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Towards an Inclusive Development Framework for Governing Freshwater Resources

Shakeel Hayat ¹ Hameed Jamali ² Yamna Ihtisham ³ Muhammad Zakria Jan ⁴

Abstract: *There is considerable literature on governing freshwater resources, where one group of water scholars employs power theory to improve freshwater governance while another group focuses on an institutional approach to enhance the governance of freshwater resources. Among these scholars, few take an explicit inclusive development approach to consider the importance of ecosystem services for effective freshwater governance and human wellbeing. Hence, the purpose of this research is to investigate how inclusive development techniques might enhance freshwater resource governance. Building on a literature review of the concept of inclusive development, this conceptual paper builds a framework for assessing freshwater governance by investigating the socio-ecological roots of inclusive development in the post-2015 sustainable development goals. The paper concludes by identifying different instruments of inclusive development in order to enhance the governance of freshwater resources.*

Key Words: Inclusive Development, Water Governance, Freshwater, SDGs

Introduction

The Millennium Development Goals (MDGs) were established by the UN in 2000, signalling the beginning of a significant and successful global mobilization effort to accomplish a number of critical socioeconomic priorities globally (Sachs, 2012). It was globally agreed by all (i.e. heads of the States, civil society organizations, donor and development agencies, etc.) that goals to fight various socio-economic and environmental problems should continue beyond the MDGs, which expired in 2015 (UN DESA, 2015). This commitment led to the development of the Sustainable Development Goals (SDGs) (Chasek et al., 2015; UN-Water, 2014), which cover all three dimensions of sustainable development (i.e. economic, social and environmental) (Traub and Sachs, 2015; Gupta et al. 2015a; Bos and Gupta, 2016). Driven by the "leave no one behind" philosophy, these 17 goals and 169 targets are applicable to both industrialised and developing nations. The SDGs framework addresses important systemic barriers to sustainable development that the MDGs overlooked, such as inequality, unsustainable consumption patterns, a lack of institutional capacity, and environmental degradation. SDGs have significant governing implications, even though they are not legally enforceable (Van der Bliet et al., 2014; Orme et al., 2015: 971), particularly for transboundary water-related issues. The five main sectors of the globe that the SDGs aim to safeguard and enhance are people, planet, prosperity, peace, and partnership. The objective of this document is to propose a framework for reviewing the governance of transboundary rivers by investigating the socio-ecological roots of inclusive development in the existing SDGs and identifying various instruments for governing transboundary rivers.

Over the past few decades, a number of strategies have been developed to improve transboundary river governance. The hydro-hegemony (HH) concept of the London Water Research Group (LWRG) is specific

¹ Assistant Professor, Center for Water Informatics & Climate Resilience (CWC), IMSciences, Hayatabad, Peshawar, Khyber Pakhtunkhwa, Pakistan.

² Assistant Professor, Center for Water Informatics & Climate Resilience (CWC), IMSciences, Hayatabad, Peshawar, Khyber Pakhtunkhwa, Pakistan.

³ Research Assistant, Center for Water Informatics & Climate Resilience (CWC), IMSciences, Hayatabad, Peshawar, Khyber Pakhtunkhwa, Pakistan.

⁴ Research Assistant, Center for Water Informatics & Climate Resilience (CWC), IMSciences, Hayatabad, Peshawar, Khyber Pakhtunkhwa, Pakistan.

▪ **Corresponding Author:** Shakeel Hayat (shakeel.hayat@imsciences.edu.pk)

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to transboundary water governance that observes the dynamics of hydro-hegemony at the transboundary level (Zeitoun and Warner, 2006; Warner, 2008). According to Zeitoun and Allan (2008: p.8), the HH concept shows that the formation of ideas in a basin combined with a combination of hard and soft power determines outcomes far more than international water law, water sharing ethics, or riparian position. HH is fundamentally a concept of water dominance (Jägerskog and Phillips, 2006) that provides a great contribution and correction to existing water policy literature (Selby, 2013). However, the lack of attention to hydro-institutions is one of the main limitations of HH, as institutions have the potential to lessen the impact of authority over policy and key players for effective transboundary water governance. Furthermore, the important elements and dynamics influencing water governance laws and the key players (state and non-state) and their consequent socio-ecological impacts have also been inadequately highlighted by HH and institutional scholarships for sustainable water stewardship of resources, particularly in the Anthropocene, when the "great acceleration" in resource demand will force us to reevaluate how we use our limited ecological area (Gupta, 2014).

