respective riparian states of and the RBOs in line with the regional body, SADC.

Generally, SADC has made significant commitment to integrated water resources management. Equally, it has declared the need for the harmonization and coordination of policies and legislation for water development and management. New RBOs have been established in addition to those that existed before the 1995 Water Protocol (revised 2000) was enacted, in line with stipulations of the SADC Water Protocol.

Based on the data presented in the findings, SADC does integrate some of the core values essential to transformation in some of its key policy documents. However, examination and comparison of the core values expressed in the SADC Treaty with key policy documents of RBOs shows that most of these values have not been translated into the RBOs' water resources management strategies. That is, while SADC has made some commitments to transformative development, most of these have not filtered down to the RBOs. SADC's commitment to transformative development is reflected in its commitment to 12 out of the 15 core values shown to be essential to transformation in this paper (Table 2). These values, however, are weakly translated at the basin level, starting with the Revised Water Protocol, 2000 itself. As such, there is no overlap of values between the region and the transboundary RBOs. The only exception is, of course, the values respectively integrated by OKACOM, ORASECOM, CUVECOM, Incomati and ZAMCOM in their respective basin instruments. *Normative* PCD only exists and is possible and achievable only when values occur (see, e.g., Häbel, 2013).

And as the RBO is used as a proxy for IWRM in this paper, the evidence in Table 2 strongly suggests that the approach might be limited in its ability to achieve transformative development in Southern

Africa. This is because the core values essential to transformation outlined in this paper only come up at the SADC and not the level of the river basin or RBOs. Much as the seven cited values adopted by all the five RBOs including OKACOM, ORASECOM, CUVECOM, Incomati and ZAMCOM overlap in both regional and RBO policy arenas, their development policies cannot be said to be coherent insofar as the application of all the core values is concerned. The application of all core values in only one of these two arenas, therefore, leads to the conclusion that normative PCD does not exist in SADC vis-à-vis RBOs and the governance or management of water resources. If all the values had been applied at both levels, it would have meant that normative PCD existed. Despite principles such as participation and the prominence given to gender and the central role women play in water management, safeguarding and provision, IWRM seems to focus less on the values that are core to transformation, as argued in this paper. Rather, emphasis seems to be on the economic value of water and the need to sustainably develop and manage it as an economic good and resource.

Even regarding the water agenda of the SADC region and the RBOs. While the SADC seems committed to transformation by ensuring the adoption of core democratic principles, it falls short of translating these to the RBO level. Here too, the RBOs seem more committed to the conservation of water than the normative aspect that would promote transformation. Because RBOs focus more on conserving, developing and utilizing water resources, they should shift their emphasis and focus on adopting more core values in their policies and programs. This will help them achieve transformation at the RBO level. Besides, it will also be consistent with regional goals, which are reflected in SADC's adoption of all but three of the 15 core values studied in this paper. Doing so will, therefore, bring the transformation agenda to the ground, something the SADC seeks to achieve.

While the study highlighted a paradox around water availability, it can be said, as Maganda and Koff (2016 cited in Siitonen, 2016:3) point out that, "in the case of drinking water, scarcity is exceptional; the problem is ... policies lacking normative commitment."

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SDGs and decentralizing water management for transformation: Normative policy coherence for water security in SADC river basin organizations

