

# Multi-stakeholder regional dialogues

---

Pathways  
for advancing  
transboundary  
water cooperation

A stylized illustration of five diverse people in profile, facing left. They are set against a background of a colorful grid in shades of blue, green, orange, and grey. The people are depicted in various colors: a woman with grey hair and a purple earring, a woman with orange hair, a man with dark skin and a blue shirt, a man with dark skin and a blue shirt, and a woman with dark skin and a green headscarf.

**MSPs  
FOR  
IMPROVED  
WATER  
GOVERNANCE**

## Regional Multi-Stakeholder Dialogues

### Pathways for Advancing Transboundary Water Cooperation

This is one in a series of reports on MSPs for *Improved Water Governance*, under the *A Stake in Water Project*, funded by the Austrian Development Cooperation (ADC).

With funding from



#### About GWP

The Global Water Partnership (GWP) vision is for a water secure world. Our mission is to advance governance and management of water resources for sustainable and equitable development. GWP is an international network that was created in 1996 to foster the implementation of integrated water resources management: the coordinated development and management of water, land, and related resources in order to maximise economic and social welfare without compromising the sustainability of ecosystems and the environment.

The GWP Network is open to all organisations which recognise the principles of integrated water resources management endorsed by the GWP Network. It includes states, government institutions (national, regional, and local), intergovernmental organisations, international and national non-governmental organisations, academic and research institutions, private sector companies, and service providers in the public sector. The Network has 13 Regional Water Partnerships, 77 Country Water Partnerships, and more than 3,000 Partners located in 183 countries.

## Copyright

Maps throughout this publication were created using ArcGIS® software by Esri®. ArcGIS® and ArcMap™ are the intellectual property of Esri and are used herein under license. Copyright © Esri. All rights reserved. For more information about Esri software, please visit [www.esri.com](http://www.esri.com)

Photos: A fisherman slowly pushes his boat along the tranquil tributaries of the mighty Brahmaputra River in India's Assam province (left), Rohan Reddy/Unsplash. Aerial shot of the Okavango River, Wynand Uys/Unsplash (right). Figures and tables content page: The Kidney, one of seven Rila lakes, Yuliyen Grozdev/Unsplash.

© Global Water Partnership, 2022

## Authors

Yumiko Yasuda, Dimitris Faloutsos, Yelysaveta Demydenko, Laurent-Charles Tremblay-Lévesque, Luca Jendrek, Ashutosh Shukla, Irina Gribanenkova, and Milena Oravcová.

## Acknowledgements

The authors would like to thank Jeroen Warner, Janet Minatelli, Andrew Takawira, and Shamiso Kumbirai for providing feedback on the draft version of this report, and Anamika Barua for providing valuable materials and insights during the writing stage of this report. The authors would also like to thank Lum Sonita Awah and Monika Ericson for providing editorial support. Additional thanks go to Hammad Javid for developing the basin and country maps in this report.

The views expressed in this document do not necessarily represent the official views of GWP.

# **Multi-stakeholder regional dialogues**

---

Pathways for advancing  
transboundary water  
cooperation

List of figures	6
List of tables	7
List of abbreviations	8

# 1.

## Introduction

1. The potential of MSDs in fostering transboundary cooperation	11
2. Objectives	12
3. Analytical approach	12
3.1 Advancing transboundary watercooperation	12
3.2. Enabling factors for MSD processes	13
4. Methodology and outline	16
5. Disclaimer	17



# 2.

## Regional dialogue in South East Europe

1. Background on the regional context	19
1.1. Geography and socio-economy	19
1.2. Political framework and regional cooperation processes	19
1.3. Transboundary water resources: use and challenges	20
2. Regional multi-stakeholder dialogue processes in South East Europe	20
2.1. Multi-stakeholder dialogue phases and key partners	20
2.2. Multi-stakeholder dialogue events and activities	23
3. Key results and outcomes from the regional multi-stakeholder dialogue	25
3.1. Drin Basin	26
3.2. Mesta/Nestos River Basin	28
3.3. Dinaric Karst Transboundary Aquifer System	29
3.4. Sava River Basin	30
3.5. Drina basin	31
4. Enabling factors	33
4.1. Inclusion and role of facilitators	33
4.2. Using existing regional political and economic processes	34
4.3. Fostering social learning across scales	34
4.4. Leveraging sustainable finance	35



# 3.

## Regional dialogue in South Asia

<b>1. Background on the Regional Context</b>	<b>37</b>
1.1. Geography and socio-economy	37
1.2. Political framework and regional cooperation processes	37
1.3. Transboundary water resources: use and challenge	38
<b>2. Regional multi-stakeholder dialogue processes in South Asia</b>	<b>41</b>
2.1. Multi-stakeholder dialogue phases and key partners	41
2.2. Multi-stakeholder dialogue events and activities	42
<b>3. Key results and outcomes from the regional multi-stakeholder dialogue</b>	<b>45</b>
3.1. Indus River Basin	46
3.2. Ganges River Basin	48
3.3. Brahmaputra River Basin	50
3.4. Sundarbans Landscape	51
<b>4. Enabling factors</b>	<b>56</b>
4.1. Inclusion and role of facilitators	56
4.2. Using existing regional political and economic processes	56
4.3. Fostering social learning across scales	56
4.4. Leveraging sustainable finance	57

# 4.

## Regional dialogue in Southern Africa

<b>1. Background on the regional context</b>	<b>59</b>
1.1. Geography and socio-economy	59
1.2. Political framework and regional cooperation processes	59
1.3. Transboundary water resources: use and challenges	60
<b>2. Regional multi-stakeholder dialogue processes in Southern Africa</b>	<b>63</b>
2.1. Multi-stakeholder dialogue phases and key partners	63
2.2. Multi-stakeholder dialogue events and activities	63
<b>3. Key results and outcomes from the regional multi-stakeholder dialogue</b>	<b>67</b>
3.1. SADC WEF Nexus Regional Governance Framework	67
3.2. Using the Nexus approach in basin-level planning	70
<b>4. Enabling factors</b>	<b>70</b>
4.1. Inclusion and role of facilitators	70
4.2. Using existing regional political and economic processes	71
4.3. Fostering social learning across scales	71
4.4. Leveraging sustainable finance	72





# 5.

## Conclusion and Discussion

<b>1. Discussion on regional multi-stakeholder dialogue contributions to advancing transboundary water cooperation</b>	<b>75</b>
1.1. Regional multi-stakeholder dialogue contributions to basin-wide cooperation where it did not exist previously	77
1.2. Regional multi-stakeholder dialogue contributions to pre-existing basin-level cooperation	78
2.3. Conclusion on regional multi-stakeholder dialogue contributions to advancing transboundary water cooperation	79
<b>2. Reflection on the enabling factors</b>	<b>80</b>
2.1. Inclusion and role of facilitators: importance of convening actors and the role of facilitators	80
2.2. Regional political and economic context	81
2.3. Fostering social learning across scales: design and structure of dialogues	81
2.4. Leveraging sustainable financing	82
<b>3. Looking forward: regional dialogues as a pathway to advance transboundary water cooperation</b>	<b>83</b>
<b>References</b>	<b>84</b>

## List of Figures

Figure 1	The cooperation continuum	12
Figure 2	Water Stress in South East Europe	13
Figure 3	Countries in South East Europe	19
Figure 4	Drin River Basin	27
Figure 5	Drin dialogue workflow diagram	27
Figure 6	Catchment basin of the transboundary Mesta/Nestos River	28
Figure 7	Sava River sub basin of the Danube River Basin	29
Figure 8	Sava River Basin	30
Figure 9	Drina River Basin	31
Figure 10	Countries in South Asia	37
Figure 11	Map of the Indus, Ganga and Brahmaputra	38
Figure 12	SAWI's development partners	42
Figure 13	The Indus River Basin	46
Figure 14	Ganges River Basin	49
Figure 15	The Brahmaputra River Basin	50
Figure 16	Map of Sundarbans	52
Figure 16	The SADC WEF Nexus Conceptual Framework	52
Figure 17	SADC member states	59
Figure 18	Geographic distribution of the 21 transboundary rivers to which one or more SADC members is a riparian	60
Figure 19	The SADC WEF Nexus Conceptual Framework	68
Figure 20	Nexus thinking embedded in regional dialogues as part of implementing the Regional Strategic Action Plan	69
Figure 21	Suggested three dimensions of cooperation continuum framework	79



## List of Tables

Table 1	Transboundary water cooperation agreements in South East Europe	21
Table 2	Activities within the South East Europe regional dialogue	23
Table 3	Transboundary water cooperation agreements on Indus, Brahmaputra, Ganges and Sundarbans	39
Table 4	Abu Dhabi Dialogue (ADD) over 2006-2012	43
Table 5	SAWI regional knowledge exchange events 2013-2020	44
Table 6	Thematic issues covered in the Indus Basin Forum (2013-2017)	47

Table 7	Indus Basin Knowledge Forum (2017-2019)	48
Table 8	Summary of key annual outcomes on Sundarbans MSD activities	53
Table 9	Overview of shared river basins in the Southern African Development Community region	61
Table 10	Southern African Development Community Multi-Stakeholder Water Dialogues, Phase I	64
Table 11	Southern African Development Community Multi-Stakeholder Water Dialogues, Phase II	65
Table 12	SADC–EU Nexus Dialogues Project, Phases I–II	66



# List of abbreviations

<b>ADD</b>	Abu Dhabi Dialogue
<b>ADD-G</b>	Abu Dhabi Dialogue Group
<b>ADDKF</b>	Abu Dhabi Knowledge Forum
<b>BBIN</b>	Bangladesh, Bhutan, India and Nepal
<b>BIMSTEC</b>	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
<b>BISRCI</b>	Bangladesh-India Sundarbans Regional Cooperation Initiative
<b>BMZ</b>	German Federal Ministry of Economic Cooperation and Development
<b>CCAD</b>	Central America Commission for Sustainable Development
<b>C-NES</b>	The Centre for North East Studies and Policy Research
<b>CoP</b>	Community of Practice
<b>CRIDF</b>	Climate Resilient Infrastructure Development Fund
<b>DANIDA</b>	Danish International Development Agency
<b>DCG</b>	Drin Core Group
<b>DIKTAS</b>	Dinaric Karst Transboundary Aquifer System
<b>EU</b>	European Union
<b>EU WFD</b>	European Union Water Framework Directive
<b>FASRB</b>	Framework Agreement on the Sava River Basin
<b>GEF</b>	Global Environment Facility
<b>GIZ</b>	German Agency for International Cooperation
<b>GWP</b>	Global Water Partnership
<b>GWPSA</b>	Global Water Partnership Southern Africa
<b>GWP-Med</b>	Global Water Partnership Mediterranean
<b>HCD</b>	Human Capacity Development
<b>IBKF</b>	Indus Basin Knowledge Forum
<b>ICIMOD</b>	International Center for Integrated Mountain Development
<b>IIT-Guwahati</b>	Indian Institute of Technology
<b>ISRBC</b>	International Sava River Basin Commission
<b>IW: LEARN</b>	International Waters Learning Exchange and Resource Network
<b>IWM</b>	Institute of Water Modelling
<b>IWMI</b>	International Water Management Institute
<b>IWRM</b>	Integrated Water Resources Management
<b>JJS</b>	Jagrata Juba Sangha
<b>JWG</b>	Joint Working Group
<b>LIMCOM</b>	Limpopo Watercourse Commission
<b>MoU</b>	Memorandum of Understanding MoU
<b>MSD</b>	Multi-stakeholder Dialogue
<b>OKACOM</b>	Okavango River Basin Water Commission
<b>PoSW</b>	Protocol on Shared Watercourses
<b>RBO</b>	River Basin Organisation
<b>RCC</b>	Regional Cooperation Council
<b>RESILIM</b>	Resilience in the Limpopo Basin

<b>RSAP</b>	Regional Strategic Action Plans
<b>SAARC</b>	South Asian Association for Regional Cooperation
<b>SaciWATERs</b>	South Asia Consortium for Interdisciplinary Water Resources Studies
<b>SADC</b>	Southern African Development Community
<b>SADCC</b>	Southern African Development Coordination Conference
<b>SAP</b>	Stabilisation and Association Process
<b>SAWI</b>	South Asia Water Initiative
<b>SAYWIN</b>	Southern Africa Youth WEF Nexus Innovation Network
<b>SDGs</b>	Sustainable Development Goals
<b>SEE</b>	South-East Europe
<b>SEECp</b>	South-East European Cooperation Process
<b>TWRM</b>	Transboundary Water Resources Management
<b>UIBN</b>	Upper Indus Basin Network
<b>UNDP</b>	United Nations Development Programme
<b>UNECE</b>	United Nations Economic Commission for Europe
<b>UNEP</b>	United Nations Environment Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>WEF</b>	Water-Energy-Food Nexus
<b>WEFE</b>	Water-Energy-Food-Ecosystems Nexus
<b>ZAMCOM</b>	Zambezi Watercourse Commission

# Chapter 1:

# **Introduction**

Multi-stakeholder dialogues for transboundary water cooperation can help transcend policy-making and management silos derived from the sectoral and spatial organisation of administrative and governance structures.





# Chapter 1: Introduction

## 1. The potential of multi-stakeholder dialogues in fostering transboundary cooperation

Worldwide, more than 310 lakes and river basins, and almost 600 aquifers, cross the political boundaries of two or more countries and can thus be considered transboundary. International lakes and river basins cover 42 percent of the Earth's land surface, serve 2.8 billion of the world's population, and account for approximately 54 percent of global river discharge ([United Nations Environment Programme – Danish Hydraulic Institute and UNEP, 2016](#)). Managing transboundary water is therefore central to achieving a water-secure world and the Sustainable Development Goals (SDGs), making it a priority for many nations (Moisio and Paasi, [2013](#); Warner et al., [2017](#)).

Establishing cooperation over transboundary waters is often a long-term process that can evolve gradually, involving different steps, twists, and turns. There are several entry points to establishing and enhancing/sustaining transboundary water cooperation including, among others: information and data-sharing among riparian countries and stakeholders; and action for managing specific subjects of common concern, such as improving navigation, and water-related disasters and emergencies (Huntjens et al., [2016](#); Sadoff and Grey, [2005](#)). Infrastructure development by one of the riparian countries can also be a trigger for discussing how best to cooperate over the use of shared resources.

Dialogues for fostering relationships and trust among States and stakeholders can take place in an intergovernmental format, also known as the Track 1 approach, or in the format that involves non-State actors – either working towards influencing decisions and action by State actors (Track 2 approach), or having action dialogue among themselves (Track 3 approach) (Moss and Newig, [2010](#)). Joint trainings, workshops or study visits can be part of Track 2 and 3 approaches and can create a favourable environment for representatives of institutions with responsibilities over shared waters to meet, exchange, and build informal relationships and trust; two elements that are important in establishing cooperation.

The concept of multi-stakeholder dialogues (MSDs) as an arena for collaborative policy-making first emerged as an alternative to top-down decision-making at the

local and sub-national level (Innes and Booher, [2003](#)). The multi-stakeholder aspect of a dialogue refers to the fact that different groups share a common problem or aspiration while having different interests (Brouwer et al., [2015](#)). Multi-stakeholder processes unite various stakeholders in a collaborative exchange using shared rules to take coordinated action, while jointly aiming to create a more comprehensive solution to a problem than any of the stakeholders could develop on their own (Gray and Purdy, [2018](#)).

Such MSDs are found in the context of transboundary water resources management. MSDs for transboundary water cooperation can help transcend policy-making and management silos derived from the sectoral and spatial organisation of administrative and governance structures. MSDs for transboundary water management may take place at multiple scales at the same time, from the local, national, and basin level to the regional level. MSDs for transboundary water management therefore broadly refer to the sustained interactions among a range of stakeholders across scales, organisations, and countries that aim to explicitly contribute to advancing cooperation over issues related to shared water resources.

In this paper, we focus on analysing MSD processes for transboundary water management that takes place at the regional level: namely regional MSDs. While most regional MSDs begin as Track 2 or Track 3 processes, many have transitioned into basin-level MSDs and into Track 1 processes with formal transboundary agreements or other types of cooperation arrangements. In many other cases, regional MSDs have remained much more fluid and ad hoc, following multitrack approaches (Barua, [2018](#)). These less formalised MSDs have however contributed in their own ways to enhancing the management of transboundary water resources by, for example, helping propagate new insights and inform better decision-making at the sub-national level. While potential benefits of MSDs have been recognised, (International Secretariat of the Dialogue on Water and Climate, [2004](#); Yasuda et al., [2017](#)), there is limited literature that examines the extent to, and ways in, which regional MSDs influence the advancement of cooperation over shared waters.

## 2. Objectives

In this context, this paper aims to understand how regional MSDs can advance transboundary water cooperation. It has two specific objectives:

- Identify the extent to which regional MSDs contribute to advancing transboundary water cooperation.
- Reflect upon key factors that enable regional MSDs to positively influence transboundary water cooperation.

## 3. Analytical approach

To respond to the first objective, we refer to the cooperation continuum as the overarching analytical approach to understand the advancement of transboundary water cooperation resulting from regional dialogues. For the second objective, we propose a conceptual framework based on four key enabling factors, which is used to anchor the discussion on how regional MSD processes function and what helps and inhibits their progress.

### 3.1 Advancing transboundary water cooperation

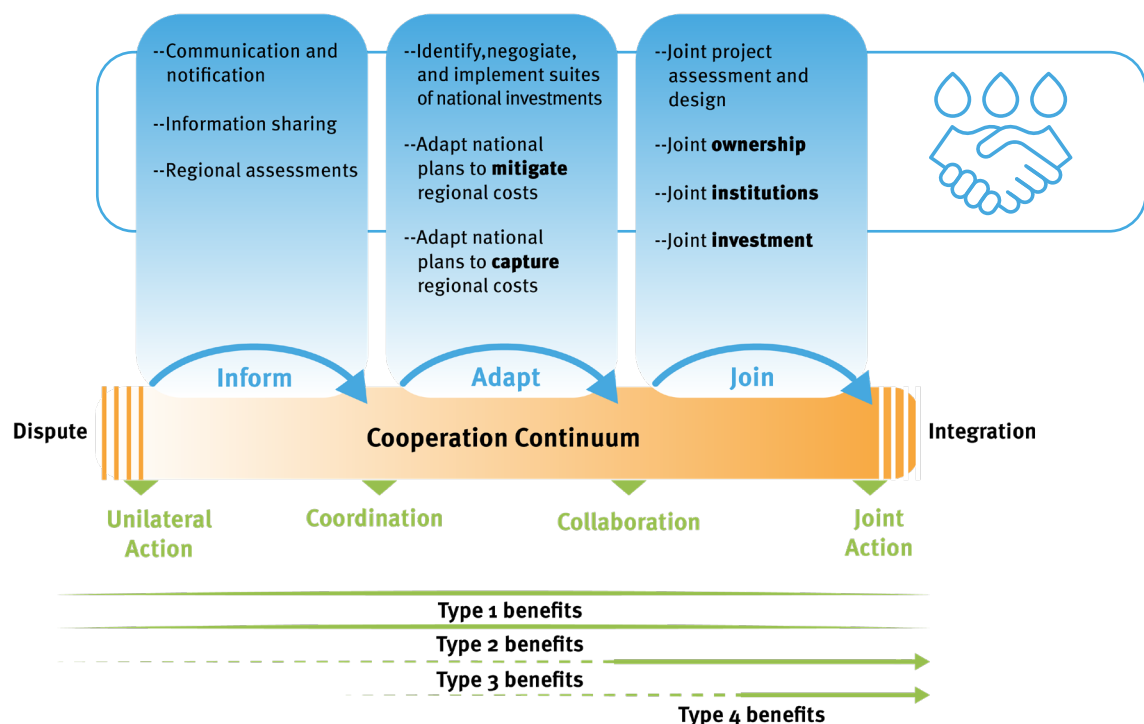
To analyse the first objective, we first need to be clear on what is meant by ‘advancing transboundary water

cooperation’. Cooperation ranges from simple information-sharing to a fully integrated approach to managing a shared resource, which usually requires continuous long-term effort from all parties (Grey et al., 2016). Since cooperation cannot be defined as a simple absolute opposite to water conflicts (Zeitoun and Mirumachi, 2008), the cooperation continuum developed by Sadoff and Grey (2005) provides a useful framework for understanding different levels and types of cooperation. The cooperation continuum framework suggests a range of possible outputs and outcomes associated with types of benefits that are generated throughout the cooperation process (Sadoff and Grey, 2002). As suggested by **Figure 1**, through different stages of cooperation continuum, different outputs are developed, e.g. from data-sharing to developing joint basin-wide plans.

Within the continuum, each type of cooperation is characterised by a particular type of activity. Starting from ‘unilateral action’, where there is no communication among riparian countries, the cooperation continuum framework evolves to the ‘coordination’ stage, which sees stakeholders engaging in cooperative information-sharing, regional assessment, and communication and notification of information. The next stage of cooperation is ‘collaboration’, which can take place through adapting national plans to mitigate regional costs and to capture regional gains. This process also involves identifying, negotiating, and implementing suites of national investments.

**Figure 1. The Cooperation continuum**

Source: Adapted from Sadoff and Grey (2005).