Recent studies suggest that an extended framework for transboundary rivers is vital to comprehend the evolving processes of conflict, cooperation, cooption, and distribution to deal with basin hegemony and enhance the governance of transboundary rivers. This paper, therefore, aims to bridge these gaps and addresses the question: 'How do inclusive development approaches improve governance of freshwater resources'? Building on a literature review of the concept of inclusive development, this conceptual paper proposes a framework for evaluating the governance of transboundary rivers and how it influences society and the natural environment. To answer this question, this paper reviews and analyzes the socio-ecological dimensions of SDGs (that are linked to water, particularly transboundary waters); discusses and highlights the important linkages between inclusive development and transboundary water governance; and identifies various instruments of inclusive development and their implications for transboundary water governance (Section 2). The paper then discusses the social (section 3) and ecological aspects of inclusive development (section 4). The last section concludes (section 5).

The Inclusive Development Concept Applied to Water

Introduction

This section sheds light on how inclusionary development first appeared in literature and how it is defined and conceptualized by various scholars, research and developmental organizations (e.g. ADB, UNDP, and the World Bank, etc.). Further, the sub-sections consider the various instruments of inclusive development and talk about how the idea of inclusive development might be used to enhance transboundary river governance.

The Sustainable Development Goals Approach to Water Governance

All three aspects of sustainable development require water as a necessary prerequisite (Gurría, 2009). as well as solid frameworks for law, policy, and regulation; additional efficient implementation organisations' civic will are all necessary for good transboundary water governance; and suitable financial commitment (Bucknall, 2006). In this subsection, we aim to thoroughly analyze whether water-related goals have been given due space in the SDGs, particularly from the perspective of society and ecology. In order to address global water issues in all areas of economic and human activities, as well as to fulfil all other development objectives, the stand-alone water-related goal (Goal 6) in the framework of the Sustainable Development Goals (SDGs) was established (UN General Assembly, 2012; Budapest Water Summit Statement, 2013; IISD, 2014). We also intend to highlight the linkages of other sectoral goals with water.

With its eight targets, Goal 6 of the SDGs framework is an ambitious endeavour to address both transboundary water governance and the global water issue. A review of Goal 6 shows that beyond Target 6.5, transboundary water governance is not addressed. It is helpful to talk about how Target 6.4 addressed concerns connected to water scarcity by emphasizing the improvement of efficiency of water use across all industries, ensuring sustainable withdrawals and supplies by 2030. It has been proven that water is a bridge between ecology, development, and society; this may be the primary factor linking water to other Sustainable Development Goals (SDGs), such as those pertaining to gender inequality, poverty, hunger,

health, and education, as well as ecosystem services and climate change (UNESCO-IHP, [2014](#)). It follows that the other sixteen goals and their targets have both direct and indirect connections to water.