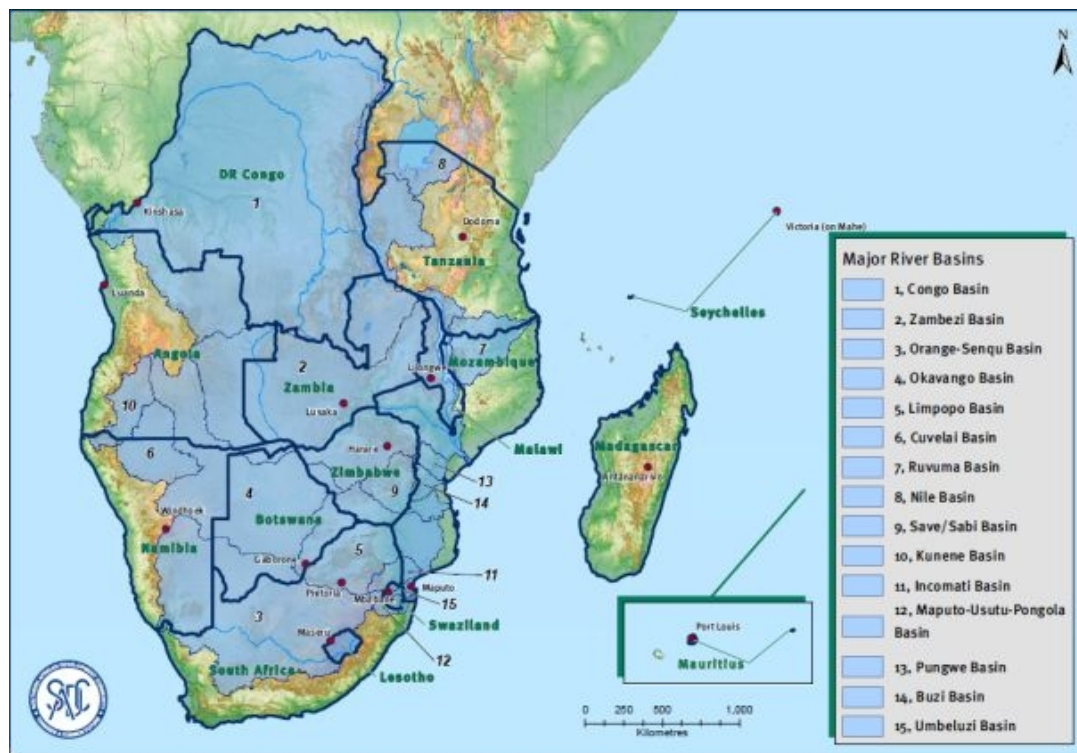


Figure 1 Major transboundary river basins of the SADC region

Source: SADC, 2016b, water: <http://www.sadc.int/themes/natural-resources/water/>, (accessed 28 September 2016).

Table 1 Major transboundary/shared rivers, river basins and river basin organizations of the SADC, 2016

Watercourse	Countries	River Basin Organisation	Cooperating partner/ donor agency acknowledged on RBO website*
1. Congo	Angola, Democratic Republic of the Congo, Cameroon, Republic of the Congo, Central African Republic, Gabon	Commission Internationale du Bassin Congo-Oubangui-Sangha (CICOS)	a) German Cooperation b) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) c) European Union d) Agence Francaise de Développement e) Fonds français pour l'environnement mondial (FFEM) f) African Development Bank Group g) World Bank
2. Zambezi	Angola, Botswana, Malawi, Mozambique, Namibia,	The Zambezi Watercourse Commission (ZAMCOM)	

	Tanzania, Zambia, Zimbabwe		
3. Orange-Senqu	Botswana, Lesotho, Namibia, South Africa	The Orange-Senqu River Commission (ORASECOM)	<ul style="list-style-type: none"> a) European Union b) French Global Environment Facility (GEEF) c) Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) d) United Nations Development Program/Global Environment Fund (UNDP/GEF) e) Directorate General for International Cooperation of the Netherlands (DGIS) f) Institut de Recherche Pour le Developpement, France (IRD) g) United Kingdom Department for International Development (UKAid) h) The International Commission for the Protection of the Danube River (ICPDR)
4. Okavango	Angola, Botswana, Namibia, Zimbabwe	The Permanent Okavango River Basin Water Commission (OKACOM)	<ul style="list-style-type: none"> a) gef (Global Environmental Facility) b) UNDP c) SIDA d) USAID
5. Limpopo	Botswana, Mozambique, South Africa, Zimbabwe	Limpopo Watercourse Commission (LIMCOM)	<ul style="list-style-type: none"> a) SADC b) GIZ c) UK AID d) Australian Government Aid Program
6. Cuvelai	Angola and Namibia	Cuvelai Watercourse Commission (CUVECOM)	
7. Ruvuma	Malawi, Mozambique and Tanzania	Joint Water Commission on the Ruvuma	