The subsequent stage of cooperation is ‘joint action’ whereby riparian countries enter into joint investments or create joint institutions.

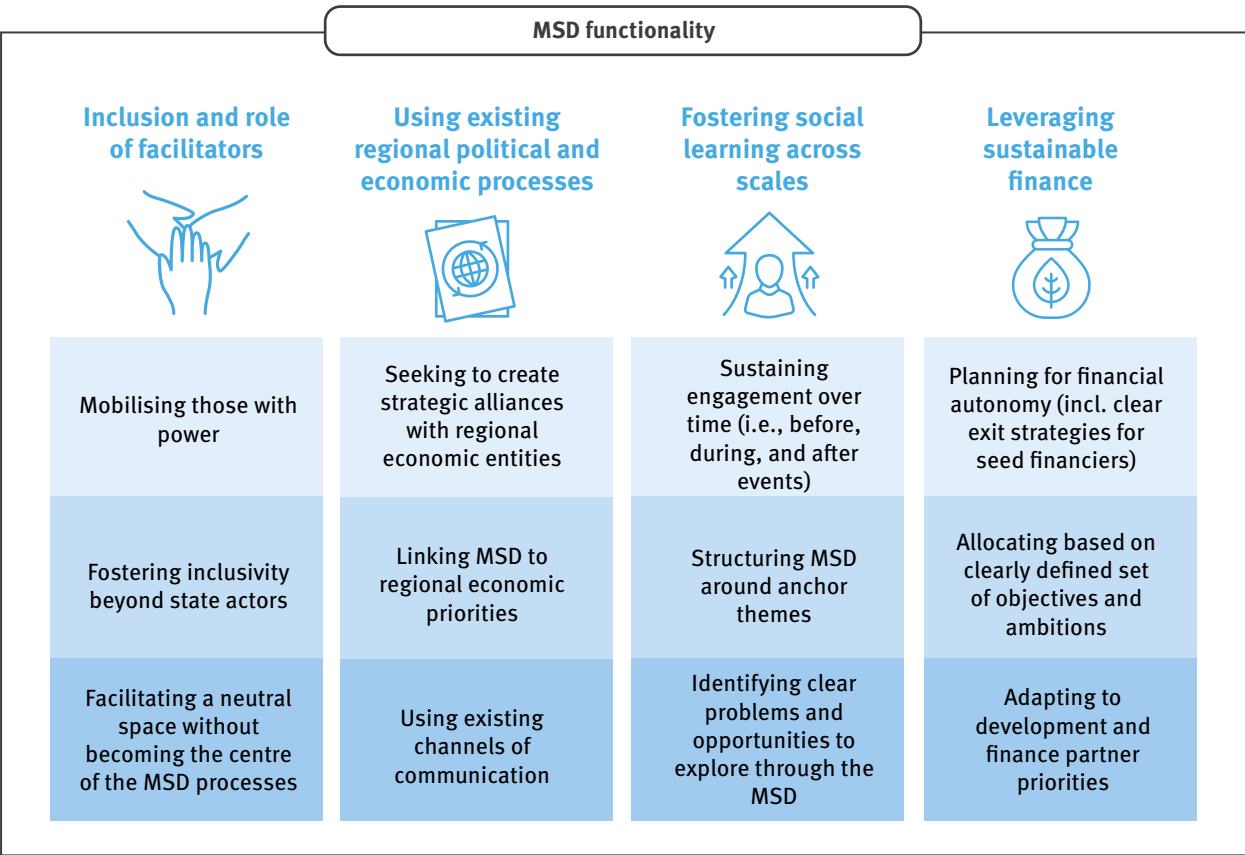
The cooperation continuum is “non-directive, dynamic and iterative” (Sadoff and Grey, 2005). Different types of cooperation and benefits exist at different times and levels of cooperation, and cooperation is not necessarily at its best in the ‘joint action’ stage. Depending on the basin context and situation, cooperation can take place at appropriate levels (Sadoff and Grey, 2005). Recognising the complexity of transboundary water cooperation, and the different levels of outputs and outcomes that can be expected from regional- and basin-level dialogues, the cooperation continuum can provide a useful reference point for understanding the extent

to which regional dialogues can contribute to advancing transboundary water cooperation.

### 3.2. Enabling factors for multi-stakeholder dialogue processes

The second objective is to reflect upon key factors that enable regional MSDs to positively influence transboundary water cooperation. Based on salient propositions made in the literature on multi-stakeholder engagement processes, this paper proposes a conceptual framework composed of four key enabling factors as a starting point to discuss how MSDs function and identify what helped or prevented their progress (Figure 2).

**Figure 2. Enabling factors for effective regional multi-stakeholder dialogues on transboundary cooperation.**  
Source: Created by the authors





## Inclusion and role of facilitators

‘Dealing with power’ and ‘fostering inclusiveness’ are two of the most cited principles that make multi-stakeholder platforms effective (Brouwer et al., [2013](#); Cheyns, [2011](#); Warner, [2007](#)). On the one hand, transformative MSD processes need to convince those with the power to make the desired change happen. In the case of regional dialogues for transboundary water cooperation, this would mean that the MSD processes engage – at least to some extent – directly with the governments and ministries responsible for signing international agreements. To do so, the organising entities must have sufficient influence and be perceived by virtue of their past activities, reputation, and mandate as being legitimate convenors by those in power (Warner, [2007](#)). On the other hand, organisers must also ensure that those who are traditionally at the margins of or outside decision-making processes are also meaningfully included in the MSD process, which is often easier said than done (Sigalla et al., [2021](#)).

Since transboundary cooperation is typically perceived as a State-to-State affair, a well-designed and inclusive MSD should also allow for participation from other non-State actors (e.g. community social organisations, academia, and the private sector). Creating a two-way conversation where bottom-up and top-down visions are genuinely heard requires experienced technical facilitators and mediators. Those convening and facilitating MSD processes must therefore strike a careful balance between stakeholder inclusion and procedural fairness (Mena and Palazzo, [2012](#)). Beyond ‘working with power’ and ‘dealing with conflict’ among participants (Brouwer et al., [2015](#)), the facilitators must also ensure that they do not take too much space in the MSD process itself. An effective MSD process therefore requires an organiser/facilitator who can strike a careful balance between managing to convene those with power and creating a neutral space for dialogue, while not dominating the dialogue and its space.



## Using existing regional political and economic processes

In trying to leverage transformational impact, MSDs should seek to build alliances with established regional actors and demonstrate where they can best complement ongoing efforts. Coalition building is indeed part of the process of multi-stakeholder engagement for building the demand-side for change (Verzosa and Fiutak, 2019). A publication by the Scientific and Technical Advisory Panel (STAP) of the Global Environment Facility (GEF) argues that MSDs need to “make use of existing processes or coalitions, where possible” (Ratner and Smith, 2020). Looking specifically at the context of dialogues at the regional level, MSDs should thus make use of existing regional political and economic processes, such as political unions or councils and economic development communities.



## Fostering social learning across scales

Multi-stakeholder water dialogues must be designed and structured towards fostering collaborative learning (Matin, [2008](#)), allowing peer-to-peer learning, and leading to cross-fertilisation of practitioners' and decision-makers' experience in managing water resources at all levels. Collaborative learning is reported to be a key ingredient in enhancing the effectiveness of the MSD processes (Ratner and Smith, [2020](#)). Learning-based MSDs are able to more effectively generate and capture alternative thinking to trigger fundamental transformations against managerial myopia (Payne and Carlton, [2017](#)). In the context of conflicts over natural resources management (as is often the case in transboundary water), social learning can contribute to adaptative management that considers the ever-changing hydrological, social, and political circumstances (Ratner et al., [2018](#)).

An overarching theme that drives and structures the dialogue activities can be key to fostering social learning across scales. If the anchoring theme covers problems that are experienced as urgent and salient, the MSD gains traction and importance (Warner, [2007](#)). Stakeholders might opt out of the multi-stakeholder process if it is not based on critical and independent analysis of underlying issues, and the specific context calling for intervention. A well-founded anchoring theme may therefore serve as a uniting factor for stakeholders to be open to dialogue, explore new perspectives together, and carry out joint analysis in the dialogue's later stages (Brouwer et al., [2015](#)).

The WEF nexus framework has been used, for instance, as a means to create shared visioning and facilitate MSD process at the transboundary level (Mohtar and Daher, [2016](#)). Supporting communities of practice to emerge and focus on burgeoning issues is one way of enhancing the reach and impact of MSD initiatives (GEF IW:LEARN and Global Environment Facility, [2020](#)). MSD processes that develop knowledge opportunities at the basin and regional levels create a web of knowledge that accelerates learning loops. Finally, Huntjens et al. ([2017](#)) remind us of the time dimension associated with a dialogue and how sustained engagement before and after events deepens opportunities for knowledge exchange.



## Leveraging sustainable finance

Multi-stakeholder processes require continuous funding to respond to the ambitions of their participants (Dore, [2007](#)). A determining factor in the effectiveness of the MSD is thus whether the process can generate funding beyond the initial investments (Ratner and Smith, [2020](#)). Facilitators have a crucial role here to promote the MSD as a vehicle to achieve the overarching goals of a cooperative process together with the organisational goals of each stakeholder (Warner, [2007](#)).

Financial sponsors and facilitators need to play a critical role in this process. At the inception phase, they need to evaluate the financial needs of the MSD based on the context and its ambitions. The financial model of the MSD should be tested and diversified as the MSD matures. MSD financiers need to plan their exit strategy and think about how the MSD will be able to sustain itself financially as they withdraw. Single-donor MSDs are less likely to be effective than those that manage funds from the private sector or investments from regional and economic entities and development partners (Ratner and Smith, [2020](#)).

## 4. Methodology and outline

This paper adopts a comparative case study approach focusing on the **(1)** South East Europe Dialogue; **(2)** the South Asia Dialogue and; **(3)** the Southern Africa Dialogue to examine the achievement and inner workings of regional MSD processes. Comparative case studies are a common method used to track change and processes over time (Sarantakos, 2005; Yin, [2003](#)). Here is a brief description of the cases:

### 1 South East Europe Dialogue



Supported by the Global Water Partnership – Mediterranean (GWP-Med), the South East Europe (SEE) regional dialogue on waters in the Western Balkans had two phases: 1) 2005–2013 under the Petersberg Phase II/Athens Declaration process and; 2) 2013–present under a political framework enabled by the Regional Cooperation Council. The regional dialogue created spin-off processes that resulted in: (i) the enhancement of cooperation in a basin (Drina Basin) and a karst aquifer system (Dinaric Karst Transboundary Aquifer System); (ii) the establishment of official cooperation in a basin (Drin Basin) and; (iii) the enhancement of cooperation in two basins with already established joint bodies (in Lake Ohrid and in the Sava River Basin).

### 2 South Asia Dialogue



The World Bank has conducted several regional dialogues through the Abu Dhabi Dialogue (ADD), followed by the South Asia Water Initiative (SAWI) programme. These dialogues have included all the South Asian countries sharing transboundary basins. After six rounds of regional dialogues during the ADD phase, participants agreed to continue the dialogue at the basin level. Subsequently under SAWI, basin-level dialogues and basin-level related activities took place within the Brahmaputra, the Indus rivers, and Sundarbans, while nationally focused activities took place primarily for the Ganges.



### 3 Southern Africa Dialogue



Through the Southern African Development Community (SADC) regional programme, SADC and GWP Southern Africa (GWP SA) have been convening SADC regional water dialogues since 2007. The process has resulted in a ministerial-level political commitment: the adoption of the Water–Energy–Food (WEF) nexus approach towards managing water resources, including transboundary waters in the SADC region. This nexus approach has been implemented in several transboundary basins.

To ensure a coherent analytical approach, each case study is examined based on the following structural components:




### 5. Disclaimer

Information used for description and analysis was collected through a desktop review, with limited interaction and input from a few key personnel who were directly engaged in the process. The case on South East Europe was authored by a GWP member of staff who was directly engaged in the process, with much of the information taken from his direct observation of the dialogues. The views expressed in this document do not necessarily represent the official views of GWP nor any other parties involved in the processes described in this document.

# Chapter 2:

# **Regional dialogue in South East Europe**



Multi-stakeholder dialogues catalysed transboundary water cooperation at five basins and aquifers shared within the region.

## Chapter 2: Regional dialogue in South East Europe

### 1. Background on the regional context

#### 1.1. Geography and socio-economy

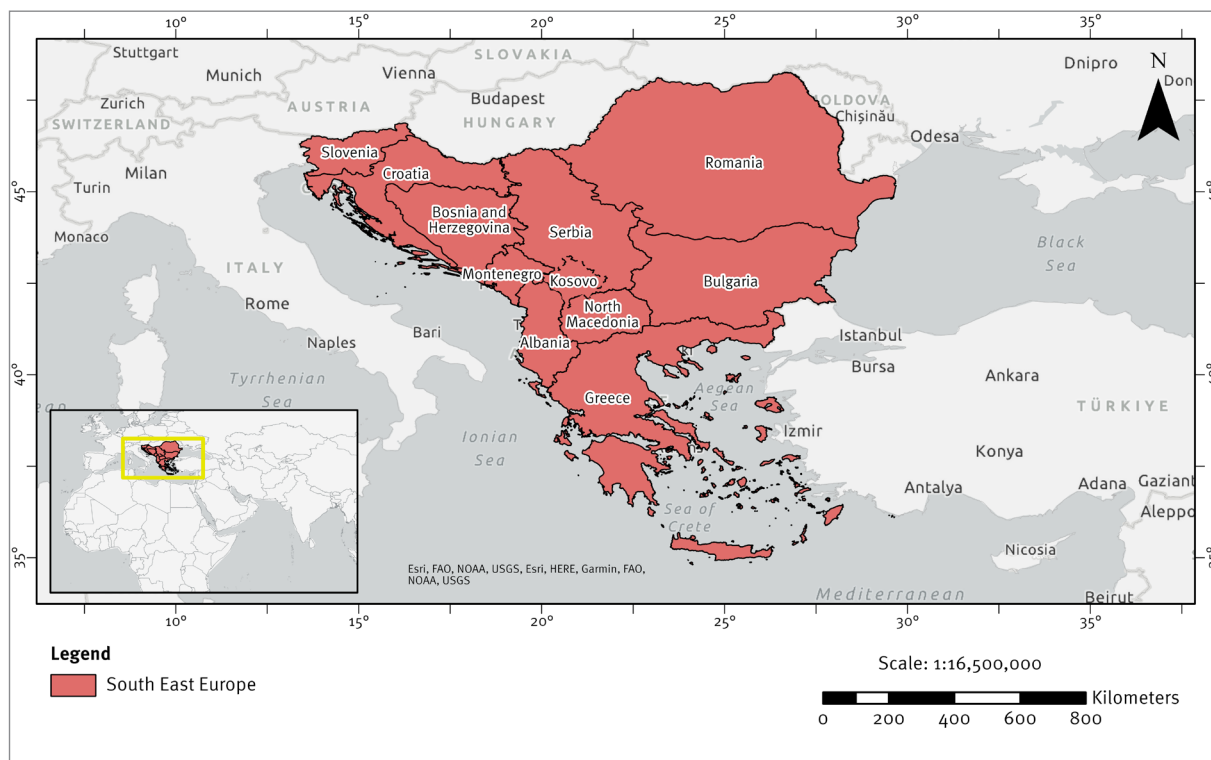
South East Europe (SEE) is composed of 11 countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, North Macedonia, Greece, Kosovo,<sup>1</sup> Montenegro, Romania, Serbia, and Slovenia (Figure 3). The region extends to over 61.4 million ha and is home to 55 million people. Population is dropping due to socio-economic factors, particularly migration linked to unemployment (Globevnik et al., 2018).

#### 1.2. Political framework and regional cooperation processes

In 1992, the federation of Yugoslavia dissolved. Following political upheavals and conflicts between 1991 and 2001, it was replaced by Bosnia and Herzegovina, Croatia, Kosovo, Montenegro, North Macedonia, and Serbia. The 1996 South East European Cooperation Process (SEECP) was established to facilitate cooperation and enable its members to approach the Euro-Atlantic structures. Driven by the European Union (EU), it resulted in the 1999 Stability Pact for South-Eastern Europe. Besides security concerns, the Pact addressed economic reconstruction and transboundary environmental hazards (Watanabe, 2010). The Stabilisation and Association Process was launched in 1999 as the EU policy for the Western Balkans, with the prospect of their eventual EU membership (European Commission, 2021). The Sarajevo-based Regional Cooperation Council (RCC)<sup>2</sup> operating under the guidance of the SEECP took over this process.

Figure 3. Countries in South East Europe.

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016).



1. All references to Kosovo are made in accordance with United Nations Interim Administration Mission in Kosovo (UNMIK), Security Council Resolution 1244, 1999, and the International Court of Justice (ICJ) Opinion on the Kosovo Declaration of Independence.

2. The RCC is a cooperation framework officially launched at the meeting of the Ministers of Foreign Affairs of the SEECP in Sofia, on 27 February 2008, under which auspices it continues to operate. Within the framework of the general political guidelines set by the SEECP, the RCC works towards cooperation, with a view to enabling the implementation of regional programmes aimed at economic and social development for the benefit of the people in the region. Its work is guided by the Statute and triennial strategies and work programmes.

Greece was the first SEE country to join the EU in 1981, while other SEE countries were seen as potential candidates for EU membership from 2003 onwards ([European Commission, 2021](#)), as subsequently reaffirmed in the Western Balkans Strategy (European Commission, 2018). Slovenia became an EU member in 2004, Bulgaria and Romania in 2007, and Croatia in 2013. Currently Albania, the Republic of North Macedonia, Montenegro, and Serbia have received EU 'candidate country' status, while Bosnia and Herzegovina and Kosovo have ongoing EU accession negotiations under their respective Stabilisation and Association Agreements.

The accession process is accompanied by technical and financial support from the EU to the countries to help them integrate the EU's *acquis communautaire*<sup>3</sup> into their legal framework and comply with it, this being one of the prerequisites to becoming an EU member state. This harmonisation process also covers legal and regulatory frameworks in the fields of environment and water resources management. The latter is governed by the EU Water Framework Directive (Water Framework Directive, (EU WFD)), which constitutes an enabling factor for transboundary cooperation. Moreover, all SEE countries have signed and ratified the 1992 United Nations Economic Commission for Europe (UNECE) Water Convention, which has been the international legal framework providing the basis and reference for official cooperation for transboundary water resources management in SEE.

### 1.3. Transboundary water resources: use and challenges

The SEE region is overall rather water-rich, exceeding its neighbours' resources by almost twice and having an estimated total of 580 bln m<sup>3</sup>/yr of renewable water resources ([Food and Agriculture Organization of the United Nations, 2022](#); [World Bank Group, 2016](#)).

Bulgaria and North Macedonia have the lowest regional shares. The share of water uses among sectors varies across the region but industrial water use generally takes the top spot in the region, followed by agricultural and municipal water uses (Food and Agriculture Organization of the United Nations, 2022). Water stress is most prominent in Albania, along with Northern Bulgaria and Greece.

Water pollution from untreated wastewater is an issue affecting all SEE countries, albeit Greece and Slovenia to a much lesser extent. Anthropogenic activities are amplifying climate change consequences, resulting in droughts and riverine floods in recent years. The region's transboundary water resources are threatened by surface water and groundwater pollution from urban wastewater and agriculture, outdated industrial facilities and mines still in operation, illegal wastewater discharge and waste deposits, water scarcity, destructive floods, declines in groundwater levels, and saline water intrusion in deltas and coastal aquifers ([UNECE, 2011](#)).

Shared basins cover the majority of SEE countries' surface areas, e.g. the Danube River Basin extends to 60 percent of Croatian territory and 70 percent of Bosnian territory ([European Environment Agency, 2010](#)). A majority of basins in SEE are transboundary, with more than half of them shared by three or more riparian countries ([TWRM-Med, 2007](#)). In trying to build joint cooperation, SEE States have reached several agreements on transboundary water cooperation. Table 1 presents an overview of existing legal frameworks for the protection and sustainable use of transboundary water resources in SEE (Oregon State University, [2019](#); Retrieved June 2022).

---

3. EU *acquis communautaire* – also known as EU *acquis* – is the body of common laws, rights, and obligations that bind all the member states together within the EU. EU *acquis* comprises the content, principles, and political objectives of the Treaties; legislation adopted pursuant to the Treaties and the case-law of the Court of Justice of the EU; declarations and resolutions adopted by the EU; instruments under the Common Foreign and Security Policy; instruments under Justice and Home Affairs; and international agreements concluded by the European Union and those entered into by its member states among themselves within the sphere of the EU's activities.

4. The [Petersberg Process](#), an initiative on cooperation for the management of transboundary waters – supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the [World Bank](#) – was established in 1998. Its Phase II focused on SEE and was intended to provide support to translate into action the developments and opportunities for future cooperation on transboundary rivers, lakes, and groundwater management in SEE. This effort was seen as complementary to the EU integration process in SEE. The [Athens Declaration Process](#) concerning 'Shared Water, Shared Future and Shared Knowledge' was initiated in 2003. It provided a framework for a long-term process to support cooperative activities for the integrated management of shared water resources in the SEE and Mediterranean regions. It was jointly supported by the Greek Ministry of Foreign Affairs and the World Bank. The two processes progressively came together to generate synergies and maximise the outcomes for the benefit of the SEE region. The mandate was given by the authorities and stakeholders of the SEE countries during a roundtable organised in Berlin, Germany in 2005.