Goals 11, 12, and 15, including targets 11.5, 12.4, and 15.8 to lessen the influence of invasive alien species on water ecosystems, and 15.1 to guarantee the preservation, restoration, and sustainable use of terrestrial and inland freshwater ecosystems and their services, of the Sustainable Development Goals (SDGs) specifically cite one or more of their suggested targets that include water. Goal 3 includes targeting 3.9 to prevent illnesses and fatalities caused by water pollution and 3.3 to battle water-borne diseases. A careful review of the SDGs reveals that objectives that do not specifically address water have additionally strong linkages with water-related particular Goals (e.g. Goal 6). For instance, it won't be able to eradicate poverty (i.e. Goal 1) without making substantial water investments (UNGA, [2014](#)). Similarly, water is not specifically mentioned in Goals 2 (supplying sustainable agriculture, attaining food security, and putting an end to hunger) or 7 (guaranteeing that everyone has access to modern, cheap, dependable, and sustainable energy), despite the fact that we know that water is necessary for both the agriculture sector and reliable, affordable, and sustainable energy (Kaygusuz, [2009](#); UNGA, [2014](#)). As the primary component of sustainable development, addressing climate change and its effects is the focus of Goal 13, which must also be considered from this perspective. Globally, climate change has had a significant impact on water supplies in a number of ways (Burrell et al., 2007). Target 13.3 calls on States to include climate change in their national planning and policy frameworks, which is obviously linked to transboundary water governance.

The promotion of inclusive, peaceful societies is central to Goal 16's overarching vision for long-term social development. It is, in fact, motivated by the idea of "good governance," which emphasises building strong, transparent, and responsible institutions at all levels in order to promote international collaboration. One way to interpret this is as a request for successful "transboundary water cooperation." In addition, one of the key tenets of inclusive development—responsive, inclusive, participative, and representative decision-making at all levels—is targeted by Target 16.7. This is to prevent a number of challenging scenarios in which significant development decisions may have an adverse effect on water users who lack a strong voice in the decision-making process. For instance, riparian areas downstream that rely on a steady water flow for fishing or agriculture may be impacted by the construction of dams. Although a lot of these kinds of challenges can be solved so that both parties win, inclusive, representative, and participatory decision-making is necessary first. Target 16.10 guarantees that the inclusive development's public engagement component complies with both domestic laws and international accords (UNECE, [1998](#)). Target 16.10 is relevant to transboundary water governance because, without knowledge, the public cannot participate in decision-making. In conclusion, transboundary water governance appears to be present in the SDGs as other goals and as a stand-alone goal (i.e., Goal 6), albeit not particularly prominently.

Inclusive Development: The Theory

Development that incorporates marginalised individuals, groups, and nations enhanced human well-being, social and environmental sustainability, empowerment, and inclusive development in social, political, and economic processes highlights the social and environmental aspects of sustainable development (Gupta et al., [2015](#); p. 542). While inclusive development focuses more on socio-ecological aspects of development, sustainable development considers economic, environmental, and social factors (Gupta & Baud [2015](#)). This is how inclusive development differs from sustainable development. (Gupta et al., 2015a; Bos and Gupta, [2016](#)). According to Raumiyyar and Kanbur (2010: p. 9), the word "inclusive development" refers to progress that is accompanied by equal chances and has institutional, social, and economic components (Vellala et al., [2014](#): p. 231). Sen ([1999](#)) asserts that the main goal of inclusive development is to guarantee the fulfilment of civil, civic, and political rights. Moreover, inclusive development discusses how people's freedoms expand and the actual decisions they can make as they grow human skills (Hickey, [2013](#)), according to WRR. (2010), Evans ([2010](#)), Sandbrook et al., [2007](#); Walton ([2010](#)), it is linked to the fair distribution of material and social benefits among social groups and categories (i.e., income groups, genders, ethnicities, regions, religious groups, and others).



According to Conceição et al. (2001) and Chatterjee (2005), inclusive development is a process of development that involves every citizen of every nation, promotes widespread involvement, and lessens social exclusion and poverty. Enhancing the distribution of well-being along the dimensions of income, health, and education is another term for inclusive development (Kanbur and Rauniyar, 2009: p. 38). It's an adaptive learning process that adjusts to new threats of marginalisation and exclusion as well as change. Lately, the idea of inclusive development has also been included in publications written by donor agencies like IDRC(Canada), Sida (Sweden), Danida (Denmark) and Norida (Norway) (ADB, 2007; Globelics, 2012; Tingting and Zhizhang, 2014: pp. 71-72). It is recognised as a strategy for social protection, which reduces vulnerabilities and dangers associated with ageing, disease, disability, natural catastrophes, economic downturns, and civil strife, gender development, which focuses on women's health, welfare, and civic engagement) and equity and empowerment (participatory decision-making and community-based steering). (Rauniyar and Kanbur, 2010; Gupta et. al., 2015; p. 543).