8. Nile	Burundi, Central African Republic, DRC, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, Uganda	Nile Basin Initiative	
9. Save/Sabi	Mozambique and Zimbabwe	Joint Water Commission between Mozambique and Zimbabwe	
10. Kunene	Angola, Namibia	Angola Namibian Permanent Joint Commission (PJTC) of Cooperation	<ul style="list-style-type: none"> a) German Federal Ministry for Economic Cooperation and Development (BMZ) b) German Cooperation Agency Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) c) UK Department for International Development (DFID) d) Australian Agency for International Development (AusAID)
11. Incomati	Eswatini, Mozambique and South Africa	Tripartite Permanent Technical Committee (TPTC)	
12. Maputo-Usutu-Pongola	Eswatini, Mozambique and South Africa	Tripartite Permanent Technical Committee (TPTC)	
13. Pungwe	Mozambique and Zimbabwe	Joint Water Commission between Mozambique and Zimbabwe	
14. Buzi	Mozambique and Zimbabwe		
15. Umbeluzi	Eswatini, Mozambique, and South Africa	Tripartite Permanent Technical Committee (TPTC)	

Sources: SADC, 2016a, water: <http://www.sadc.int/themes/natural-resources/water/>, (accessed 28 September 2016); (Schmeier, 2014, Schmeier, 2013)

* Where data is available

Note that 11. Incomati, 12. Maputo-Usutu-Pongola and 15. Umbeluzi river basins are, respectively, managed by Tripartite Permanent Technical Committee (TPTC), hence the apparent discrepancy between number of river basins and RBOs

Table 2 The right to water in selected SADC RBOs* #

Value	SADC Treaty	Revised Water Protocol, 2000	OKACOM	ORASECOM	ZAMCOM	LIMCOM	CUVECOM	NBI	Kunene	Incomati
<i>Human dignity</i>	X	X								

Freedom	X	X								
Democracy	X									
Equality	X	X	X	X	X			X	X	
Equity	X					X	X			X
Rule of law	X	X	X	X	X					
Human rights	X									
Pluralism										
Non-discrimination	X									
Tolerance										X
Justice	X	X								X
Solidarity	X									
Gender equality	X	X					X			
Good governance										
Peace	X	X	X	X	X	X	X			

Source: adapted from Habel (2013); compiled by the author from various sources

Documents sourced include the SADC Treaty, SADC protocols, Agreements establishing the RBOs and policy documents (see Methodology section for details).

* Where data is available

Table 3 The water and security agendas of SADC and selected SADC RBOs* #

Regional/ river basin organization	Regional/ Basin organization water agenda	Regional/ Basin security agenda (water aspects in italics)
SADC	<p>Develop a monitoring policy for shared watercourse systems;</p> <p>Promote the <i>equitable</i> utilisation of shared watercourse systems;</p> <p>Advance the sustainable, <i>equitable</i> and reasonable utilization of shared watercourses;</p> <p>Promote a co-ordinated and integrated environmentally sound development and management of shared watercourses;</p> <p>Promote harmonization and monitoring of legislation and policies for planning, development, conservation, protection of shared watercourses, and allocation of resources thereof;</p> <p>Formulate strategies for the development of shared watercourse systems;</p> <p>Monitor the execution of integrated water resource development plans in shared watercourse systems</p>	<p>Protect against instability and intra-and inter-state conflict and aggression, conflict early warning system, intelligence cooperation, peacekeeping and peace-making, cross-border crime, conflict prevention, <i>protection of human rights</i>, migration governance, disaster prevention</p>
Permanent Okavango River Basin Water Commission (OKACOM)	<p>The objective of the Commission shall be to act as a technical adviser to the Contracting Parties on matters relating to the conservation, development and utilization of water resources of common interest to the Contracting Parties and shall perform such functions pertaining to the development and utilisation of</p>	