Table 1. Transboundary water cooperation agreements in South East Europe<sup>4</sup>

Transboundary basin	Countries	Applicable agreement	Date of conclusion	Validity
Danube, Drava Basin	Hungary, Croatia	Agreement between the Government of the Republic of Croatia and the Government of the Republic of Hungary on Water Management Relations	10 June 1994	Present
Mesta/ Nestos River Basin	Bulgaria, Greece	Agreement between the Government of the Hellenic Republic and the Government of the Republic of Bulgaria for the Use of the Mesta/Nestos River Waters	22 Dec 1995	Present
Bilateral agreement (applicable to all shared basins in the countries)	Croatia, Slovenia	Treaty between the Government of the Republic of Croatia and the Government of the Republic of Slovenia on the Settlement of Water Management Relations	25 Oct 1996	Present
Prespa Lakes, Drinos River, Aoos-Vjosa River	Greece, Albania	Agreement between the Government of the Hellenic Republic and the Government of the Republic of Albania on the Establishment of the Permanent Greek-Albanian Commission on Transboundary Freshwater Issues	3 April 2003	Renewed every 5 years
Bilateral agreement (applicable to all shared basins in the countries)	Hungary, Romania	Agreement between the Government of the Republic of Hungary and the Government of Romania on the Protection and Sustainable Use of Transboundary Waters	15 Sept 2003	Present
Prespa Lakes	Albania, Greece, North Macedonia	Joint Statement regarding the Prespa Park by the Prime Ministers of the Hellenic Republic, the Republic of Albania and the former Yugoslav Republic of Macedonia	27 Nov 2009	Present
		Joint Declaration on the Creation of the Prespa Park and the Environmental Protection and Sustainable Development of the Prespa Lakes and their Surroundings, by the Prime Ministers of the Hellenic Republic, the Republic of Albania and the former Yugoslav Republic of Macedonia	2 Feb 2000	Present
Ohrid Lake	Albania, North Macedonia	Agreement between the Council of Ministers of the Republic of Albania and the Government of the Republic of Macedonia for the Protection and Sustainable Development of Lake Ohrid and its Watershed	17 June 2004	Present

5. Source: Oregon State University (2019; Retrieved June 2022).

Transboundary basin	Countries	Applicable agreement	Date of conclusion	Validity
Skadar/Shkodra Lake	Albania, Montenegro	Agreement between the Ministry of Tourism and Environment of the Republic of Montenegro and the Ministry of Environment, Forestry and Water Administration of the Republic of Albania for the Protection and Sustainable Development of the Skadar/Shkodra Lake	27 May 2008	Present
Sava River Basin	Bosnia and Herzegovina, Croatia, Serbia, Slovenia	Framework Agreement on the Sava River Basin	3 Dec 2002	Present
		Protocol on the Prevention of Water Pollution caused by Navigation to the Framework Agreement on the Sava River Basin	1 June 2009	Present
		Protocol on Flood Protection to the Framework Agreement on the Sava River Basin	1 June 2010	Present
		Memorandum of Understanding (MoU) between International Sava River Basin Commission and Montenegro	9 December 2013	Present (Terminates when Montenegro becomes party to FASRB*)
		Policy on the Exchange of Hydrological and Meteorological Data and Information in the Sava River Basin	16 July 2014	Present
		Protocol on Sediment Management to the Framework Agreement on the Sava River Basin	6 July 2015	Present
Drin River Basin	Albania, Greece, Kosovo, North Macedonia, Montenegro	MoU for the management of the Extended Drin Basin – The Drin Strategic Shared Vision	25 Nov 2011	Present
		Strategic Action Programme	24 April 2020	Present

## 2. Regional multi-stakeholder dialogue processes in South East Europe

### 2.1. Multi-stakeholder dialogue phases and key partners

Systematic action for a regional dialogue on transboundary water resources management (TWRM) issues in SEE was initiated under the Petersberg Phase II / Athens Declaration

Process in 2006.<sup>4</sup> Activities within the process were primarily supported by the Governments of Germany and Greece and the World Bank. In addition, Global Water Partnership – Mediterranean (GWP-Med) provided strategic advice as well as technical and administrative support for the planning and implementation of the regional dialogue. During this initial phase, the main objective of the dialogue was to build capacity and share experience on IWRM, towards enhanced cooperation for TWRM and the development of IWRM plans for shared water bodies.

\* Framework Agreement on the Sava River Basin



The dialogue process has additionally benefited from the Global Environment Facility (GEF) supported International Waters Learning Exchange and Resource Network (IW:LEARN), which brought synergies and practical experiences from other GEF international waters projects. Indeed, the aim of this GEF IW:LEARN project was to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio (GEF IW:LEARN, Retrieved May 2022). GEF IW:LEARN was also the primary source of financial support during the 2005–2010 period, along with the Swiss Development Agency, which financed action in a specific basin. Organisations and institutions such as the UNECE Water Convention secretariat have been collaborating partners as well, and the RCC joined from 2009 onwards. Synergies with active institutions, processes, initiatives, and projects supported by GEF, other international financial institutions, and donor countries were developed throughout this first phase.

Created in 2013, the South East Europe 2020 strategy of the RCC provided the framework for action in the 2013–2020 period, thus signalling the initiation of the second phase of the regional dialogue. Sustainable management of natural resources (those that are shared among countries as well

as those that extend within national jurisdictions) became a growing shared ambition of the SEE countries. The concept of Water–Energy–Food–Ecosystems (WEFE) nexus and its related approach provided a suitable framework for sustainable natural resources management at the national and transboundary levels, thus supplementing the original anchor theme as well as the objectives of the dialogue. The UNECE Water Convention secretariat, which was already a partner in the process, became more involved in organising the dialogue events. In terms of in-cash financing, the GEF IW:LEARN continued its financial support from 2013 onwards, which was then matched by the Austrian Development Agency and the German Environment Protection Agency. As for the first phase, considerable in-kind co-financing was provided by all countries that hosted dialogue events.

## 2.2. Multi-stakeholder dialogue events and activities

The SEE regional dialogue process comprises a series of complementary activities (e.g. regional roundtables, capacity building workshops, study visits) that provide a forum for exchanging on TWRM issues in SEE (**Table 2**). Events have been consistently organised since 2005 with the exception of two 2-year gaps: 2015–2017 when financing was not available and 2020–2021 during the peak of the COVID-19 pandemic.

**Table 2. Activities within the South East Europe regional dialogue**<sup>6,7</sup>

Phase	Date	Location	Title
Phase I	5–7 December 2005	Berlin, Germany	International Roundtable ‘Protection and Sustainable Use of Transboundary Waters in South-Eastern Europe’
	12–14 October 2006	Ohrid, North Macedonia	International Roundtable ‘Integrated Shared Lake Basin Management in South East Europe’
	15–17 November 2006	Zagreb, Croatia	‘Principles for Multipurpose Management in the Sava River Basin’

6. This list does not include the events that were organised at specific basin/aquifer levels as key ‘spin-offs’ from regional dialogues, which are addressed in the following dedicated section.

7. Source: GEF IW:LEARN and Global Environment Facility (2018).

Phase	Date	Location	Title
Phase I	October 2007	Belgrade, Serbia	Environment for Europe Conference – Side event ‘Transboundary Water Cooperation in South East Europe: A Key to Development and Security’
	12–14 November 2007	Brdo, Slovenia	International Roundtable ‘Integrated Management of Shared Groundwater in South-Eastern Europe’
	25–27 March 2008	Podgorica, Montenegro	Capacity Building Workshop ‘Stakeholder involvement in Transboundary Water Resources Management’
	June 2008	Tirana, Albania	Workshop ‘Water and Climate Change in South East Europe: Understanding Impacts & Planning for Adaptation’
	16–18 July 2008	Ohrid, North Macedonia	Capacity Building Workshop on ‘Integrated Management of Shared Lakes Basins’
	December 2008	Postojna, Slovenia	International Roundtable ‘Shared Groundwater Resources Management’
	18–20 May 2009	Sarajevo, Bosnia and Herzegovina	‘International Workshop on Integrated Transboundary Water Resources Management in South Eastern Europe’
	15–20 November 2009	Lake Constance/Bodensee, Austria, Germany, and Switzerland	Study visit of the Lake Skadar/Shkoder (Albania/Montenegro) Commission members to Lake Constance/Bodensee
	7–8 July 2011	Tirana, Albania	Capacity Building Workshop on ‘The Implementation of the EU WFD as a Means to Promote Environmental Integration’
	13–14 December 2011	Zagreb, Croatia	Capacity Building Workshop on ‘Flood Management in a Transboundary Context’
	15–16 December 2011	Zagreb, Croatia	International Roundtable ‘Protection and Sustainable Use of Transboundary Waters in South East Europe’
	30 November – 2 December 2011	Zagreb, Croatia	Capacity Building Workshop on ‘How to connect policy and science for an improved water management: A practical introduction to application of knowledge brokering in the Sava River Basin Management Planning’
	22–27 April 2012	Lake Neusiedl, Austria and Hungary	Study Tour with the Shkoder/Skadar Lake Commission to the International Sava River Basin Commission (ISRBC), the International Commission for the Protection of the Danube River and Lake Neusiedl
	21–22 November 2012	Tirana, Albania	Capacity Building workshop on ‘The Implementation of the Water Framework Directive (WFD) as a means to Enhance Water Resources Management’

Phase	Date	Location	Title
Phase II	6–8 November 2013	Sarajevo, Bosnia and Herzegovina	'International Roundtable on Water and Energy Nexus in Transboundary Basins in South East Europe'
	December 2014	Zagreb, Croatia	Regional Roundtable 'Water, Food, Energy and Environment Nexus in South East Europe'
	June 2017	Belgrade, Serbia	Regional Roundtable 'Introducing and Operationalizing the Water, Food, Energy and Environment Nexus in South East Europe (SEE)'; First Nexus Ministries Meeting
	October 2018	Skopje, North Macedonia	Second Nexus Regional Roundtable on 'The Path Towards Water, Energy, Food and Ecosystems Nexus in South East Europe' and Nexus Ministries Meeting
	16–18 October 2019	Tirana, Albania	Third Nexus Regional Roundtable 'Addressing Water–Energy–Food–Ecosystems Nexus Challenges in South East Europe'
	27 July 2022	Tirana, Albania	Fourth Nexus Regional Roundtable in South East Europe

The MSD activities in Table 2 generally revolved around a specific theme echoing a priority in SEE countries (e.g. transboundary rivers, lakes and groundwater, climate change adaptation, multi-purpose uses, stakeholder participation). This facilitated the sharing of common experiences in terms of issues and solutions applied, hence enabling discussion and cross-fertilisation. The thematic focused discussions revealed the political, economic, social, and environmental benefits that can be realised through effective cooperation in the management of transboundary water bodies. The EU WFD and the UNECE Water Convention provided an additional overall framework for the discussions and interaction under the SEE MSD activities.

Activities assembled a variety of stakeholders. Participants in the events were mainly high-level staff and decision-makers representing national, regional, and international institutions and organisations, but representatives of civil society and academia also participated. Depending on the content and the regional dialogue level, about 50–70 stakeholder representatives participated in each event while about 20 representatives participated in capacity building workshops and study visits. Overall, more than 150 institutions and organisations were engaged in the dialogue activities.

### 3. Key results and outcomes from the regional multi-stakeholder dialogue

It is difficult to track the full scale of the results derived from the MSD process in SEE since 2005. That said, one overarching and clear contribution of the MSD has been the establishment of a community of practice (CoP). On the one hand, the MSD activities helped enhance the capacities of individuals and, on the other, also contributed to building the organisational capacity of governmental bodies and administrations involved in transboundary water management. Many members of the CoP and the organisations they represent have been actively involved in the initiation and implementation of successful basin-level transboundary projects and processes.

Another positive result from the regional MSD is basin-level action and spin-offs. Indeed, many regional dialogue activities have been intertwined with basin processes and proved to be a catalyst in a number of cases. The main basin- and aquifer-level spin-off action and results that have been influenced by the regional MSD process are presented as follows.

## Key outcomes and spin-off actions from the SEE regional MSD.

- **Drin Basin:** An MSD for the management of the Drin Basin and its transboundary sub-basins and a subsequent signing of an MoU at the ministerial level in 2011 that established a joint institutional structure. Basin-level action undertaken has since led to the implementation of around 90 percent of the MoU, the adoption of a Strategic Action Programme to address transboundary issues, as well as decision by the riparians to negotiate an international agreement for the management of the basin and develop a Drin River Basin management plan. The investment supported by (mainly) GEF, the Austrian Development Agency, and the Adaptation Fund (AF) and mobilised since the signing of the MoU will exceed USD 23 million in the 2011–2028 period.
- **Mesta/Nestos River Basin:** An MSD for the management of the Mesta/Nestos River Basin. Despite efforts and the fact that the riparian countries are members of the EU, this basin dialogue has only led to increased awareness among stakeholders of the need for enhanced transboundary cooperation.
- **Dinaric Karst Transboundary Aquifer System:** A project for the management of the Dinaric Karst Transboundary Aquifer System that led to the development of Transboundary Diagnostic Analysis (TDA) and endorsement of a Strategic Action Programme (SAP) to address transboundary issues. A subsequent GEF-supported project to implement the SAP will start in 2023.
- **Sava River Basin:** The development of the ISRBC Public Participation Plan led to enhanced stakeholder engagement while the capacities of the Secretariat of the International Sava River Basin Commission were enhanced.
- **Drina Basin:** A nexus dialogue for the management of the Drina Basin deepened the discussion regarding renewable energy – and the role of hydropower in particular – and flow regulation in the basin and led to the development of a Drina Nexus Roadmap/Strategy, which describes next steps towards enhanced cooperation.

More information on the initiation and evolution of the spin-off processes and initiatives is provided in the following section.

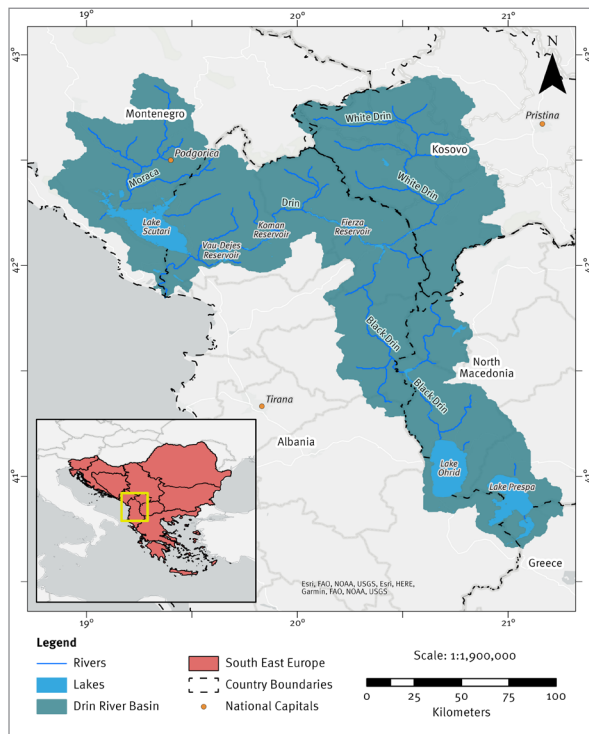
### 3.1. Drin Basin

The Drin Basin is located in the southwestern part of the Balkan Peninsula. It comprises the transboundary sub-basins of the Drin and Buna/Bojana Rivers and of the Prespa, Ohrid, and Skadar/Shkoder Lakes (**Figure 4**). The water bodies and their watersheds cover a geographical area that includes Albania, Greece, Kosovo, Montenegro, and North Macedonia. The Drin River is the connecting body of the ‘extended’ Drin Basin, linking the lakes, wetlands, rivers, and other aquatic habitats into a single, yet complex, ecosystem of major importance.

The overall concept for enhanced cooperation among the riparians for the management of the basin was initially discussed by representatives of the competent ministries and other key stakeholders during the International Roundtable ‘Integrated Shared Lake Basin Management in South East Europe’ held 12–14 October 2006 in Ohrid, former Yugoslav Republic of Macedonia. In response to the related expression of interest by stakeholders, another ‘Consultation Meeting on Integrated Management of the Extended Drin River Basin’ was further organised in Tirana on 24 November 2008 by the Albanian Ministry of Environment, Forestry and Water Administration, UNECE, and GWP-Med, with the financial support of the Swedish Environmental Protection Agency and the German Ministry for the Environment (GEF IW:LEARN and Global Environment Facility, 2018).

**Figure 4. Drin River Basin.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016).

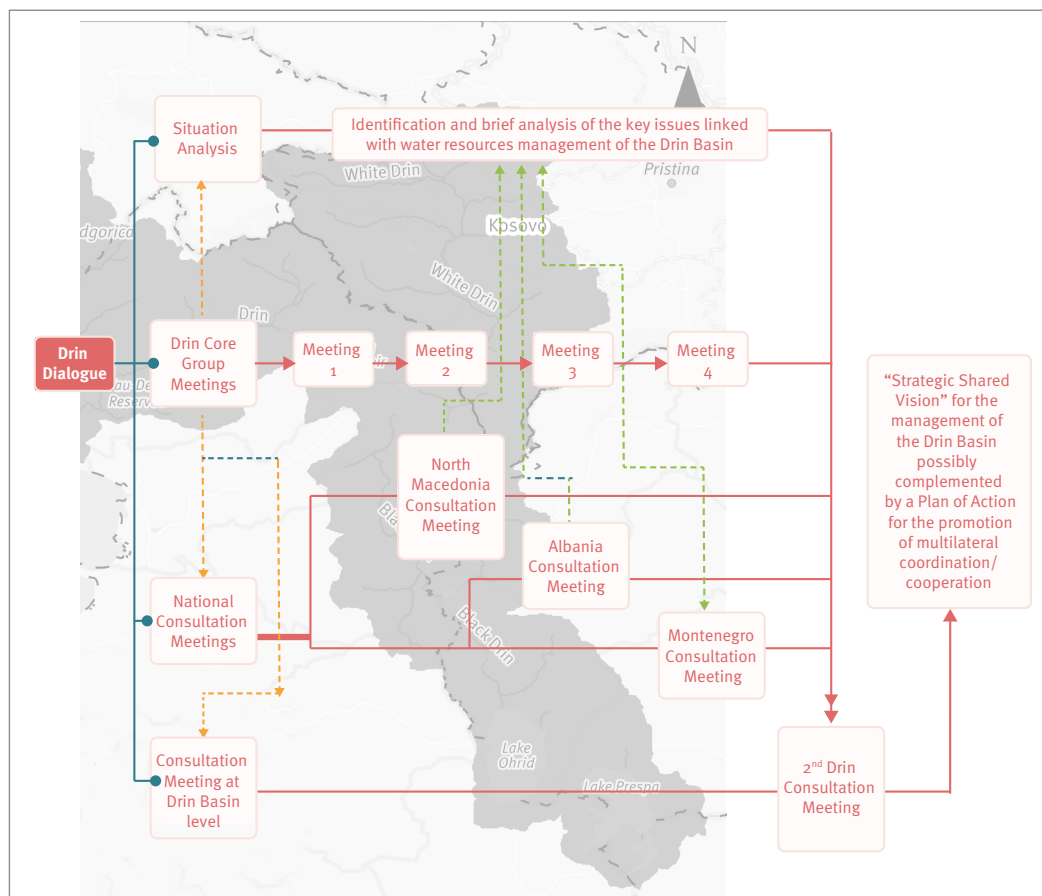


The meeting mandated the Partners in the Petersberg Phase II / Athens Declaration Process and UNECE to facilitate the establishment of a Shared Vision for the coordinated management of the Basin ("Shared Vision"). The multi-stakeholder process for the establishment of the Shared Vision, the Drin dialogue, ran from 1 May 2010 until 30 November 2011 with the financial support of the Swedish Environmental Protection Agency.

The Drin dialogue process culminated in the signing of an MoU (in Tirana on 25 November 2011) for the management of the Drin Basin by the ministers of water and environment of the Drin riparians (GEF IW:LEARN and Global Environment Facility, 2018). The Shared Vision became the objective of the Drin MoU. Following the provisions of the MoU, an institutional structure was established (Figure 5). It includes: the Meeting of the Parties, the Drin Core Group (DCG) (this joint body is mandated to coordinate actions for the implementation of the MoU), and four Expert Working Groups to assist the DCG in its work. The Drin Coordinated Action (Drin CORDA) process was established by the Drin riparians for the implementation of the Drin MoU.

**Figure 5. Drin dialogue workflow diagram.**

Source: TWRM-Med (undated).



A GEF-supported Drin Basin project designed to support this process was implemented in 2015–2021. The GEF Drin Project resulted in: (i) consensus among countries on key transboundary concerns and drivers of change reached through joint fact finding – a TDA was approved by the riparian States; (ii) an agreement on a programme of priority actions to address the transboundary concerns and achieve the Shared Vision – the Drin SAP was endorsed by ministers and high-level officials; (iii) strengthened technical capacities.