At first, inclusive development was mostly concerned with the social aspects, but some scholars (for instance, see Sachs, 2004: p. 1810; Zoomers, 2010; Fairhead et al., 2012; Leach et al, 2012) claim that because the poorest people are more likely to rely on local resources (soil, woods, fish, and water) and are more susceptible to the seizing of land, water, fish, and carbon credits, inclusive development has a significant ecological component. (Gupta et al., 2015). In addition, sustained investment in preserving ecosystem services is directly tied to the welfare of all people. (Chopra et al., 2005; Hayat and Gupta, 2016). International politics have been adopting a trend of embracing trade-offs between development and the environment in order to prioritise growth and employment over inclusion, and the environment has been made worse by the global recession. The notions of the "green economy" (UNEP, 2011) and "green growth" (World Bank, 2012) emerged as a result, encouraging economic expansion while respecting the environment. (Gupta et al., 2015; pp. 545-546; Fulai, 2016: pp. 1-2).

Inclusive development consists of (a) social inclusiveness (i.e. enhancing the lives of the most marginalized people, groups, and states) (Gough and McGregor, 2007); second, (b) ecological inclusiveness (e.g. to recognize that there are limits to our resources and that the most marginalized are deeply relying on the natural resources) (Crutzen, 2006); and (c) relational inclusiveness (i.e. to deal with the structural causes, including power politics of development and the environment) (c.f. Rauniyar and Kanbur, 2009, p. 455; Gupta et al., 2015: pp. 545-548; Bos and Gupta, 2016). Furthermore, the concept of inclusive development relies on three pillars, i.e. (a) sustainable development (which creates wide scope), (b) protecting rights and ensuring participation of people and (c) safety net arrangements for the ultra-poor (Jalil, 2016: pp. 1-2).

Inclusive Development: The Instruments

Although functionalists frequently portray governance techniques and tools as impartial means of addressing social and environmental issues, these tools are heavily weighted with values. The instrument selection (regulatory, economic, technological, suasive, management, procedural and cooperative) (Sterner, 2003; Gupta et al., 2013) or methods (e.g. poverty mapping or participatory budgeting) (see Pahl-Wostl and Hare, 2004; Armitage et al., 2008)) represents a particular problem formulation and framing. It might consciously or unintentionally further marginalize the poorest people and upend or disregard current informal relationships and governance processes. All of the tools mentioned above can be used for inclusive development (Sterner, 2003; Gupta et al., 2013). For instance, legally enforceable concepts (such as sovereignty, human rights, and equity) and regulatory tools (Shortall, 2004, 2008) direct society and provide a normative force to social norms (such as good governance and voluntary certification). Similar to this, suasive instruments—which include research and monitoring—such as participatory geographical systems and participatory rural appraisal—as well as soft law targets—such as the MDGs and SDGs—that offer policy guidance—are meant to persuade actors to alter their behaviour (Gupta et al., 2013). Education is valued as a persuasive tool in terms of employability. As a result, this tool is crucial to development since it fosters cultural awareness, comprehension of human rights, improved adaptability, and a developing sense of independence, self-reliance, and self-confidence (Sachs, 2004: p. 1802).

Another key procedural instrument is participation, which prompts inquiries about who extends invitations, who is eligible to participate, how participation is structured, and the several subthemes of

participatory writing (see Pahl-Wostl and Hare, [2004](#); Armitage et al., [2008](#)). Participation could not, however, necessarily result in quick fixes because discursive methods to wicked problems could take a very long period (Hurlbert and Gupta, [2015](#)). Economic tools for inclusive governance, according to Ali ([2007](#)) and Vellala et al. ([Vellala2014](#)), include progressive taxation (Oxfam, [2014a](#), b), which lessens the possibility of tax evasion. (Weaver, [2014](#)). This is done in order to produce the funds needed to provide the underprivileged with infrastructure (Singh, 2012). A few examples of management tools are community-based forest or fisheries management, corporate social responsibility (OECD, [2011a](#)), and community-based hybrid and management schemes (Arthurson, [2002](#); Mansuri and Rao, [2004](#)). The creation of drought-resistant seeds, expertise in crop diversification, and cleaner production techniques for SMEs are further technological tools for equitable development (Soni, [2007](#); Sanz, [2015](#)). (Gupta et al., [2015](#): pp. 550-552).