	<p>such resources as the Contracting Parties may from time to time agree to assign to the Commission</p> <p>The function of the Commission shall be to advise the Contracting Parties on...4.3 The criteria to be adopted in the conservation, <i>equitable</i> allocation and sustainable utilization of water resources in the Okavango River Basin</p>	
Orange-Senqu River Commission (ORASECOM)	<p>Development, utilisation and conservation of the water resources in the River System</p> <p>**advise the Parties on the <i>equitable</i> and reasonable utilisation of the water sources in the River System to support sustainable development in the territory of each Party</p>	
Zambezi Watercourse Commission (ZAMCOM)	<p>Promote the <i>equitable</i> and reasonable utilization of the water resources of the Zambezi Watercourse</p> <p>The Zambezi Watercourse shall be managed and utilized in an <i>equitable</i> and reasonable manner</p>	
LIMCOM	<p>COMMITTED towards the realisation of the principle of <i>equitable</i> and reasonable utilisation as well as of the principle of sustainable development, with regard to the Limpopo</p> <p>The Protocol shall apply, in particular-</p> <p>a) Sustainable development; c) Intergeneration equity principle; d) Prevention principle; e) Transboundary impact assessment principle.</p> <p>The Council shall advise the Contracting Parties on the following: b) The <i>equitable</i> and reasonable utilisation of the Limpopo to support sustainable development in the territory of each Contracting Party and the harmonisation of their policies related thereto;</p>	
CUVECOM	<p>adopt policies and decisions and provide other necessary guidance on the promotion, support and coordination of the effective management, sustainable development, reasonable and <i>equitable</i> utilisation of the water resources of the Cuvelai Watercourse;</p> <p>develop and propose for consideration and approval by the Council rules of application to facilitate <i>Equitable</i> and Reasonable Utilisation (ERU) of the Cuvelai Watercourse, including and not limited to;</p>	

	<p>develop and distribute programmes and materials aimed at fostering greater awareness among the inhabitants of the Cuvelai Watercourse on the <i>equitable</i> and reasonable utilization of the Cuvelai Watercourse;</p> <p>The Parties shall in their respective territories, utilise the resources of the Cuvelai Watercourse in an <i>equitable</i> and responsible manner with a view to attaining optimal and sustainable utilisation thereof, and benefits therefrom, consistent with adequate protection of the Cuvelai Watercourse. The term "equitable and reasonable" shall be interpreted in line with the SADC Protocol.</p>	
NBI	<p>The Nile River Basin and the Nile River System shall be protected, used, conserved and developed in accordance with the following general principles:</p> <p>(a) Cooperation. The principle of cooperation between States of the Nile River Basin on the basis of sovereign <i>equality</i>, territorial integrity, mutual benefit and good faith in order to attain optimal utilization and adequate protection and conservation of the Nile River Basin and to promote joint efforts to achieve social and economic development.</p> <p>(b) Sustainable development. The principle of sustainable development of the Nile River Basin.</p> <p>(c) Subsidiarity. The principle of subsidiarity, whereby development and protection of the Nile River Basin water resources is planned and implemented at the lowest appropriate level.</p> <p>(d). <i>Equitable</i> and reasonable utilization. The principle of equitable and reasonable utilization of the waters of the Nile River System.</p> <p>(e). Prevention of the causing of significant harm. The principle of preventing the causing of significant harm to other States of the Nile River Basin.</p> <p>(f) The right of Nile Basin States to use water within their territories. The principle that each Nile Basin State has the right to use, within its territory, the waters of the Nile River System in a manner that is</p>	<p>Prevention of the causing of significant harm. The principle of <i>preventing the causing of significant harm</i> to other States of the Nile River Basin.</p>

	consistent with the other basic principles referred to herein.	
Kunene	to develop between themselves, in the context of the Southern African Development Co-ordination Conference, comprehensive co-operation based on <i>equality</i> and mutual benefit with the aim of raising the living standards of their peoples as rapidly as possible;	
Incomati	<p>the general principles of the Protocol shall apply, especially- (a) sustainable utilization principle; (b) <i>equitable</i> and reasonable utilisation and participation principle; (c) prevention principle; and (d) co-operation principle.</p> <p>If more water is made available through structural and nonstructural measures in the Incomati or Maputo watercourses, the Parties shall give priority to the water uses referred to in subArticle(1), when considering the allocation of the water, taking into account the <i>equitable</i> and reasonable utilisation by the Parties of the water resources of the Incomati and Maputo Watercourses.</p>	

Source: adapted from Koff (2016); compiled by the author from various sources

Documents sourced include the SADC Treaty, SADC protocols, Agreements establishing the RBOs and policy documents (see Methodology section for details).

* Where data is available

** cited as function under overall agenda