Institutional capacity was strengthened at the national and transboundary levels. The Drin Core Group and its Expert Working Groups became fully operational and act as a de facto joint commission. In addition to work carried out at the Drin Basin level, the project enabled the Lake Ohrid Watershed Committee to recommence operations (GEF IW:LEARN and Global Environment Facility, 2018). The Lake Ohrid Management Plan – only the second transboundary management plan in the Western Balkans – was developed.

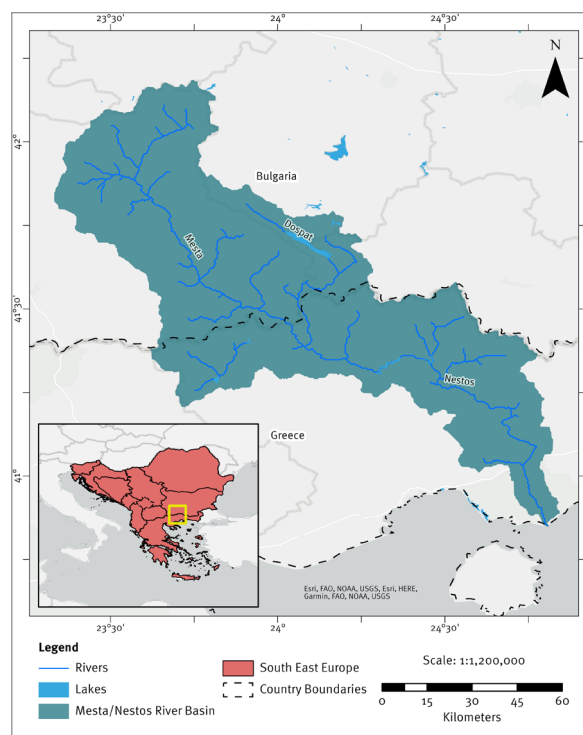
The MoU based transboundary cooperation supported by the Drin Project delivered catalytic results that constitute the basis for sustained transboundary management of the basin. Two major outcomes are noteworthy: the development of a draft text of an international agreement for the management of the Drin Basin to be negotiated by the countries, and the development of a terms of reference (ToR) for a Drin River Basin management plan. Further, the project resulted in the development of two spin-off projects with total financing of over USD 10 million, designed to contribute to the implementation of the Drin MoU and the Drin SAP.<sup>8</sup>

### 3.2. Mesta/Nestos River Basin

Shared by Bulgaria and Greece, the Mesta/Nestos River flows over 230 km and drains an area of 5,184 km<sup>2</sup> (Kamidis and Sylaios, 2017) (Figure 6). Both riparians are members of the EU and implement its Water Framework Directive. They concluded a special bilateral agreement on the Mesta/Nestos River in 1995, which covered in particular the water allocation regimes between these two countries (Oregon State University, 2019).

**Figure 6. Catchment basin of the transboundary Mesta/Nestos River.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016).



Under the mandate of the Petersberg Phase II/Athens Declaration Process and as part of the SEE regional dialogue, GWP-Med initiated a basin-level MSD in 2008 supported by the Swiss Agency for Development and Cooperation with a view to catalysing implementation of the Mesta/Nestos agreement. By that year, the countries had either developed (Bulgaria) or were taking actions to develop (Greece) river basin management plans. However, these processes were not coordinated, despite relevant guidance from the EU WFD.

The Mesta/Nestos River dialogue aimed at: (i) sharing international experience and best practices from within and outside the SEE on stakeholder/public participation in shared water resources management; (ii) discussing the management of the basin; (iii) enhancing the engagement of stakeholders in accordance with the provisions of the EU WFD; (iv) assisting in identifying next steps for enhancing cooperation between the two countries for basin management in the context of the EU WFD.

8. The projects are: 'Promoting the Sustainable Management of Natural Resources in South East Europe, through the use of the nexus approach', focusing on the Drin Basin and supported by the Austrian Development Agency; and 'Integrated climate-resilient transboundary flood risk management in the Drin River Basin in the Western Balkans', supported by the Adaptation Fund.



Several activities and events took place under this basin-level dialogue process. For instance, a study was developed to map the transboundary problems and their likely causes to feed into the dialogue. Two preparatory consultation meetings with the major stakeholders of the respective part of the basin were also organised – one in Gotze Delchev, Bulgaria (28 February 2008) and another in Kavala, Greece (20 March 2008) – to explore interests, extract experiences, and create input for the dialogue. This was followed by an International Roundtable on ‘Stakeholder/Public Participation for the Integrated Management of Shared Water Resources – The Case of Mesta/Nestos River Basin’ which took place in Sofia, Bulgaria, 15–16 April 2008 (GEF IW:LEARN, 2008).

This dialogue process represented a unique platform that brought together representatives from competent institutions from both countries, including the Ministries of Foreign Affairs in addition to other key stakeholders. Although the majority of the stakeholders agreed on the need for follow-up steps and action, this was not supported by the political leadership of the Bulgarian ministry responsible for water resources management. Despite making significant progress in terms of building the relationship, the Mesta/Nestos River dialogue did not advance.

### 3.3. Dinaric Karst Transboundary Aquifer System

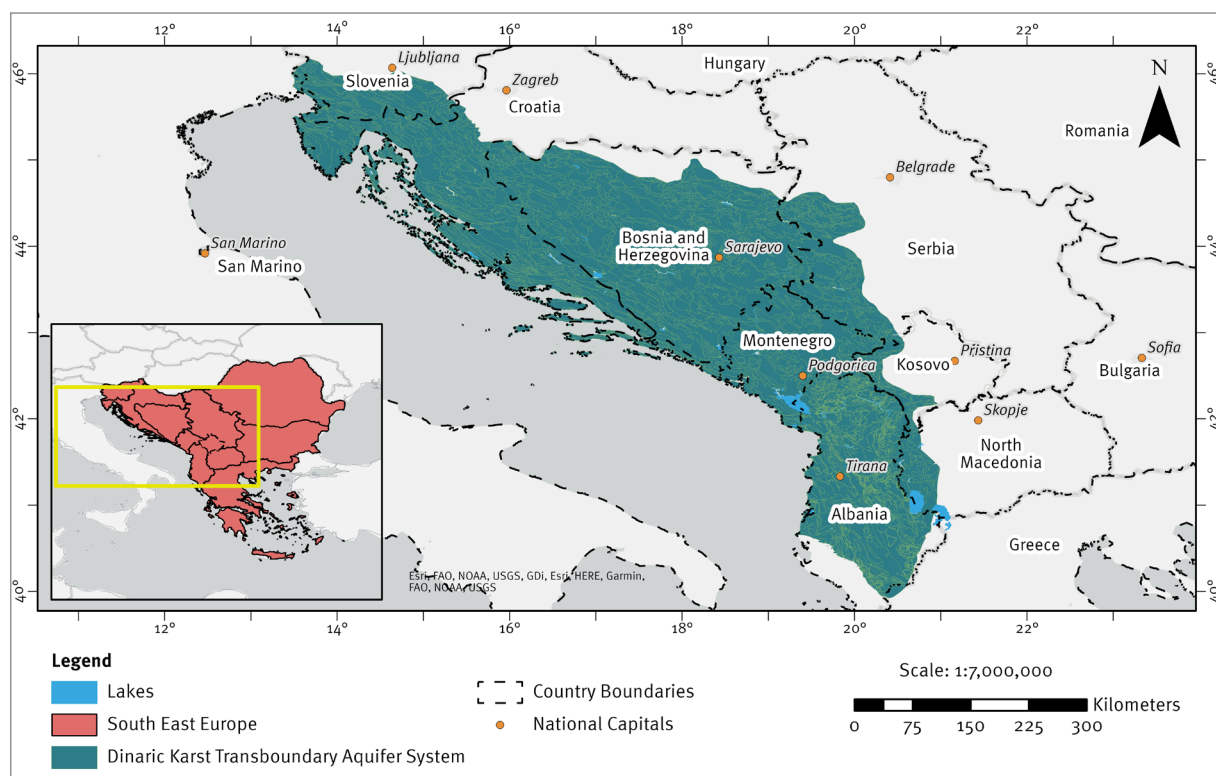
The Dinaric Karst Transboundary Aquifer System (DIKTAS) – the karst region corresponding to the Dinaric mountain range,

which runs from Friuli (North East Italy) through Slovenia, Croatia, Bosnia and Herzegovina, and Montenegro to Albania – is one of the world’s largest karst geological provinces and aquifer systems (**Figure 7**). The dominant flow of the groundwater resources contained in the DIKTAS is towards the Adriatic and Ionian Seas through rivers and submarine water flow, while the Eastern extension of the karst chain drains to the Sava River Basin (GEF IW:LEARN DIKTAS, 2013).

The SEE regional MSD process was instrumental in creating consensus among the karst riparian countries on the need to collaborate in managing this transboundary aquifer. The International Roundtable ‘Integrated Management of Shared Groundwater in South-Eastern Europe’ which took place in Brdo pri Kranju, Slovenia, 12–14 November 2007 was a critical turning point in this regard. It was jointly organised by the Slovenian Ministry of the Environment and Spatial Planning and GWP-Med, and supported by GEF IW:LEARN (TWRM-Med, 2007). The roundtable discussed the most significant issues relating to groundwater resources management; raised awareness regarding the socio-economic and environmental values of shared aquifers and the need for surface-groundwater conjunctive management; facilitated the exchange of information on good practices and success stories; and identified key steps to advancing a strategy and action programme for the management of shared groundwater in the SEE region.

**Figure 7. The Dinaric Karst Transboundary Aquifer System.**

Sources: Esri (2022); International Groundwater Resources Assessment Centre (2020); Lehner and Grill (2013); Messenger et al. (2016).



Another key positive outcome of MSD processes related to the Dinaric Karst Aquifer is the establishment of the peer network on shared groundwater management, which ultimately led to the DIKTAS Strategic Action Programme. This result was based on, and sustained the work that, the United Nations Educational, Scientific and Cultural Organization Intergovernmental Hydrological Programme (UNESCO IHP) had already initiated in this field, and enabled the development of the GEF-supported DIKTAS project, implemented by the United Nations Development Programme (UNDP) and executed by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2010–2014.

GWP-Med was responsible for stakeholder engagement and communication activities. The project created the conditions to establish cooperation towards equitable and sustainable utilisation and management of the transboundary water resources of the DIKTAS, and protection of the groundwater-dependent ecosystems from natural and human-made

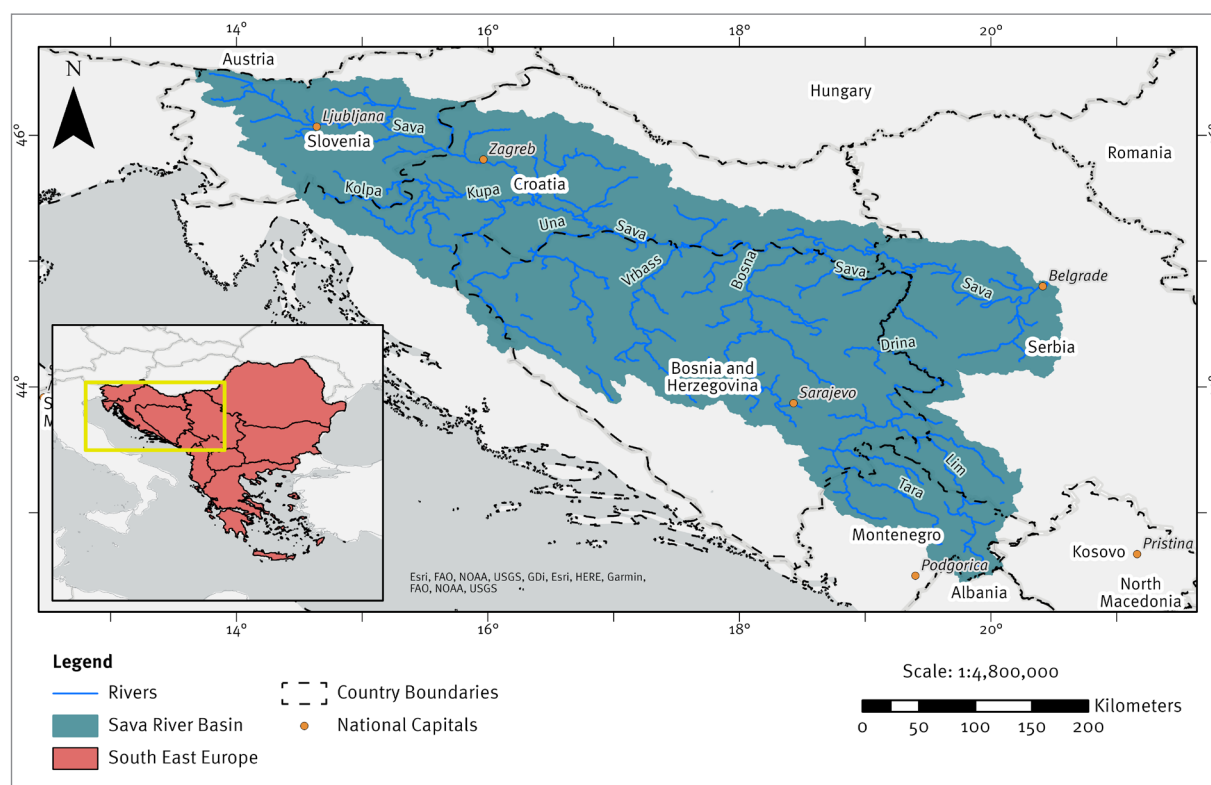
hazards. Further, the scientific understanding of the karst aquifer system was improved, political consensus around key reforms and new policies was built, and coordination among countries was enhanced. In fact, these continuous efforts led to the endorsement of the Strategic Action Programme to address the identified transboundary problems. GEF continued its support by financing the implementation of the DIKTAS SAP through a newly approved project from 2023 onwards ([Global Environment Facility](#), undated).

### 3.4. Sava River Basin

The most water-abundant Danube tributary, the Sava River is widely known for its high environmental and socio-economic values. At 940 km long, it flows through a basin shared by Bosnia and Herzegovina, Croatia, Serbia, Slovenia, and Montenegro (**Figure 8**) that is home to 8.5 million people. It became an international river of high importance following the dissolution of Yugoslavia (Grošelj and Komatina, [2012](#)).

**Figure 8. Sava River Basin.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016).



The Stability Pact for South-Eastern Europe provided a platform for active stakeholder cooperation and paved the way towards the establishment of the Sava River Basin Initiative in 2001. The initiative resulted in the 'Letter of Intent' signed by all riparians launching joint activities in the Sava River and its tributaries. Following on from that, the FASRB was signed in 2002 by all riparian States (apart from Montenegro) and was ratified in 2004.

The FASRB was the first international agreement among four countries that had formed part of Yugoslavia after its dissolution. The agreement integrates all aspects of water resources management and established the joint ISRBC for the implementation of the FASRB, facilitating the legal status of an international organisation.<sup>9</sup> Work under the FASRB is coordinated by the ISRBC with the assistance of its Secretariat. The FASRB provides the ISRBC with the capacity to make decisions on issues related to navigation and provide recommendations to the parties of the agreement on all other water-management-related issues.

Conveners of the regional MSD in SEE provided continuous support from the early development of the FASRB through to its implementation. A dedicated international roundtable took place in Zagreb, Croatia, 15–17 November 2006, focusing on the 'Principles for Multipurpose Water Management in the Sava River Basin'. The roundtable agreed upon five recommendations for the management of the basin. The representatives of the FASRB parties indicated the positive contribution of the MSD processes, clearly stating that they "would like to continue the political dialogue initiated at the International Roundtable as well as the scientific exchange on competing uses and the coordination with other donors and institutions in the region. The ultimate goal is not only to enhance and deepen cooperation (especially with the two Danube Commissions), but also to complete the analysis of the International Sava River Basin with a focus on transboundary multipurpose uses, a realistic assessment of ecosystems and ecosystem services (also with a view to their socioeconomic value) and the integration of sustainable water management into sectoral planning processes" (TWRM-Med, 2018).

Furthermore, once established the ISRBC Secretariat became very involved in the regional dialogue process itself, especially those events and meetings whose technical focus was of interest for its work. For instance, following a request by the ISRBC Secretariat, GWP-Med provided additional assistance in the field of stakeholder engagement by developing a Sava Stakeholder Analysis and a Public Participation Plan, both of which were adopted by the ISRBC. It is the only public participation plan for a transboundary basin with

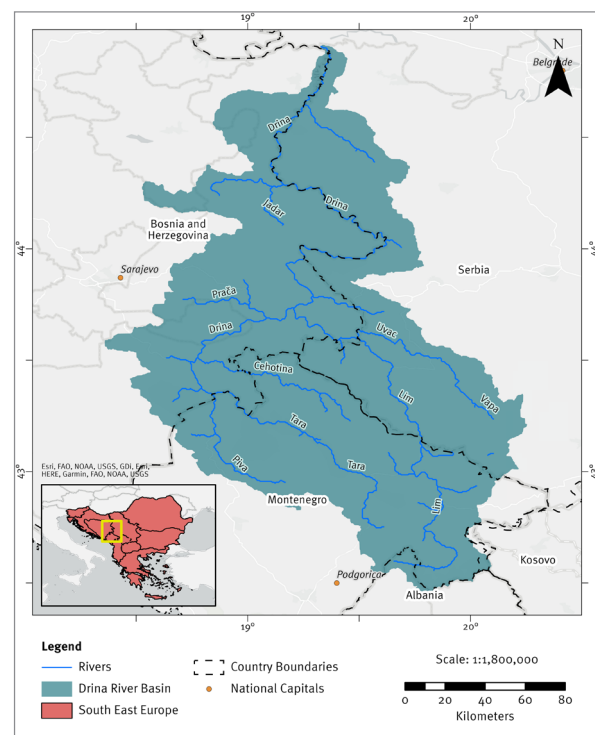
official cooperation established in the Western Balkans. By establishing the legal framework of the basin-wide cooperation with the FASRB, and through the successful work of the ISRBC and its Secretariat, the riparian States are working jointly for the sustainable management of the Sava River Basin. The mechanism now fully conforms with EU standards (directives such as the EU WFD, the Flood Directive, and strategies such as the EU Strategy for the Danube Region and the EU 2020 Strategy).

### 3.5. Drina Basin

The Drina River Basin (20,320 km<sup>2</sup>), a sub-basin of the Sava River Basin, stretches over 346 km, of which 220 km form the border between Bosnia and Herzegovina and Serbia (Figure 9). The basin surface area is almost evenly distributed among three of the four riparian countries (Bosnia and Herzegovina, Montenegro, and Serbia), and a very small part (less than 1 percent of the river basin) is in the North of Albania. The Drina River Basin is of high importance for the riparian countries in terms of water, energy, and land resources as well as ecosystems, taking into account the resource bases of these countries at the national level (United Nations Economic Commission for Europe, 2017).

**Figure 9. Drina River Basin.**

Source: Esri (2022), Lehner and Grill (2013); Messenger et al. (2016).



9. Framework Agreement on the Sava River Basin available at [www.savacommission.org/dms/docs/dokumenti/documents\\_publications/basic\\_documents/fasrb.pdf](http://www.savacommission.org/dms/docs/dokumenti/documents_publications/basic_documents/fasrb.pdf)



A nexus dialogue in the Drina Basin was implemented from 2014, shortly after the nexus approach had been included as an anchor theme of the regional dialogue process and the nexus-related regional roundtable had been held in Sarajevo in 2013. The aim has been to foster transboundary water resources management by identifying intersectoral issues and possible solutions and synergies, and determining measures that could alleviate tensions related to the multiple needs of the riparian countries in terms of shared resources.

Two nexus assessments were implemented in conjunction with regional MSD processes (Phase I in 2016–2017 and Phase II in 2019–2022). These assessments were financially supported by the Italian Government and the Austrian Development Agency respectively. Work was coordinated by UNECE until 2019, after which GWP-Med joined forces. Each phase of the nexus assessment process involved three national-level intersectoral workshops, followed by

consultations of the various sectoral authorities at the national and transboundary levels. To provide overall guidance and ensure ownership and alignment of activities with national and transboundary priorities and strategies, an ad-hoc steering committee has been established involving senior officials from ministries and agencies of the riparian countries responsible for water resources management, energy policy, and environmental protection.

The dialogue and nexus assessments resulted in: (i) analysing two crucial issues for development and transboundary cooperation in the basin i.e. hydropower, and flow regulation; and (ii) the development of a Drina Nexus Roadmap/Strategy that includes action towards strengthened cooperation that is aligned with the FASRB and the Sava River Basin management efforts. An outline of a climate change adaptation strategy that was developed is expected to contribute to the continuation of the dialogue process.





## 4. Enabling factors

Looking back at the regional MSD in SEE, we will now reflect on and discuss some of the key factors that influenced the process and contributed to all the positive outcomes and spin-offs hitherto mentioned.

### 4.1. Inclusion and role of facilitators

One of the factors of success for the dialogue was the continuous participation of the concerned ministries, the political leadership and/or high-level staff, and key regional and international stakeholders. This was made possible because of the convening power of the World Bank, the (then) German Ministry for Environment, Nature Conservation and Nuclear Safety, and the Greek Ministry of Foreign Affairs. As EU members, Germany and Greece were key founders of the dialogue process, especially as they were important sources of direct investments, each one in different parts of the SEE region. The UNECE Water Convention, followed by the RCC and the Austrian Development Agency, joined forces and added their weight to that of the other conveners during the

first phase, while they became the key conveners during the second phase.