ADB's work focuses on various core activities such as infrastructure, technological and financial development, energy and environment, regional integration, and knowledge management. It is important to discuss that infrastructure development, together with public-private partnerships, are some of the primary instruments that promote higher levels of and more inclusive growth (Rauniyar and Kanbur, [2010](#): P. 50; Chakrabarti and Dhar, [2012](#): p. 1092). Governance instruments must be built on the basis of scholarly knowledge to be truly effective. Amongst the various tools of scholarly knowledge, geo-technologies are becoming increasingly important (Roche, [2014](#); Gupta et al., [2015](#): pp. 221-223). To achieve inclusive growth, the focus of policies and programmes should be on creating opportunities, improving security, building capacity and capability, as well as enhancing accessibility for all, including the poor (Chibba, [2008](#): pp. 147-150).

ADB (2011), through various research studies, identified and introduced a set of 35 key indicators which later on reduced to seven indicators (e.g. poverty and inequality; economic growth and employment opportunity; key infrastructure endowments; access and inputs to education, health; infrastructure utilities and services; gender equality and opportunity; social safety net; governance and institutions), spread over three categories i.e. (high, efficient, and sustained economic growth; social inclusion, good governance and institution; and social safety net). Based on these indicators, one can calculate an index of inclusive development (IDI), which is simply the sum of the seven key indicators (Zhuang, [2010](#); Tambunan, [2012](#): pp. 241-242).

Implications for Transboundary Water Governance

The concept of inclusive water governance (IWG) is to secure access for marginalized and socially excluded people to water resources and realize their rights to sustainable livelihoods. In order to achieve this, it is necessary to mobilize and build their capacities and, at the same time, to structurally engage them in advocacy. The IWG approach is based on a transboundary scale (e.g. sustainable solutions for water governance that go beyond provincial and national borders); inclusive decision-making (e.g. the voices of all users, representing and ensuring fair decision-making); empowerment of women (women's empowerment is critical for successful water governance); rights and responsibilities (rural people have their own responsibilities in water governance); power of the people (strengthening local organizations) (Oxfam, [nd](#)). To effectively construct plans for sustainable development, governments must establish excellent water governance in light of the increasing stress on water resources caused by variables such as population expansion, climate change, and water quantity and quality. (Orme et al., [2015](#): p. 969).

According to McCaffrey ([2007](#)), there are two types of criteria that define sustainable transboundary water governance: substantive and procedural. Substantive standards encourage collaboration and sustainability in transboundary rivers, while procedural criteria encourage transparency, predictability and accountability by adopting the principles of international law (Cook and Bakker, [2012](#)). Furthermore, substantive criteria comprise three key legal obligations, i.e. (1) to utilize the transboundary rivers in an equitable way (UNWC, [1997](#); McCaffrey, [2007](#); McIntyre, [2007](#)), (2) to follow the no harm principle (derived from the theory of limited territorial sovereignty) (UNWC, [2014](#); UNWC, [1997](#)); and (3) to protect and conserve water-related ecosystems (McCaffrey, [2007](#)). Similarly, the procedural contains four commitments i.e. (1) prior notification and sharing information (UNWC, [1997](#); McIntyre, [2010](#)); (2) ensuring public participation (UNECE, [1998](#); Tignino and Sangbana, [2015](#)); (3) environmental impact



assessment (EIA) (UNWC, [1997](#); McIntyre, [2010](#)); and (4) access to justice (Bruch, [2002](#); UNECE, [1998](#); Sanchez and Roberts, [2014](#); Orme et al., [2015](#): p. 972–974).