In addition to these conveners, GWP-Med has been a committed political, technical, and administrative facilitator ensuring coordination among the convening actors. Critically in terms of sustaining the dialogue and enabling basin-level results, it has been seen as a trusted partner and an enabling actor by stakeholders. The deep understanding of diplomatic rules and political sensitivity in the region that GWP-Med provided was a cornerstone for the progress achieved. GWP-Med has successfully involved and developed cooperation with international organisations (including United Nations organisations) and other development partners; enabled the participation of the needed concerned actors to feed into and benefit from the process; ensured that all riparians are informed; ensured that everybody's voice is heard and that all concerns are taken care of, and; ensured that the organisation of the events in terms of agenda, content, and logistical arrangements respect and align with the needs of each event, with the aim of achieving the aforementioned neutral political environment.<sup>10</sup>

10. At times, it was necessary to negotiate how the name of a given (not officially recognised) country would be written in the agenda or how the themes to be discussed would be formulated so as to avoid any official party considering that the phrasing used was not in line with the national policy and interests. In all cases, either the United Nations or commonly accepted rules were applied.



## 4.2. Using existing regional political and economic processes

The focus of the regional roundtables and the accompanying events aligned with the EU integration process, the UNECE Water Convention, and the SEE 2020 Strategy. These three processes helped structure the dialogue discussions, including the solutions discussed to address common issues of concern in terms of water resources management at the national and transboundary levels.

The EU integration process represented an important opportunity and challenge in terms of reforming national institutions, policies, and laws. Aligning policy development with EU directives has been a driving force for introducing principles of IWRM. The EU WFD provides for the coordination of basin management plans in transboundary basins. The transposition of the EU acquis into national legislation created a de facto homogenous water-management-related legal framework (the level of transposition and implementation still differs) and further assisted in establishing a common language for water management among experts.

The UNECE Water Convention and the RCC were two other ongoing regional processes that also benefited the MSD process. The UNECE Water Convention has resulted in the acceptance of common principles for transboundary water resources management, leading to a de facto framing of the discussions and interactions for TWRM using these principles. The UNECE Water Convention secretariat was actively involved in organising events during the second phase of the regional dialogue. The RCC was the body that coordinated the development and implementation of the SEE 2020 Strategy. Together with the EU integration, these two additional processes provided the MSD process with enabling frameworks and legitimacy.

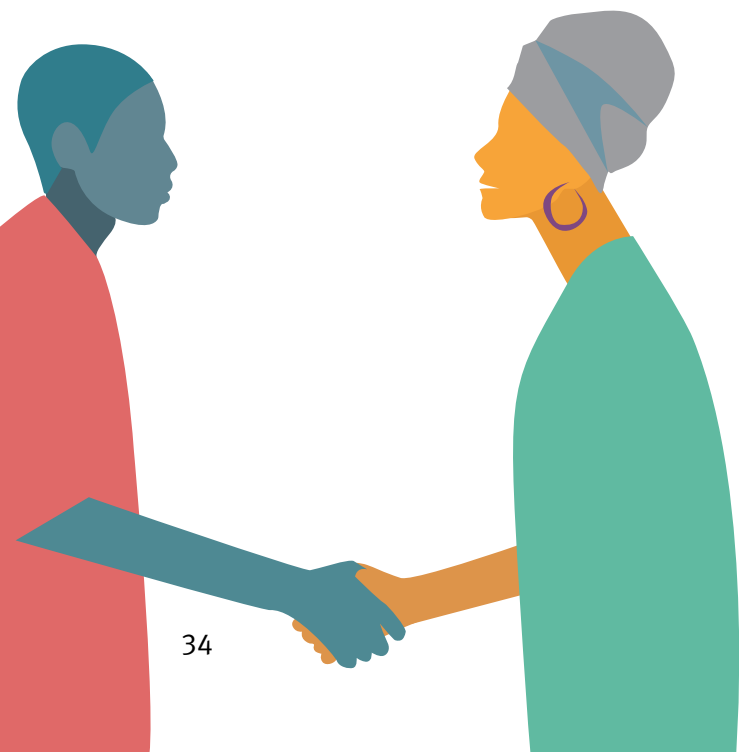
Thus, the regional dialogue functioned within, and served, existing political and economic/developmental frameworks. It also contributed to the implementation of the policy directions and legal frameworks arising from these; this was a stated aim that was accepted by all participants of all events.

## 4.3. Fostering social learning across scales

The SEE dialogue embraced social learning and aimed to have a long-term perspective on capacity building, which was a key factor in enabling its positive contributions to transboundary cooperation. A key related element is the development of a CoP which emerged and was sustained through MSD activities. The regional and basin MSDs mobilised a critical mass of stakeholders, engaging them in a dialogue supported through different means (face-to-face and web-based activities and knowledge products). This resulted in building the capacities of the participants and, indirectly, the capacities of the organisations and institutions they represented, which has had a broader positive effect in terms of enhancing transboundary water management. Many members of the CoP have been actively involved in initiating and implementing successful basin-level transboundary projects and processes.

The fact that the dialogue focused on common issues of concern and being solutions-oriented was also a key contributing factor in its success. Each of the roundtables addressed different issues, covering to a large extent the hydrological, social, and political circumstances at the national and basin scales, and touching upon management issues. Participating in the dialogue events, decision-makers realised that these management issues are present not only in other basins in SEE but also elsewhere in Europe. They also realised that there are types of solutions that can be implemented and may lead to tailored/unique solutions for each basin at the national and transboundary levels. Furthermore, these solutions to common issues could present an entry point for cooperation if agreed upon by the riparian States.

The MSD also successfully managed to create a high level of engagement before, during, and after the events. Each regional roundtable and capacity building event was very carefully planned in terms of structuring the agenda, speakers, participant seating, facilitators, presentations and so on, while a carefully blended mix of stakeholders was invited each time in the hope of creating the necessary enabling environment for learning, and identifying ways to enhance cooperation and benefits.



A series of preparatory meetings among presenters, facilitators, and organisers were also held in advance to enable coordination to increase ownership by jointly structuring the narrative across which each event would revolve, and to ensure all political sensitivities would be respected. The CoP engaged in regular information exchange, meetings, interactions, and phone calls between riparians and with the support of convening partners. This personal-level interaction was invaluable in terms of cross-fertilisation. In addition to peer learning, it created trust that made possible the initiation of activities that led to the spin-off results.

#### **4.4. Leveraging sustainable finance**

The SEE MSD process was effective at mobilising a range of funding sources beyond initial sources, which enabled its sustained engagement towards producing basin-level outcomes. The initial financing from GEF was made possible as the aims and objectives of the IW:LEARN project and the Petersberg Phase II/Athens Declaration Process (which provided the framework for action during the first phase of the dialogue) were aligned. The World Bank, being a key actor in both, facilitated synergies between the two, which translated into financial support for the regional dialogue events.


Further to the GEF financing, additional support was then leveraged in the form of in-kind contributions from the countries that hosted the events. As an indication, co-financing during the first phase (2005–2009) of the dialogue process reached to 1/9 i.e. USD 9 was leveraged for each USD 1 invested by GEF. This has led to a considerable expansion of the activities from those initially foreseen. This was the result of GWP-Med liaising with the SEE countries to promote the dialogue as a vehicle to address issues of priority for them in terms of TWRM management. Indeed, this led to interest and involvement by the responsible ministries in these countries that wanted to put forward their areas of interest as items of focus for the dialogue events.

One related factor that explains why the MSD process managed to sustain its finances was that convenors were responsive to the changing needs of development partners and financiers. As a first step, finance partners were invited to be part of the MSD processes, making them stakeholders rather than bystanders. This helped with the identification of needs and the development of long-term relations with donors. It is in fact essential for MSD convenors and facilitators to understand what drives each individual donor and to initiate a dialogue based on common interests (GEF IW:LEARN and Global Environment Facility, [2018](#)). This continuous engagement and relationship building with donors happened at both the regional and basin levels.

Finance partners were also invited to basin-specific MSDs, which offered platforms to discuss funding requirements for addressing issues and upcoming donor opportunities, thus creating opportunities for matchmaking. The financing of the numerous spin-offs reflects the creation of these synergies between the SEE countries and partners such as the Swedish Environment Agency, UNDP, the Austrian Development Agency, and GEF, that financed basin dialogue processes and projects.

# Chapter 3:

## **Regional dialogue in South Asia**



In the context where countries have historically dealt with transboundary water issues on bilateral levels, multi-stakeholder dialogues catalysed multilateral basin level conversations.



## Chapter 3: Regional dialogue in South Asia

### 1. Background on the regional context

#### 1.1. Geography and socio-economy

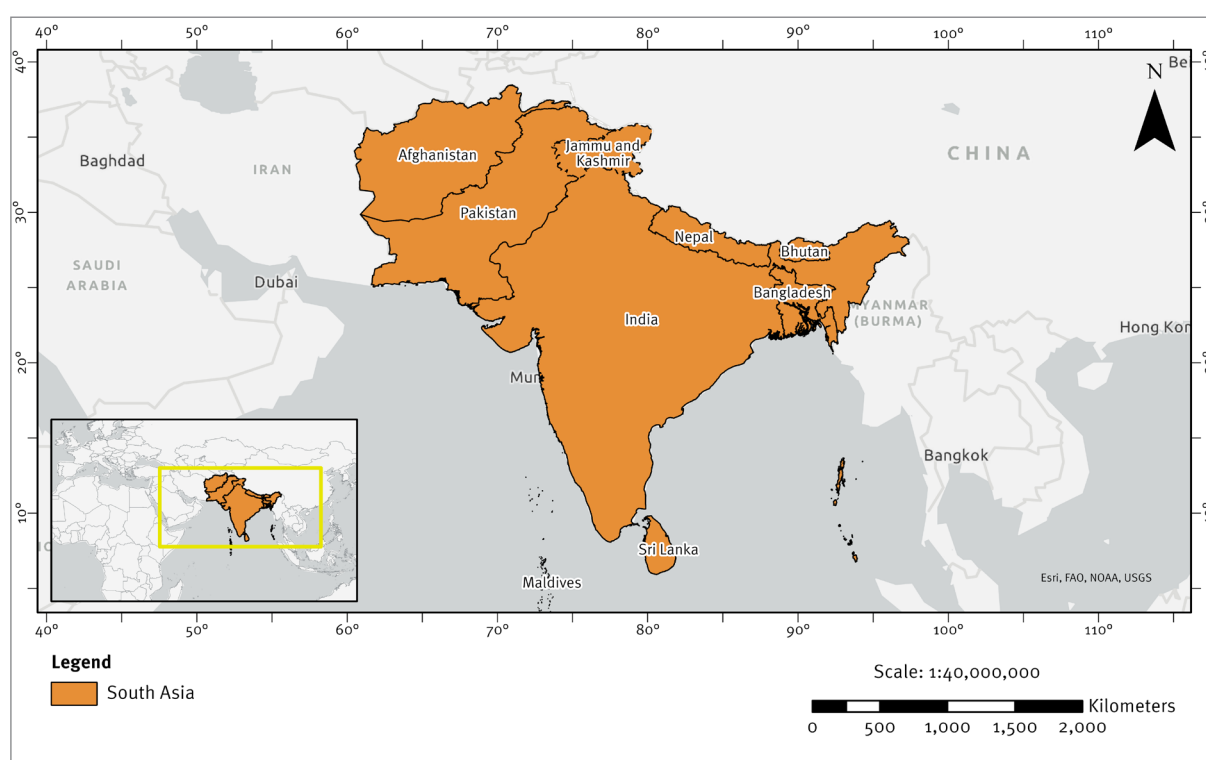
South Asia comprises Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka (**Figure 10**). The South Asia region has the world's largest concentration of poor people, with over 500 million people living on less than USD 1.25 a day (Bishwajit et al., [2013](#)). Home to 25 percent of the world's population, the region also has the highest population density ([Worldometer](#), 2022). This combination of high population density and high incidences of poverty in a predominantly agrarian society undergoing rapid urbanisation puts additional stress on the fragile natural resources (land, water, biomass, and air) and ecosystems (mountains, riverine, terrestrial, wetlands, deltaic, and mangroves) in the face of climate change and increasing climatic and hydrologic variabilities (World Bank Group, [2013](#)).

#### 1.2. Political framework and regional cooperation processes

South Asian countries are connected historically, socially, and culturally, the ways of living are similar, and the languages spoken by the majority of people in Bangladesh, India, Nepal, and Pakistan have Sanskrit or Persian origins (Romshoo, [2012](#); [Pulla et al., 2018](#)). Bangladesh, India, and Pakistan were part of one nation under British colonial rule until 1947, when Pakistan came into existence after the partition of unified India. Bangladesh gained independent nationhood much later, only in 1972 (Romshoo, [2012](#)). In fact, most countries and their independent nationhood have recent history as they were either divided into numerous princely States or independent tribal rules brought under British colonial between the seventeenth and nineteenth centuries. Another aspect to note is that as these countries are connected to the same landmass, they share similar climate and natural resources (only Sri Lanka and Maldives are island States). Despite these connections, the region is characterised by a low level of cooperation among the countries and their agencies, people, and business communities ([Price et al., 2014](#)).

**Figure 10. Countries in South Asia.**

**Sources:** Esri (2022); Lehner and Grill (2013); Messenger et al. (2016); United Nations Office for the Coordination of Humanitarian Affairs (2020).



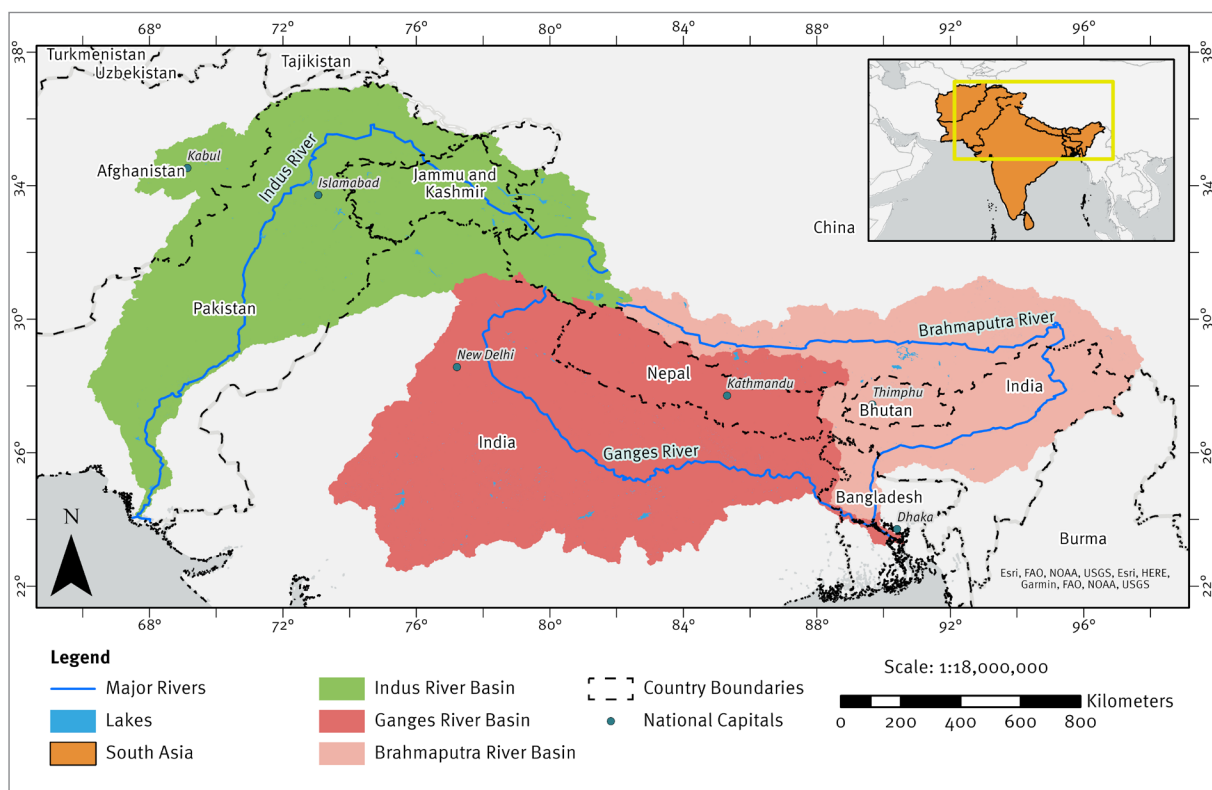
Several regional initiatives that are aiming to strengthen regional cooperation are worth mentioning. Most notable is the South Asian Association for Regional Cooperation (SAARC), which is a regional platform for socio-economic cooperation among eight countries in South Asia: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. They cooperate on various areas of social and economic development in the region, including agriculture and rural development, economics, trade and finance, social affairs, environment, natural disasters, and biotechnology. There is also the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), a regional organisation established in 1997, which currently comprises seven member states (Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand). This initiative has several areas of cooperation, such as agricultural production, energy, and water and climate. Finally, there is the sub-regional Bangladesh, Bhutan, India, and Nepal (BBIN) Initiative, whose members have shown emerging political willingness to move forward and improve cooperation in environmental resources management and other sectors, particularly transport, including motor vehicles (Haran, 2018).

### 1.3 Transboundary water resources: use and challenge

The Indus, Ganga, and Brahmaputra are the three main rivers of South Asia (Figure 11) and a huge irrigation network has been built on them. These three rivers cross seven riparian countries in the region (Afghanistan, Bangladesh, Bhutan, China, India, Nepal, and Pakistan) and around 700 million people's livelihoods depend on their river basins (Nepal and Shrestha, 2015). Groundwater is an important source of water supply for agriculture, drinking water, and other usage in these basins. In all countries of the region, subsurface water is pumped through shallow wells or deep tube wells/ turbines (Hanif, 2002). Most of the rivers and creeks have good-quality water in their upper reaches, but as water flows downstream, industrial and urban effluents load this water with heavy metals, injurious chemicals, and biological pollutants. The quality of groundwater is also deteriorating rapidly in most South Asian countries due to heavy use of pesticides and fertiliser (Hirji et al., 2017).

**Figure 11. Map of the Indus, Ganga and Brahmaputra.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016); United Nations Office for the Coordination of Humanitarian Affairs (2020).



There are large fluctuations in the river flows during the year. The South Asia region has two distinct rainfall systems; rainfall generally peaks in monsoon season and during snowmelts (July to September) and the flows largely recede in the dry season, particularly in winter. In summer, the southwestern system brings rainfall to this region. In winter, Bangladesh and adjoining areas of India receive rainfall from the northeastern monsoon system. Pakistan and other parts of the region experience rainfall from the western weather system. La Niña (dry spell) and El Niño (wet spell) are two distinct phenomena that have an extraordinary effect on water availability. This region also features large year-to-year variations in the rainfall that frequently causes severe floods/droughts over large areas. Global warming is particularly affecting the Himalayas region as glacier melting has implications on the availability of water and the potential for water-related disasters ([Raza, 2019](#)).

Several attempts at enhancing transboundary water cooperation have been made in South Asia, such as introducing many agreements, particularly at the bilateral

level. The very first collaborative action on transboundary water in South Asia dates back to 1960, when one of the earliest agreements on shared waters – the Indus Waters Treaty – was signed. As the only such agreement in developing countries at that time, it served as an example for many other bilateral agreements elsewhere ([Raza, 2019](#)).

In 1972, India and Bangladesh signed a statute to develop the Indo-Bangladesh Joint Rivers Commission, which serves as a key body for bilateral collaboration of all shared rivers. Another key agreement is the 1996 treaty between Bangladesh and India on the Ganges. This treaty expires in 2026, as the agreement was signed based on 30-year data. Moreover, in 2011 the two countries agreed to work jointly on water-basin management and created a technical committee to help ensure equitable use of water. Both countries are also planning joint studies, which were postponed because of the COVID-19 pandemic ([Rahman, 2022](#)). Most agreements are at the bilateral level and focus on water use at a particular point of a river or its tributaries, thereby lacking a whole-of-basin approach. An overview of key transboundary water treaties on the water bodies concerned is presented in Table 3.

**Table 3. Transboundary water cooperation agreements on Indus, Brahmaputra, Ganges, and Sundarbans.<sup>11</sup>**

Water body	Countries	Applicable agreement	Date of conclusion
Indus	India, Pakistan	Indus Waters Treaty 1960 between the Government of India, the Government of Pakistan, and the International Bank for Reconstruction and Development	19 September 1960
Bilateral agreement (applicable to all basins shared between the countries)	Bangladesh, India	Statute of the Indo-Bangladesh Joint Rivers Commission	24 November 1972
Ganges	Bangladesh, India	Treaty between the Government of the Republic of India and the Government of the People's Republic of Bangladesh on Sharing of the Ganga/Ganges Waters at Farakka	12 December 1996 (revision of agreement of 5 November 1977 and 7 October 1982)
		Provisional Conclusion of the Treaty of 18 April 1975 on the Division of the Waters of the Ganges	18 April 1975

11. Source: Oregon State University – Transboundary Freshwater Dispute Database (Retrieved July 2022); Yasuda et al. (2017).

Water body	Countries	Applicable agreement	Date of conclusion
Mahakali (tributary of the Ganges)	India, Nepal	Treaty between His Majesty's Government of Nepal and the Government of India concerning the Integrated Development of the Mahakali River including Sarada Barrage, Tanakpur Barrage, and Pancheshwar Project	12 February 1996
Kosi (tributary of the Ganges)	India, Nepal	Agreement between the Government of India and the Government of Nepal on the Kosi Project	25 April 1954 (revised 19 December 1966)
Chandra Canal, Pumped Canal, and Western Kosi Canal	India, Nepal	Agreement between Nepal and India on the Renovation And Extension of Chandra Canal, Pumped Canal, and Distribution of the Western Kosi Canal	7 April 1978
Gandak, Bagmati (tributaries of the Ganges)	India, Nepal	Agreement between His Majesty's Government of Nepal and the Government of India on the Gandak Irrigation and Power Project	4 December 1959
Brahmaputra	India, Bhutan	Agreement Concerning Cooperation in the Field of Hydroelectric Power (India-Bhutan Hydropower Agreement)	2006
	India, Bhutan	Protocol to India-Bhutan Hydropower Agreement	2009
	India, China	Memorandum of Understanding upon Provision of Hydrological Information of the River Brahmaputra /Yaluzangbu	Signed in 2002 and valid for five years, renewed in 2008, 2013, and 2018
	China, Bangladesh	Memorandum of Understanding on Technical Cooperation on Water Conservancy	2007
	China, Bangladesh	Memorandum of Understanding on Hydrological Data Exchange	2015
	India, China	Memorandum of Understanding on Strengthening Cooperation on Trans-Border Rivers	2013
Teesta (tributaries of the Brahmaputra)	Bangladesh, India	Agreement on Ad Hoc Sharing of the Teesta Waters between India and Bangladesh reached during the 25th Meeting of the Indo-Bangladesh Joint Rivers Commission held in July 1983, at Dhaka	20 July 1983
Sundarbans	India, Bangladesh	Memoranda of Understanding (MoUs) on Managing and Sustainably Developing the Sundarbans	6 September 2011
	India, Bangladesh	MoU on passenger and cruise vessels on coastal and protocol routes and the launch of these services between Dhaka and Kolkata	16 November 2015*

\* <http://iwai.nic.in/sites/default/files/The%20MoU%20on%20passenger%20and%20cruise%20services.pdf>, supplemented by standard operating procedure in 2017, <https://shipmin.gov.in/sites/default/files/1516954744aggrement2.pdf>

## 2. Regional multi-stakeholder dialogue processes in South Asia

### 2.1. Multi-stakeholder dialogue phases and key partners

The Abu Dhabi Dialogue (ADD), one of the first formal regional multi-pronged multi-stakeholder dialogue (MSD) initiatives, ran from 2006 until 2012. The ADD stemmed from the First International Conference on Southern Asia Water Cooperation organised in Abu Dhabi in September 2006 by the International Institute of Strategic Studies with support from the United Kingdom's Foreign and Commonwealth Office (World Bank Group, [2013](#)).

The conference participants felt the need to continue the discourse on the rivers originating from the Himalayas and shared by seven countries in the region – Afghanistan, Bangladesh, Bhutan, China, India, Nepal, and Pakistan – to further the agenda of the conference. Shared risks and opportunities brought senior members of the government, thought leaders, researchers, and academics together on a common platform, and they decided to meet annually under the aegis of the ADD to discuss and share their knowledge and wisdom on seeking common solutions to common problems on regional waters. A ten-year ADD vision was: “a cooperative and knowledge-based partnership of States fairly managing and developing the Himalayan river systems to bring economic prosperity, peace and social harmony and environmental sustainability from the source to the sea” (World Bank Group, [2013](#), 15).

ADD proceeded as Track 2 diplomacy – involving political leadership as well as bureaucrats in key decision-making positions, together with researchers and thought leaders from prominent knowledge institutions and think tanks across the region. The discourses at the regional level were also brought to the national arena, through the organisation of national-level ADD dialogues led by members of the Abu Dhabi Dialogue Group (ADD-G) representing the riparian States. Government ministries were involved in organising a country-level meeting in Nepal and Bangladesh in 2008. There was strong presence and participation of government representatives in the civil-society-led country-level meeting in India in 2008, as well as in China in 2010 and in Pakistan in 2011. These meetings helped link the ADD's discourses to the State water policies and governance agenda.

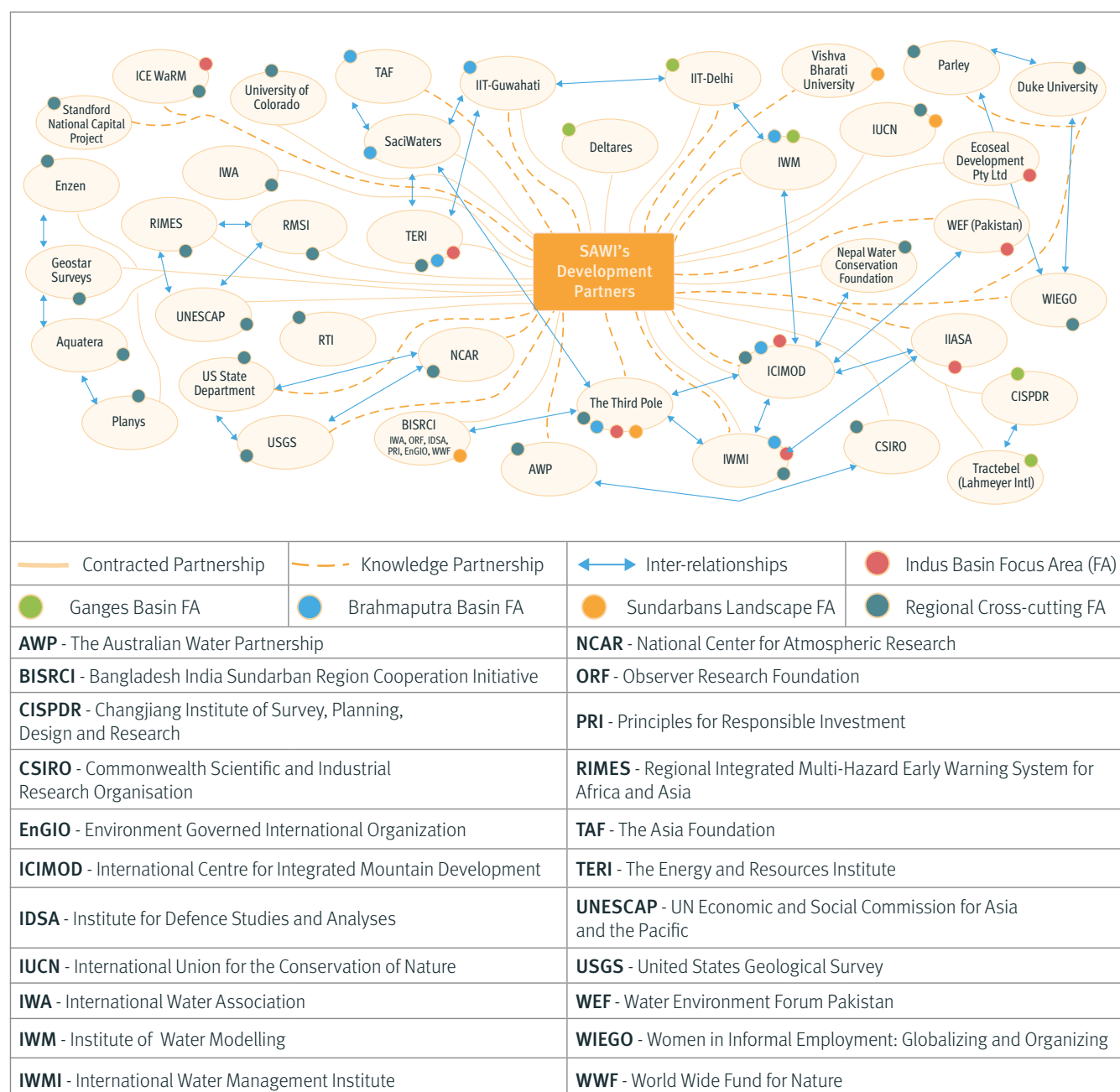
In parallel, the SAWI was conceptualised in 2007 to support the riparian countries in “harnessing the potential of their shared water resources” (World Bank Group, 2013, 1). SAWI was formally established in 2009 as a partnership between the World Bank and the Governments of Australia, Norway, and the United Kingdom. The growing involvement of the World Bank in the region may be explained by its extensive experience in promoting cooperative transboundary water management in several regions across the globe, including the Danube, Mekong, Niger, Nile, and Senegal River Basins (World Bank Group, 2013). The World Bank also found a niche for its operations as there were no established regional institutions on transboundary water governance in South Asia that were using its expertise from regional- and country-level programmes in South Asia (World Bank Group, [2018](#)).

The SAWI programme had two phases. The objective of Phase 1 (2009–2013) was to promote the goals of poverty reduction, economic growth, mitigation of and adaptation to climate change, and water security through significant and measurable improvements in water resources management and development at the regional, international basin, and national levels in South Asia. During this first phase, SAWI was structured around three goals: i) generate new knowledge; ii) facilitate MSDs, such as ADD, and; iii) enable innovative investments and institutional development.

[SAWI Phase 2](#) (2013–2021) marked a significant transition for the ADD's dialogue to start discussions on the four specific basins and landscapes, which were identified as the SAWI programme's future focus areas. The strategic objective of Phase 2 remained focused on the original goal of increasing regional cooperation in the management of the major Himalayan river systems to deliver sustainable, fair, and inclusive development and climate resilience (World Bank Group, [2013](#), [2014](#)).

SAWI itself functioned based on the partnership approach, which had been introduced to ensure that activities were carried out with close engagement with national, regional, and global partners (**Figure 12**). The approach was aimed at increasing the buy-in and uptake of SAWI knowledge to ensure the sustainability of its work beyond the end of the programme (World Bank Group, 2020).

Figure 12. SAWI's development partners. Source: World Bank Group (2022).



## 2.2. Multi-stakeholder dialogue events and activities

The ADD meetings and events were centred around problems that were identified as common to all countries concerned, including the changing South Asian monsoon, accelerated snow melting and glacier retreat, increasing frequency of the flood–drought cycle, sedimentation, and water pollution, all of which are crucial to sustaining production, the economy, and the well-being of the people in the region.

ADD meetings involved political and bureaucratic leadership, researchers, and civil society organisations. The meetings

were facilitated by neutral interlocutors: the International Centre for Integrated Mountain Development (ICIMOD) – a Kathmandu, Nepal-based intergovernmental learning and knowledge centre dedicated to the cause of people and environment in the Hindukush Himalayan region – and the International Water Management Institute (IWMI) – a Colombo, Sri Lanka-based research organisation involved in scalable water management solutions in the region. These actors provided a safe environment to brainstorm on the problems of common interest and produce collective benefits. The key events and roundtables organised under the ADD are provided in Table 4.

**Table 4. Abu Dhabi Dialogue, 2006–2012.<sup>12</sup>**

<b>Title</b>	<b>Time and location</b>	<b>Key highlights</b>
First International Conference on Southern Asia Water Cooperation	September 2006, Abu Dhabi	The conference participants formed the Abu Dhabi Dialogue Group (ADD-G) to lead the ADD in subsequent years.
Second ADD meeting ‘The rivers of the Greater Himalayas – changing conditions in the headwaters and the pressures in the floodplains and deltas’	2007, Bangkok	Consensus was reached on the ADD’s ten-year vision.  The World Bank conceived SAWI in 2007, which extended its support for subsequent ADDs from that year.
Country-level ADDs	2008, Bangladesh, India, and Nepal	Identified key issues for discussion at the third ADD; adopted 11 recommendations from Bangladesh’s perspective.
Third ADD meeting ‘Moving towards a cooperative knowledge partnership’	2008, Singapore	Abu Dhabi Dialogue Knowledge Forum (ADDKF) was conceived in the meeting.
Fourth ADD meeting ‘Practical steps to achieving a knowledge-based partnership of the states’	2009, Abu Dhabi	The Small Grants Programme was initiated as a part of ADDKF.
Fifth ADD meeting ‘Cooperative regional action to enhance information sharing’	2010, Bangkok	Discussions under the Small Grants Programme on cooperative regional action and collaborative research took place.
Sixth ADD meeting ‘Exploring entry points for cooperative action on transboundary water resources in the Greater Himalayas’	2012, Bangkok	This meeting marked a new chapter in the dialogue process, shifting the focus to the four specific basins and landscapes.

At the sixth ADD, participants agreed to continue the dialogue at the basin and landscape levels, which are discussed in detail in the following section of this report. At the regional level, SAWI conducted some knowledge exchange events, as described in Table 5.

12. Source: World Bank Group (2013).



**Table 5. SAWI regional knowledge exchange events 2013–2020.<sup>13</sup>**

Title	Time and location	Key highlights
Water–Energy–Food Nexus Forum	2015, Kathmandu, Nepal	<ul style="list-style-type: none"> <li>• More than 100 diverse stakeholders from government and NGOs, and national and international experts, including those specialising in the nexus approach, participated in the event.</li> <li>• The Fulbright Commission, ICIMOD, and the Nepal Water Conservation Foundation supported the event.</li> </ul>
South Asia Groundwater Forum ‘Regional challenges and opportunities for building drought and climate resilience for farmers, cities and villages’	2016, Jaipur, India	<ul style="list-style-type: none"> <li>• 126 participants (46 decision-makers and 80 technical experts) took part in the forum.</li> <li>• Drought cushioning and climate-resilience building through sustainable groundwater management were planned.</li> </ul>
International River Symposium	2016, New Delhi, India	<ul style="list-style-type: none"> <li>• 450 delegates, including 249 delegates from India (of whom 80 were officials from Indian state and central government water agencies under the umbrella of the Government of India’s sponsorship) took part in the event.</li> <li>• Following the session, SAWI organised a closed policy dialogue on regional water cooperation, which included senior government water official participation from the riparian countries.</li> </ul>
Regional Workshop on ‘Managing water extremes in South Asia’	2018, Bangkok, Thailand	<ul style="list-style-type: none"> <li>• Over 100 participants, ranging from policy-makers to technocrats and academics and representing seven SAWI countries, participated alongside Thailand.</li> <li>• International experts from Australia, Canada, Malaysia, the United States of America (USA), intergovernmental organisations and non-governmental organisations (NGOs) took part in the event.</li> <li>• Closing the science-policy gap was addressed by exploring new tools and methodologies.</li> </ul>

13. Source: World Bank Group ([2017](#), [2019](#), [2020](#)).

### 3. Key results and outcomes from the regional multi-stakeholder dialogue

The successive regional-level dialogues successfully resulted in participants agreeing at the sixth ADD meeting in Bangkok to initiate discussions on individual river basins and landscapes of ecological significance shared by two or more riparian States: the Indus, the Ganges, the Brahmaputra Basins, and the Sundarbans. This was a major departure from the cardinal rule maintained in the fifth ADD meeting of ‘no attribution’ and ‘no focus on specific river basins’. The ADD-G

members confirmed their commitment to continue their advisory role in the SAWI’s initiatives and use their network of influence to catalyse on-the-ground results produced from the initiative ([World Bank Group, 2013](#)).

In the context of high vulnerability to climate change and human dependence on varying river flows, the World Bank and respective local stakeholders have been driving interventions in three basins and one landscape, to develop and strengthen information-sharing systems as well as exchange practices on sustainable management of the basins. The main spin-off achievements of the MSD processes across these four focus areas are detailed below.

#### Key outcomes and spin-off actions from the South Asia regional MSD

- **Indus River Basin:** A series of Indus Basin level dialogues (initially as the Indus Forum, subsequently as the Indus Basin Knowledge Forum, IBKF) resulted in the creation of neutral space for regular and continuous exchange among government officials and opinion leaders. This basin-level dialogue also shifted the past bilateral (India–Pakistan) approach, to conversations among four riparian actors, including influential government officials and non-governmental stakeholders. It has also resulted in a joint research proposal among the stakeholders who participated. ([World Bank Group, 2022](#))
- **Ganges River Basin:** The Ganges Basin level dialogue did not materialise due to political economy constraints. Instead, SAWI channelled support to country-specific efforts, including strategic basin planning at the national scale, and supporting flood forecasting tools ([World Bank Group, 2022](#)). As a result of national-level technical assistance in river basin modelling and planning, a community of practice (CoP) on basin modelling was established. However, it was not sustained ([World Bank Group, 2017, 2018, 2019, 2020, 2022](#)).
- **Brahmaputra River Basin:** Unlike the other basin dialogues, the Brahmaputra dialogue was initiated by academics and civil society actors in India and Bangladesh, and was later financed through SAWI. The Brahmaputra dialogue primarily resulted in information and knowledge exchange among governmental and non-governmental stakeholders in the basin. It also led to dialogue among all four riparian country stakeholders for the first time, in a context where historically, conversation on cooperation had primarily taken place at the bilateral level. The dialogue led to collaboration among researchers and academics from the riparian States on a joint research initiative.
- **Sundarbans Landscape:** The Sundarbans MSD that started in 2015 catalysed the operationalisation of the MoU on Conservation of the Sundarbans (2011) signed between the two countries. Two key institutional processes were established: the Bangladesh-India Sundarbans Regional Cooperation Initiative (BISRCI) and Joint Working Group (JWG) who have continued their work since the dialogue closed in 2020. Key outcomes of the Sundarbans dialogue are the MoU (2019) between Bangladesh and India on passenger and cruise vessels on coastal and protocol routes and the launch of these services between Dhaka and Kolkata.

The detailed description of the evolution of these four basin-level spin-off processes and their outcomes are provided in the following section.

### 3.1. Indus River Basin

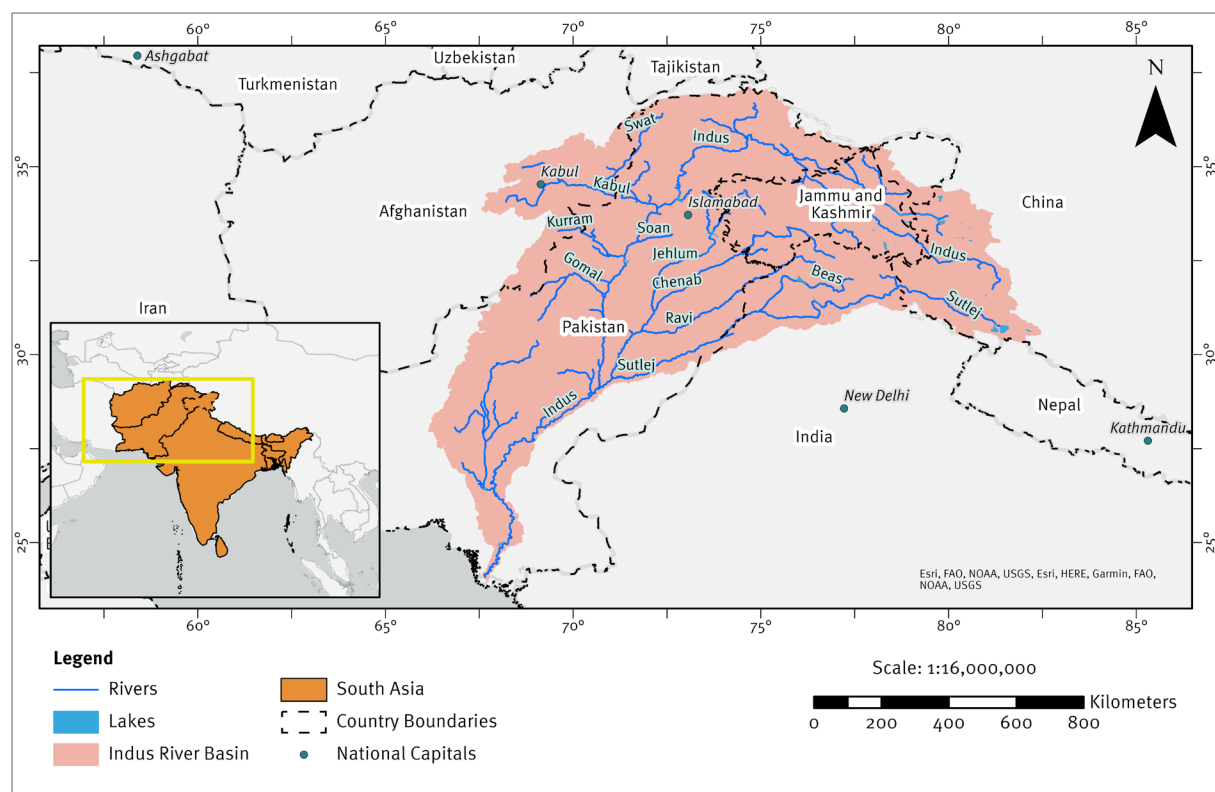
Indus River Basin is the second largest of the ten Himalayan river basins. Covering 1.1 million km<sup>2</sup>, the basin encompasses four countries (Afghanistan, China, India, and Pakistan) and supports the water needs of over 268 million people (Figure 13). A total of 8,887 deaths were attributed to 21 major floods that occurred in the Indus River Basin between 1950 and 2010 (Ali, 2013). These floods also devastated 109,822 villages and resulted in around USD 19 billion in direct

economic losses (Ali, 2013). The 2022 floods in Pakistan alone affected at least 33 million people and killed approximately 1,718 people (World Weather Attribution, 2022).