Transboundary water cooperation in SDGs is critical in meeting all five important and cross-cutting areas which intend to stimulate growth and development over the next 15 years i.e. *People* (for instance water is a key component of food security and sustainable agriculture), *Planet* (e.g. transboundary water cooperation is crucial for the protection of the planet), *Prosperity* (i.e. wherever water was found, civilizations flourished) (UN-Water, 2014), *Peace* (i.e. transboundary rivers as a key driver for cooperation in the context of sustainable development) (Sindico, [2016](#): pp. 5–9), and *Partnership* (Transboundary waters can mark significant relationship milestones based on good practices)(UN-Water, 2014). When we examine the SDGs, we find that two of the water proposals—the UN-Water proposal and the Swiss position paper—address transboundary water-related challenges. Sustainable treaties should serve as the foundation for the regulation of transboundary watercourses, according to the Swiss position paper (Confederation Suisse, 2013). The UN-Water position paper (UN-Water 2014) suggested using three water governance indicators—participation, accountability, and existing regulatory frameworks—as part of an integrated approach to water governance at the national and transboundary levels.

Recommendations from GWP consultations within the UN-Water talks included the establishment of river basin organisations (RBOs) to encourage cooperative agreements and the inclusion of transboundary water management agreements (GWP, 2013). Goal 6 of the Open Working Group plan had six aims related to water, with target 6.5 encompassing transboundary water cooperation (UNECE, [1998](#); UN, 2014; Saruchera and Lautze, [2015](#): Pp. 2–4). In order to address global water issues in all domains of human and economic activity and to achieve all other development objectives, Goal 6 on water in the SDGs is crucial (UNESCO-IHP, [2014](#)). A goal devoted to water is essential to mobilising real pledges and coordinated action on all water-related challenges through a cogent international framework, given the significance of water for the settlement of other global crises (UNESCO-IHP, [2014](#); Orme et al., [2015](#): pp. 978–979).

Ecological Aspects

The environment, poverty, gender, and growth can no longer be viewed as tangentially related aspects of development. The foundation of better and long-term growth for everyone is an understanding of their interdependence. Inclusive development has strong ecological roots. The poorest are most often dependent on natural resources such as water, wood, fish, and land and are also most vulnerable to the negative impacts of natural resource degradation due to human as well as natural activities (Zoomers, [2010](#); Fairhead et al., [2012](#); Leach et al., [2012](#)). Maintaining and sustaining ecosystem services are important for all parts of the human population and thus require continuous investment towards its sustainability (Chopra et al., [2005](#)). Any shock or deterioration of the natural ecosystems, particularly water, in terms of its quality and quantity due to human or natural activities, has the potential to disturb the livelihoods of millions and enhance competition among human populations (IPCIG, 2011: p. 2).

Because of its potential to produce significant social benefits, the combination of environmental and poverty policies has taken centre stage in the development discourse. The implementation of these policies confronts political challenges since, contrary to popular assumption, they do not consistently result in win-win scenarios for all facets of society. Extremely rapid expansion has had a notable impact on ecosystems and the services they provide. Over the past 20 years, more than half of all ecosystem services have either degraded or been exploited in an unsustainable manner (UNEP, [2010](#)). Integrating policies on poverty and the environment makes sense for the following five reasons: First, there can be substantial complementarity and synergy between environmental and poverty strategies (Chomitz, [2007](#)). Finding the right amount of resource pressure that permits impoverished people to earn more money while remaining within societally accepted safe bounds is, for the most part, the second challenge. Third, raising the standard of living for the poorest people means raising their purchasing power (e.g., more food, better clothing, housing, etc.) (MEA, 2005). Readjustments in the consumption patterns of the middle and higher classes in industrialised and developing countries will be necessary to counterbalance the rising consumption of the poorest under conditions of sustainable resource usage. In this situation, combining the environment and poverty would necessitate politically unpopular actions (Lind, [2010](#); Soley, [2010](#)). Fourth, there are expenses associated with integrating poverty-environment policies into development