The river basin is also famous for long prevailing disputes on water-sharing between India and Pakistan, complicated by territorial partition after the end of the British Colonial rule in the sub-continent. Indus water-sharing between these two countries was settled by the Indus Waters Treaty in 1960, brokered by the World Bank, which is regarded as the most enduring water treaty between these two countries that are otherwise locked in a host of political differences and disputes (Romshoo, 2012).

**Figure 13. The Indus River Basin.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016); United Nations Office for the Coordination of Humanitarian Affairs (2020).



SAWI's MSD processes on the Indus Basin were guided by a focus area strategy developed by the World Bank in consultation with the regional stakeholders (World Bank Group, 2014). The key aspect of this process was the Indus Forum, which evolved from a basin-level subgroup of the Adu Dhabi Dialogue, engaging key policy- and opinion-makers representing the riparian countries (World Bank Group,

2014). The forum met seven times between 2013 and 2017 (see Table 6). The central agenda of these forums focused on climate change and its implications for water and natural resources, and the need for development and sharing of data/information among riparian countries for coherent policy actions. Joint research proposal on the topic was developed and launched during the seventh Indus Forum.

**Table 6. Thematic issues covered in the Indus Basin Forum (2013–2017).<sup>14</sup>**

Title	Time and location	Key highlights
First Indus Forum meeting	2013, Afghanistan	Building cooperation on climate change as the major stressor undermining the basin's water, food, and energy security and impacting the livelihoods and economies of the riparian countries and their population.
Second Indus Forum meeting and a study tour	2014, Ecuador	Consensus on the need to establish and strengthen snow and glacier monitoring in the headwaters.
Third Indus Forum meeting	2015, Pakistan	Supporting a joint research proposal on the issues of common interest led by scientific communities to bridge existing knowledge gaps.
Fourth Indus Forum meeting integrated with a regional conference jointly organised by ICIMOD and IWMI	February 2016, Kathmandu, Nepal	Discussion on collaboration among the riparian countries and civil society on the rapidly changing cryosphere.
Fifth Indus Forum meeting and joint study tour	October 2016, Switzerland	Finalisation of work packages of the joint research proposals developed.
Sixth Indus Forum meeting	May 2017, Kathmandu, Nepal	Developing synergy between the Indus Forum and the Upper Indus Basin Network (UIBN) by convening a joint meeting. UIBN is convened by ICIMOD.
Seventh Indus Forum meeting	July 2017, Colombo, Sri Lanka	Launch of research proposals.

The Indus Forum then evolved into the Indus Basin Knowledge Forum (IBKF), strengthening the knowledge–policy–action interface to inform action and intervention needs on the basin's water and natural resources (**Table 7**). IBKF aimed to produce new knowledge and practices on sustainable management of the basin's water and natural resources, and produce opportunities for the riparian countries to

build on them. A report from the World Bank indicates that one key outcome from a series of dialogues at the basin level was building trust and confidence among riparian stakeholders through the creation of this neutral space. In fact, the IBKF continued even when official dialogue was suspended between India and Pakistan in 2016–2017 (World Bank Group, [2022](#)).

14. Source: World Bank Group ([2014](#), [2015](#), [2017](#), [2018](#)).

**Table 7. Indus Basin Knowledge Forum (2017–2019).<sup>15</sup>**

Title	Time and location	Key highlights
International Conference on Climate and Environmental Change Impacts on the Indus Basin Waters, taken as the first IBKF	February 2016, Kathmandu, Nepal	<ul style="list-style-type: none"> <li>• Hosted by ICIMOD.</li> <li>• Established the Indus Basin research centre of excellence.</li> </ul>
Second IBKF	July 2017, Colombo, Sri Lanka	<ul style="list-style-type: none"> <li>• Hosted IWMI with the support of ICIMOD and the World Bank.</li> <li>• Focused on assessment of existing knowledge and practices on basin management, and exploring the needs of new knowledge frontiers.</li> </ul>
Third IBKF	May–June 2018, Laxenburg, Austria	<ul style="list-style-type: none"> <li>• Hosted by the International Institute for Applied Systems Analysis (IIASA) with support from IWMI, ICIMOD, and the World Bank.</li> </ul>
Fourth IBKF	August 2019, Kathmandu, Nepal	<ul style="list-style-type: none"> <li>• Hosted by ICIMOD. Focused on strengthening connections between each forum to set the path for impactful research.</li> </ul>

In addition to these dialogues, SAWI supported capacity building of national stakeholders in the region by taking officials from all countries to Ecuador to monitor glaciers, as well as by training Afghan government officials to learn about basin management, including through a study tour to the Nile Basin. SAWI also supported technical and analytical work on joint river management in the Kunar Basin, shared between Afghanistan and Pakistan, and a tributary of the Kabul River that flows into the Indus River. The study confirmed the feasibility of hydropower development to provide low-cost energy to both countries, which catalysed further conversations and a feasibility study between Afghanistan and Pakistan on cascade dams. However, due to the changing political economy, the investment did not materialise ([World Bank Group](#), 2022).

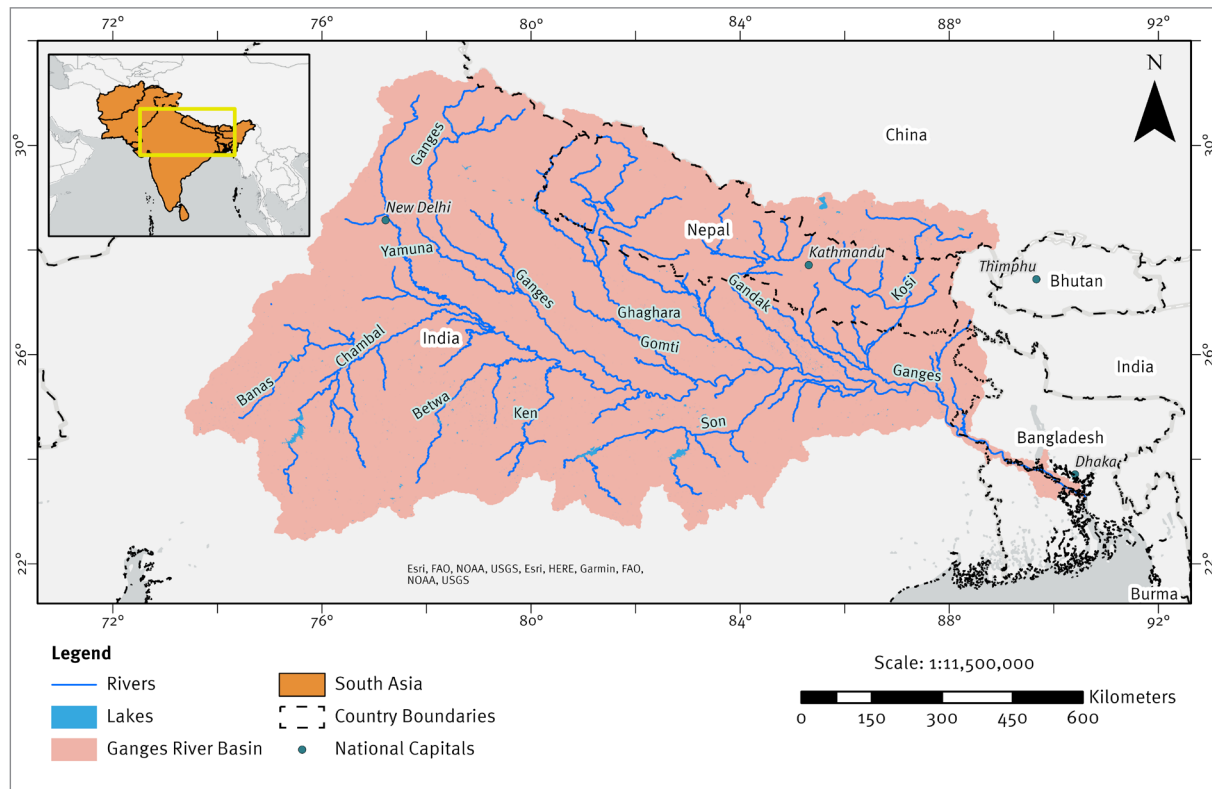
### 3.2. Ganges River Basin

The Ganges River Basin is one of the largest and the most populous river basins in the world. Fed by numerous tributaries originating in Bhutan, Nepal, and the Tibetan Autonomous Region of China, this river system flows through 1.2 million km and is home to more than 655 million people in Bangladesh, Bhutan, China, India, and Nepal (**Figure 14**). The river also has religious value among Hindus who consider that a sacred dip, at least once in their lifetime, produces salvation. The Ganges Basin is also known for having several water infrastructure projects for irrigation and flood control, developed at different reaches, some of which are under bilateral arrangements and treaties between the riparian countries (see **Table 3** for details). Nevertheless, there is no formal multilateral transboundary governance or investment involving all three Ganges riparian countries (World Bank Group, [2017](#)).

15. Source: World Bank Group ([2017](#), [2018](#), [2019](#), [2020](#)).

**Figure 14. The Ganges River Basin.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016); United Nations Office for the Coordination of Humanitarian Affairs (2020).



In the Ganges Basin, basin-level dialogue did not materialise due to the political economy context and the realisation that such an approach would not be cost-effective in this basin (World Bank Group, 2022). Instead, SAWI focused its intervention on national level activities. One key aspect was to develop and strengthen an information system across the basin to support basin-wide planning and to guide area-specific investment on water infrastructure projects and improving water resources management at the national level. In India, strategic basin planning activities were introduced. SAWI supported the Indian Ministry of Water Resources, River Development and Ganga Rejuvenation to develop a multi-year water resources planning model for the entire Ganges Basin, resulting in strengthened capacities of several government agencies in undertaking evidence-based assessments (World Bank Group, 2019). In Nepal, a strategic environmental and social assessment was carried out to support hydropower development planning, together with mapping of potential sources of pollution and an assessment of the pollution problems associated with each source (World Bank Group, 2019).

Building on the national-level technical assistance with river basin modelling and planning, basin-wide dialogue on hydrologic and water resources modelling was supported. SAWI facilitated technical interactions and consultations with the Indian Institute of Technology (IIT) Delhi, IWMI (India, Nepal, and Sri Lanka), the Commonwealth Scientific and Industrial Research Organisation (CSIRO, Australia), eWater (Australia), the Natural Environment Research Council (NERC, UK), Oxford University (UK), Southampton University (UK), the National Ganga River Basin Authority (NGRBA, India), Institute of Water Modelling (IWM, Bangladesh), National Institute of Hydrology (NIH, India), and Texas A&M University (USA). Additionally, a survey was designed to test the value of a modelling CoP (World Bank Group, 2014).

A CoP on basin modelling has also been established to consolidate knowledge and practices on environmental flow, water security, and adaptation to recurrent floods and drought in the basin (World Bank Group, 2017). SAWI was supposed to provide opportunities for the CoP to connect with key basin stakeholders through dialogue events. However, in 2017, the initiative was put on hold due to political economy issues that required SAWI to focus on other entry points in India and Nepal (World Bank Group, 2017, 2018, 2019, 2020, 2022).

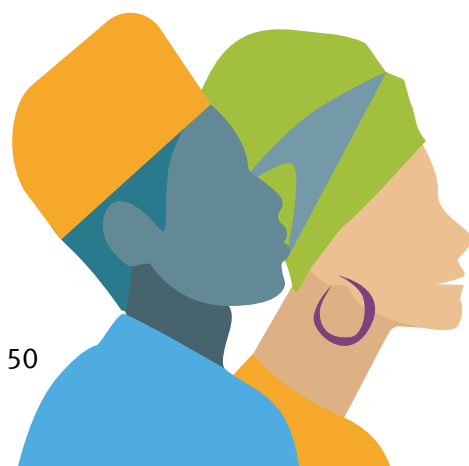
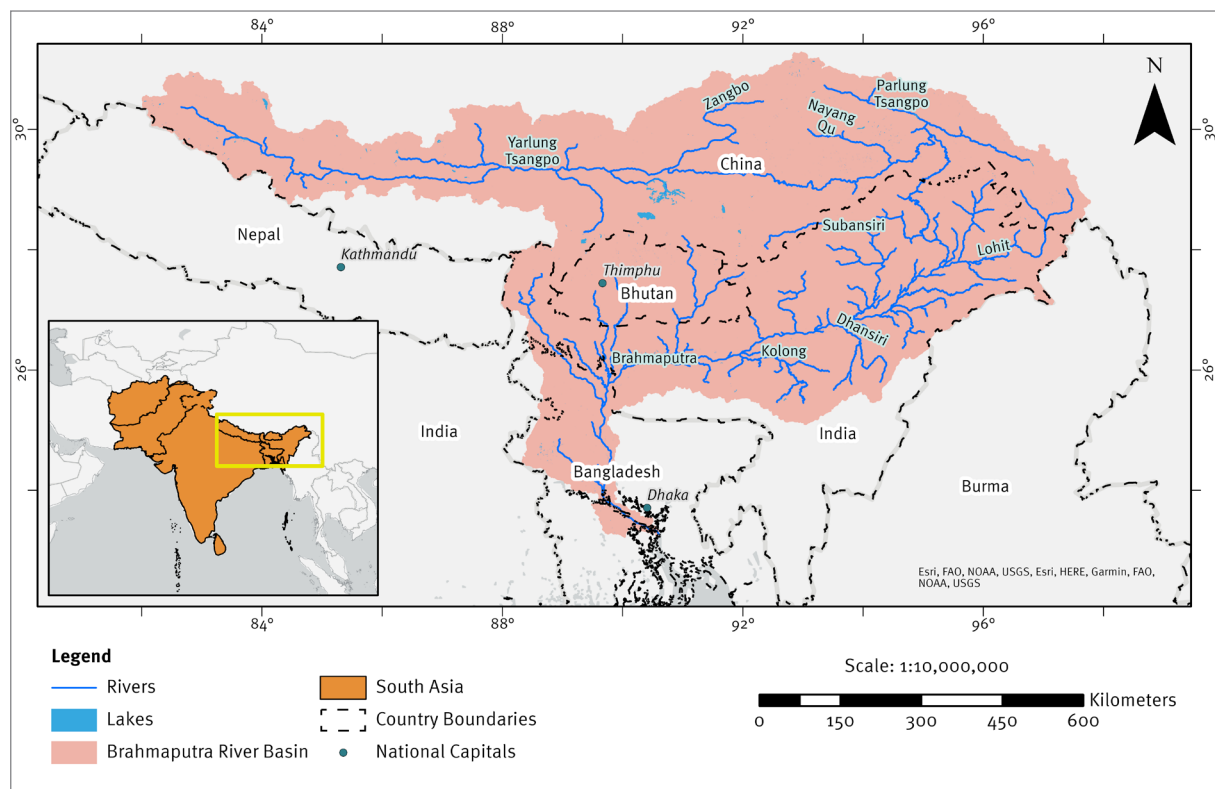
### 3.3 Brahmaputra River Basin

Originating in the Tibetan Autonomous Region of China, the Brahmaputra River flows through the northeastern provinces of Arunachal Pradesh and Assam in India, then flows eastward in Bangladesh, where it joins the Ganges before ending into the Bay of Bengal (**Figure 15**). The river also receives flow from its tributaries originating in Bhutan. The basin is home to more than 130 million people who depend on the river for crop and livestock farming and capture fishery as their main source of livelihoods in the upper and lower reaches,

while hydroelectricity generation is the key opportunity in the upstream areas in Bhutan and China. China has begun investing in at least three major dam projects in the region, upstream where the river loops southwest into India ([Ministry of External Affairs](#), Government of India, 2022). There are concerns in India and Bangladesh over the river diversions and hydropower projects in China because of their likely effect on the dry season flow downstream. The river is also used for freshwater augmentation in water-deficit regions in China and northeastern provinces in India.

**Figure 15. The Brahmaputra River Basin.**

**Sources:** Esri (2022); Lehner and Grill (2013); Messenger et al. (2016); United Nations Office for the Coordination of Humanitarian Affairs (2020).





The Brahmaputra dialogue was initiated as a bilateral and people-to-people initiative in India's northeastern provinces (Assam and Arunachal Pradesh) and Bangladesh in 2013. The dialogue was led by the South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATeRs), in collaboration with the Indian Institute of Technology Guwahati (IIT Guwahati), and the Institute of Water and Flood Management (IWFM) at Bangladesh University for Engineering and Technology (BUET). Initial financing came from the Asia Foundation (TAF) (Yasuda et al., 2017). SAWI started by engaging as an observer in the initial phase during 2013–2015, and in 2014 funded the dialogue process. Throughout the process, public-funded research and knowledge institutions – IIT Guwahati in India and IWM in Bangladesh – engaged by helping ensure continuity and systematic documentation. All of this signalled increasing ownership of the dialogue process (SaciWATeRs, 2014, 2015; [World Bank Group, 2018](#)).

Over the course of its three phases, the dialogue evolved from Track 3 to Track 1.5. The initial phase of the dialogue involved a consultation meeting conducted in Bangladesh and India, primarily through Track 3 diplomacy, involving community social organisations, NGOs, provincial and local media, and local research and knowledge institutions. The process involved active participation of the population and their formal and informal organisations at the grassroots level.<sup>16</sup>

For the second phase of the workshop (2014–2015), the dialogue started moving to Track 2 as province level agencies in Assam and Arunachal Pradesh, and retired government officials who had held important positions at planning and policy levels in the two provinces and in the central level agencies, started to participate and contribute to the process. The dialogue also brought together participants from all four riparian countries (Barua, [2018](#)).

Towards the end of the second phase, the process graduated to Track 1.5 level diplomacy as the former bureaucrats from government agencies in Bangladesh, Bhutan, and India, and State-supported think tanks, academics, and research institutions in China began to participate in the process. The third phase of dialogues over 2017–2018 concentrated on consolidating knowledge and practices around important thematic agenda identified in the earlier phases by holding workshops and focused consultations on them. These, among others, included institutional mapping, disaster management, inland navigation, and the water–energy nexus ([World Bank Group, 2018](#)). These thematic agenda were strategically selected to avoid contentious issues affecting the process while discussion, sharing, and exchanges on these

issues served as an opportunity to look into the ways and means to address some of the contentious issues facing the riparian countries.

One of the key outcomes of the Brahmaputra dialogue is a basin-wide research project titled Water Resources Vulnerability and Security Assessment of Yarlung Tsangpo–Brahmaputra Transboundary River Basin involving researchers from Yunnan University in China, and IIT Guwahati and IWM in Bangladesh, which was funded by the National Natural Science Foundation (NNSF) of China and ICIMOD. Further, a Memorandum of Understanding (MoU) was developed in 2017 between Yunnan University and IIT Guwahati for data-sharing and exchange of faculty staff and students in order to foster joint research and academic exchanges in the basin. In 2019, the initiative was extended to develop a book, titled *Perspectives on the Yarlung-Tsangpo-Brahmaputra-Jamuna River*, in the hope of introducing into public discourse the multiple dimensions of the river and its riverine resources for the well-being of the region's population (Barua et al., [2019](#)).

The fact that this dialogue process brought together stakeholders from all riparian countries is significant, in the context where all existing agreements and Track 1 level cooperation take place only at the bilateral level. The dialogue also fostered relationships and willingness to continue the conversation through a neutral platform, providing a stepping stone for trust building in particular as lack of trust is the key issue hindering cooperation in the region (Barua, [2018](#)).