plans. Realising the benefits of poverty–environment mainstreaming may need increases in environmental spending, which could be a challenging decision for a policymaker with limited resources. As a result, it may involve readjusting expenditures between sectors (see also Bah, 2008). Fifth, the law of diminishing returns still applies when poverty–environment initiatives are mainstreamed. The interventions with the highest potential for return on investment should be given priority in projects that offer technical assistance to nations seeking to integrate policies addressing poverty and the environment. (IPCIG, 2011: pp. 5–7).

Although studies of the relationship between the environment and human development frequently concentrate on sustainable consumption, a more comprehensive approach is required to acknowledge the critical role that natural resources play as a means of growth. In response to the crises of food, water, energy, and climate change, the idea of the "green economy" has recently gained popularity as a means of boosting economic activity. (IPC-IG, 2011: pp. 11–13).

Conclusion

The water, energy, and food nexus was examined at the 2012 Bonn Conference, which issued a number of proposals asking countries to "adopt a basin-wide perspective reflecting the principles of IWRM." States should ratify the United Nations Watercourses Convention (UNWC) and consider integrating benefit sharing into water sharing for international basins. The UNWC promotes and facilitates this approach. When it comes to transboundary rivers, cooperation from a benefit-sharing standpoint can yield more advantages and chances than individual nation methods. Even though the international water community made major contributions, this was not specifically mentioned in the Rio+20 final outcome documents. Instead, it was acknowledged that "water is at the core of sustainable development as it is closely linked to a number of key global challenges."

The importance of transboundary water cooperation for sustainable and inclusive development emphasizes that "water is at the core of sustainable development as it is closely linked to a number of key global challenges" (UN General Assembly, 2012). The SDGs' research of transboundary water governance has proven this exact point. For transboundary water governance, Goal 6 on its own is insufficient. Only by examining Goal 6 in conjunction with other pertinent sectoral goals that are related to water—specifically, Goal 16—which asks for increased transboundary cooperation, public participation, access to justice, accountability, and transparency—will the substantive and procedural requirements become clear. Both legal and non-legal strategies offer unique benefits and drawbacks, and both are crucial to comprehend in the context of the SDGs and global development. For this reason, it is definitely important to conduct further research and study in the area of completely examining water governance within the SDGs from the perspective of informal tactics. To achieve effective and efficient transboundary water governance in both developed and developing nations, a collaborative and cross-sectoral platform is required. Realizing that the SDGs cannot be achieved in a vacuum and that transboundary water governance requires significant consideration in the context of water presents a challenge.

Although the SDGs are far from ideal, they do offer a foundation upon which to build when it comes to enhancing transboundary water governance going forward. Countries and all other stakeholders will need to fully invest in the SDG implementation phase because effective, sustainable development cannot exist without sound transboundary water governance. (Sanchez and Roberts, 2014). The current text of the proposed SDG target 6.5 states, "by 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate." While it is not entirely clear what 'as appropriate' is meant to imply, one suspects that such language was used for one of two possible reasons: (i) to explicitly acknowledge that cooperation can take on a variety of forms, that it can be tailored to local circumstances as needed, and that it is unlikely that the same form of cooperation will be required everywhere; or (ii) to introduce flexibility regarding the requirement for cooperation on transboundary waters.

It is important to emphasise that the body of current knowledge can serve as a strong foundation for the development of indicators that track the achievement of SDG targets. (Saruchera and Lautze, 2015). The relevance of transboundary cooperation for sustainable development, its applicability to the overall implementation of the SDGs, and the intrinsic link between IWRM and transboundary cooperation are the



three main arguments in favour of maintaining a separate transboundary water cooperation indicator in the SDG implementation process. It is crucial to make sure that current institutions and norms can effectively harmonise with growing IWRM and the goals and ambitions put forth by the SDGs, given the diverse spectrum of players in transboundary water governance.

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