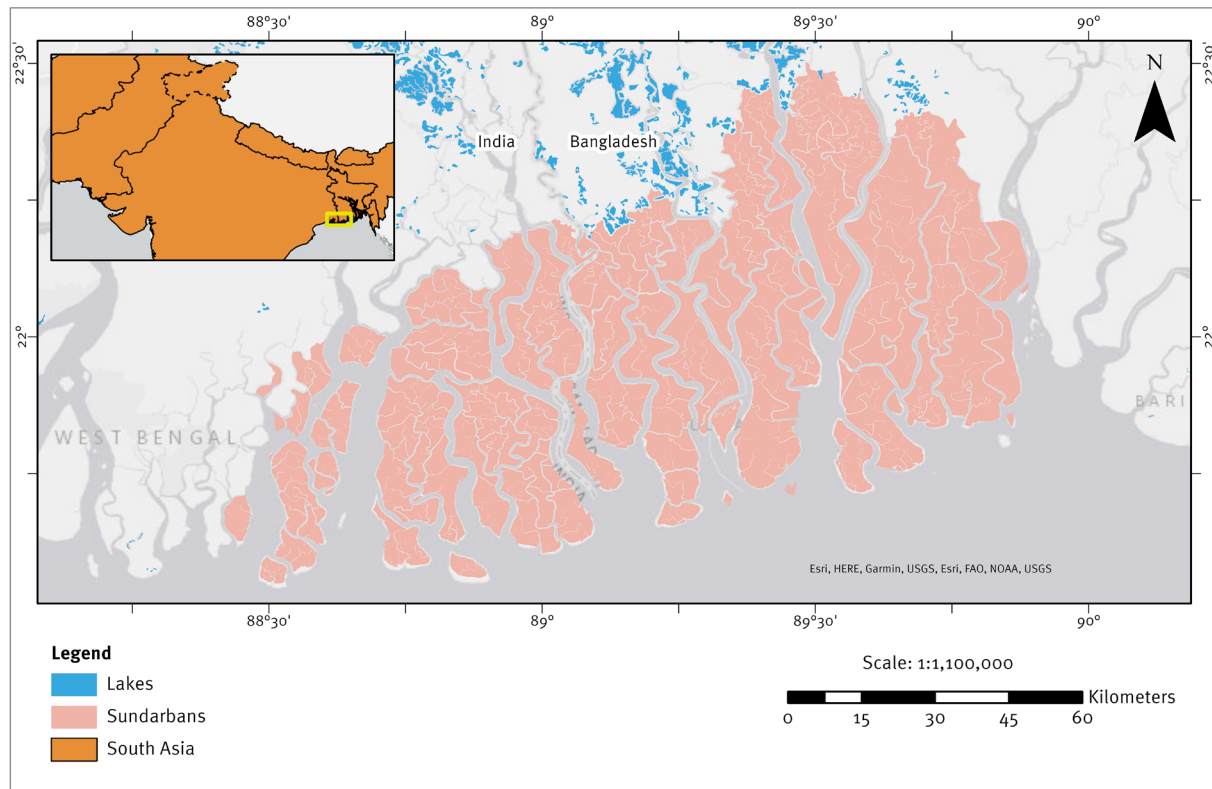
### 3.4. Sundarbans Landscape

One of the largest deltas in the world, the Sundarbans is composed of three rivers: Ganges, Brahmaputra, and Meghna on the Bay of Bengal. It is shared between coastal Bangladesh and India (**Figure 16**). Home to more than 123 million people and covering 140,000 ha ([World Bank Group, 2021](#)), the Sundarbans Landscape is a unique delta with a complex network of tidal waterways, mudflats, small islands, and the biggest mangrove forest in the world ([United Nations Educational, Scientific and Cultural Organization, undated; Retrieved June 2022](#)). It is rich in biodiversity, with 334 plant species, 693 wildlife species, 260 bird species, and endangered species such as the Royal Bengal Tiger or Indian python ([United Nations Educational, Scientific and Cultural Organization, undated; Retrieved June 2022](#)). However, the area is under increased pressure due to frequent cyclones, sea level rise, saline intrusion, coastal erosion, and channel sedimentation combined with increased population and industrial activity ([World Bank Group, 2021](#)).

16. These community social organisations included: Aaranayak and the Centre for North East Studies and Policy Research (C-NES) in Arunachal Pradesh and Assam, and Jagrata Juba Sangha (JJS) in Bangladesh.

**Figure 16. Map of Sundarbans.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016); United Nations Office for the Coordination of Humanitarian Affairs (2020).



In an attempt towards joint cooperation, Bangladesh and India signed an MoU in 2011 on sustainably managing and developing the Sundarbans (World Bank Group, 2013). The MoU falls under an umbrella framework agreement on cooperation for development between India and Bangladesh (The Framework Agreement on Cooperation for Development between India and Bangladesh, 2011). Some of the actions agreed in the MoU include: establish a joint working group; undertake joint monitoring of resources; undertake joint management of resources; undertake conservation and protection; facilitate eco-tourism; develop management plans, e.g. for disaster management; undertake research to develop a common and shared understanding of impacts of climate change; undertake joint research and management projects; and share knowledge on and for biodiversity conservation (Danda, 2019).

The MSD on the Sundarbans was initiated in 2015 and was seen as a way of strengthening and deepening the collaboration that had started under the MoU

(see Table 8 for a list of events). In fact, the overall aim of the dialogue was to facilitate the operationalisation of the MoU and promote Sundarbans management ownership among government and non-government agencies (World Bank Group, 2020). The Sundarbans dialogue brought together ambassadors of both countries and laid the ground for future shared collaboration (World Bank Group, 2020; 2021).

The dialogue had two working bodies, BISRCI and the JWG, both financed and facilitated by SAWI (World Bank Group, 2020). BISRCI had become the main platform for this dialogue. While BISRCI provided technical insights to influence action of the parties involved, the JWG set a formal agenda for collaboration. The group was formed mainly by high-level bureaucratic, technocratic, and diplomatic representatives of relevant ministries from both countries, and had to ensure compliance with the MoU from 2011. Furthermore, the group was the main decision-maker for the future joint actions (Observer Research Foundation, Retrieved July 2022).

**Table 8. Summary of key annual outcomes on Sundarbans MSD activities.<sup>17</sup>**

Year	Key annual outcomes
2015–2016	<ul style="list-style-type: none"> <li>• BISRCI was established.</li> <li>• Launch of Sundarbans dialogue.</li> <li>• COP 21: joint India-Bangladesh side event on the Sundarbans Landscape. Protocol on Inland Water Transit and Trade signed during the Indian Prime Minister's visit to Bangladesh.</li> <li>• BISRCI influenced the policy discussions that led to an MoU (16 November 2015) between Bangladesh and India on passenger and cruise vessels on coastal and protocol routes and the launch of these services between Dhaka and Kolkata.</li> </ul>
2016–2017	<ul style="list-style-type: none"> <li>• Bangladesh-India Joint Working Group on Conservation of the Sundarbans: meeting for designing and planning joint and cooperative activities on the Sundarbans as envisaged under the 2011 MoU.</li> <li>• Joint Government of India – Government of West Bengal meeting on cooperation on the Sundarbans.</li> <li>• Discussion on the Sundarbans between the Prime Ministers of Bangladesh and India established and sustained local dialogues (between the community/local government and the State/federal levels of government).</li> <li>• A documentary film, <i>Nature's Own People</i>, was developed by BISRCI.</li> <li>• COP 23: BISRCI prepared presentations on the Sundarbans at the India Pavilion, to raise international attention around better management of the Sundarbans.</li> </ul>
2017–2018	<ul style="list-style-type: none"> <li>• The Joint Landscape Narrative was completed.</li> <li>• Launch of the draft document on Vision for the Sundarbans Region.</li> </ul>
2018–2019	<ul style="list-style-type: none"> <li>• Targeted environmental studies continued.</li> </ul>
2019–2020	<ul style="list-style-type: none"> <li>• Sundarbans dialogue closed.</li> <li>• Targeted environmental studies finished.</li> <li>• Both countries continued to cooperate on creating joint management. JWG and BISRCI continued their work. BISRCI launched a knowledge portal on the Sundarbans.</li> <li>• The report created by BISRCI and SAWI – Institutional Structure for Joint Action in the Sundarbans Region – was finalised.</li> </ul>

17. Sources: World Bank Group (2015–2020).



The MSD on Sundarbans played a crucial role in terms of awareness-raising and technical knowledge-sharing. Firstly, as the Sundarbans did not receive much media attention prior to the MSD, BISRCI – through awareness-raising events and capacity building workshops – helped community-level stories reach national and international audiences, spreading the word about the challenges facing the Sundarbans. BISRCI successfully pushed the Sundarbans agenda at the global level and brought together key policy-makers from Bangladesh and India at two Conferences of the Parties to the 1992 United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol: COP 21 in Paris in 2015 and COP 23 in Bonn in 2017 ([World Bank Group](#), 2016).

Secondly, the Sundarbans MSD also helped develop technical studies conducted in both countries. For example, the Sundarbans Joint Landscape Narrative that was completed in April 2018 engaged stakeholders from the scientific community, government, and other key actors. SAWI supported the narrative and developed a draft Vision for the Sundarbans Region: Rationale and Structure for Joint Action which was launched in August 2017 in Delhi. This vision incorporated sustainable economic growth through cooperation and joint action, business development and economic growth for local communities, and valuation of ecosystem services ([World Bank Group](#), 2018). All studies help generate evidence to support the narrative on the





cooperation between India and Bangladesh that has led to building better collaboration and common understanding, and has set the stage for greater stakeholder ownership and action ([World Bank Group, 2020](#)).

Over the years, the dialogue evolved from an initial discussion on framing options for cooperation to influencing high-level discussion and policy actions, and subsequently to advancing strategic cooperation between Bangladesh and India ([World Bank Group, 2021](#)). One of the main outcomes that happened in parallel to MSD processes was the Bangladesh and India agreement on the movement of passenger and cruise services as part of the Protocol on Inland Water Transit and Trade.

Facilitated by BISRCI with the use of SAWI technical studies, the agreement empowered policy action to commence an eco-tourism river cruise between Dhaka and Kolkata via the Sundarbans in March 2019 ([World Bank Group, 2020](#)). BISRCI also continues to meet regularly and conducts strategic discussions and activities for greater cooperation and enhanced understanding from the local to the regional level ([World Bank Group, 2020](#)).





## 4. Enabling factors

Having considered the MSDs at the regional level and their basin-level spin-offs, we will now examine and discuss how certain factors impacted and influenced the process and outcomes of those dialogues in South Asia.

### 4.1. Inclusion and role of facilitators

Both the ADD and the SAWI dialogues managed to successfully mobilise high-level officials and mandated institutions while ensuring participation from non-State actors as well. For example, the ADD involved political leadership and bureaucrats in key decision-making positions, together with researchers and thought leaders from prominent knowledge institutions and think tanks across the region. Government ministries involved in organising country-level meetings helped link the ADD's discourses to the State's water policies and governance agenda, ensuring political buy-in. At the same time, key decision-makers met with researchers and knowledge stakeholders, facilitated by neutral interlocutors, including the World Bank, ICIMOD, and IWMI. This helped give voice and agency to a range of representative groups (World Bank Group, 2018). The World Bank played a significant role as a facilitator and a convenor in fostering the dialogue, since by its nature its intervention in the development context requires agreement from the governments involved.

The presence of SAWI/the World Bank in the processes, supported by prominent research and knowledge institutions (IWMI and ICIMOD) at the regional level, helped steer the ADD in the right direction and address the risk of the process getting derailed or watered down. The presence of an influential neutral interlocutor is crucial in national- and regional-level discourses in the Asian context on historically contested issues, such as transboundary water in this case, because there is a risk that conflicting parties will not reach consensus (Hanasz, 2017). Moreover, all ADD meetings followed Chatham House Rules, which allowed opinions expressed in the meeting to remain anonymous, thus enabling decision-makers to exchange their views on key challenges away from the official national position and the complexities of the political processes.

Under SAWI, the World Bank continued to play key roles in facilitating some of the regional-level MSD events and subsequent basin-level dialogues. The Brahmaputra dialogue was facilitated primarily by civil society and academic institutions. In the Indus Basin, SAWI extended its

partnership with the UIBN to build an enabling environment for cross-border cooperation on research as well as ensure long-term sustainability of the dialogue process. Additionally, SAWI transitioned the convening of the IBNF to a regional institution (World Bank Group, 2020). With regard to the Sundarbans Landscape, the World Bank anticipated that its efforts and contribution would sustain: the JWG was expected to continue to meet to set the agenda for collaboration, including joint and/or coordinated technical studies (World Bank Group, 2020).

### 4.2. Using existing regional political and economic processes

While there are existing and emerging political and economic processes in the region, including SAARC, BBIN, and BIMSTEC, there was no evidence that these processes served the purpose of regional dialogues in South Asia. One of the major reasons behind the lack of regional political and economic processes is the complex hydro-politics around the region's transboundary rivers (World Bank Group, 2020). The SAWI Annual Report in 2018 indicates that there are growing positive efforts to strengthen regional economic partnership but that incentives to cooperate on river management are still low due to "persistent challenges to regional cooperation [including] power asymmetries amongst the countries, historical tensions, and divergent interests and capacity constraints" (World Bank Group, 2019, 102). Cognisant of the nature of South Asia's political economy, SAWI engaged in the regional dialogue through non-political, technical work and by building collaborative forums (World Bank Group, 2018). This situation in South Asia may be one of the reasons why the South Asia regional MSD had limited results in materialising Track I basin level cooperation.

### 4.3. Fostering social learning across scales

Both the ADD and SAWI MSD have adopted a "knowledge for cooperation" approach, placing emphasis on evidence-based and context-specific knowledge on water systems in the region as a means to foster and sustain cooperation among the riparian States and their agencies. During the ADD phase, the ADDKF was set up as a platform of researchers, academics, and water professionals in the region for sharing and exchanges to develop CoP on common problems. This was further complemented by the ADD Small Grants Programme to promote collaborative research and learning, providing insights and synergy to ADD events (World Bank Group, 2013).

SAWI input into the MSDs in the Indus, Brahmaputra, and the Sundarbans was also very much rooted in fostering social learning. Informal knowledge exchange, especially among research institutes rather than government bodies, is often perceived as less politically charged. The evolution of the Indus Forum into the IBKF is a good example of using the knowledge–policy–action interface to continue at least some level of engagement. In the Ganges, CoP on modelling helped strengthen national level and basin level capacities in river basin and flood modelling and planning. Similarly, this knowledge-based approach was also deployed as a strategy to sustain cooperation in the Brahmaputra dialogue, the major outcome of which was collaboration among researchers and academics from the riparian States on a joint research initiative.



Anchoring themes helped ground the MSD process and keep it relevant. Four such themes were identified for SAWI engagement at the regional level, which may be seen as crucial elements of collaborative learning and successful stakeholder engagement. These were: groundwater management, inland navigation, disaster risk and climate resilience, and ecological integrity ([World Bank Group, 2019](#)). The regional dialogue process was characterised as informal and open, making it less structured around anchoring themes than at the basin level.

For the Indus Basin, climate change offered a useful entry point for parties from the riparian countries to come together despite their different perspectives ([World Bank Group, 2020](#)). In the context of the Brahmaputra Basin, common areas of interest across riparian countries needed to be apolitical to engage government agencies and included the following topics: disaster risk management, inland water transport, and the water–energy–food nexus ([World Bank Group, 2020](#)). What was picked up and leveraged through the Sundarbans dialogue is the need to work jointly on conservation as per the 2011 MoU ([Observer Research Foundation and Institute for Defence Studies & Analyses, 2018](#)).

#### 4.4. Leveraging sustainable finance

In its initial stage, the ADD was supported by the United Kingdom's Foreign and Commonwealth Office and facilitated by the World Bank. SAWI later managed to expand the funding portfolio and was formally established as a Multi-Donor Trust Fund (MDTF) supported by Australia (through Australian Aid), the United Kingdom (through the Department for International Development [DFID]), and Norway, and managed by the World Bank ([World Bank Group, 2013](#)). The World Bank administered the MDTF on behalf of contributing development partners. The trust was known as a Programmatic Trust Fund to which donors committed funds designed to support a thematic framework, rather than financing a specific project. SAWI supported both the activities executed by the recipient organisations and those implemented directly by the World Bank.

The fact that MSD processes took place in the context of SAWI (a larger programme to support with harnessing the potential of shared water resources) was one of the factors that allowed the dialogue to continue at the basin levels, and subsequently helped foster cooperation. In fact, SAWI was linked to a number of other World Bank investments and regional trust funds in South Asia, such as the Programme for Asia Resilience to Climate Change (PARCC), the South Asia Regional Trade Facilitation Programme (SARTFP), and the Programme for Asia Connectivity and Trade (PACT), thus representing an integral part of the World Bank's growing regional portfolio and providing opportunities for cross-sectoral funding ([World Bank Group, 2019](#)).

For the continuation of MSDs and subsequent activities, it is crucial that national and regional partners are able to mobilise resources in a sustainable manner. For example, In the Indus Basin, the joint research proposal – an outcome of the knowledge forum process – was not successful in securing international funding on its own ([World Bank Group, 2020](#)). In the Sundarbans, the World Bank is planning to continue support through its projects, including the Bangladesh Sustainable Forests and Livelihoods Project, the Bangladesh Sustainable Coastal and Marine Fisheries Project, and the India Blue Revolution Program. The prospects for tangible contributions derived from regional and basin MSD processes in South Asia will continue to be limited unless participants and countries involved in the dialogue manage to secure revenue streams beyond the World Bank, particularly now that SAWI has concluded its intervention.

# Chapter 4:

## **Regional dialogue in Southern Africa**



Multi-sector dialogues resulted in Southern African Development Community governments and stakeholders developing a common governance framework to apply a water-energy-food nexus approach for policy integration and multi-sector investments in their shared transboundary waters.

## Chapter 3: Regional dialogue in South Asia

### 1. Background on the regional context

#### 1.1. Geography and socio-economy

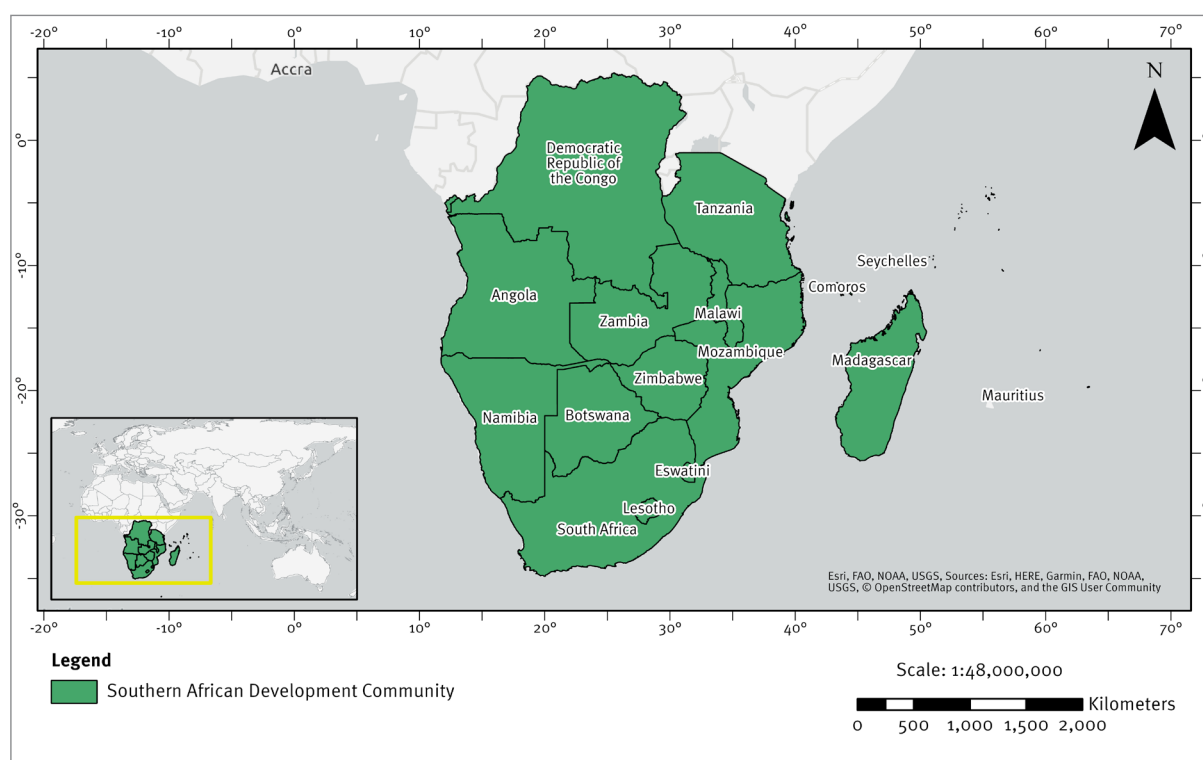
The Southern African region covers a total area of 556,781 km<sup>2</sup> and is home to 345 million people (Scheumann and Neubert, 2006). The Southern African Development Community (SADC), a regional intergovernmental entity promoting socio-economic cooperation and integration, has 16 member states (**Figure 17**): Angola, Botswana, Comoros, Democratic Republic of Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe ([Southern African Development Community](#), 2022a). Among the member states, South Africa, an upper middle-income country, is the region's largest economy, followed by Angola. Seychelles and Mauritius are the region's only high-income economies ([World Bank](#), 2020).

#### 1.2. Political framework and regional cooperation processes

The SADC region is home to some of Africa's protracted conflicts, which undermine the stability of its countries and hinder them from reaching their full potential due to significant gaps in education, health, and skills development. These conflicts create huge development challenges, impact heavily on the lives and livelihoods of their populations, and threaten regional integration and trade. Thus, the region's socio-political cohesion and economic development vary at both the national and regional levels: recurring poverty cycles, large presence of HIV and AIDS, high number of orphans, economic underdevelopment, political tensions, lack of democracy consolidation, refugee flows, and corruption severely affect the pace of development ([Southern African Development Community](#), 2022b).

**Figure 17. SADC member states.**

Sources: Esri (2022); [Southern African Development Community](#) (2022a).



One of the first times that Southern African States clearly demonstrated their desire to work jointly on the common challenges was at the Southern African Development Coordination Conference (SADCC) in 1980 in Lusaka, Zambia. SADCC was established by Angola, Botswana, Eswatini, Lesotho, Mozambique, United Republic of Tanzania, and Zambia. The coalition was built on great solidarity among liberation movements to reduce dependency, advance national liberation in Southern Africa, and strengthen each country's economic liberation strategies.

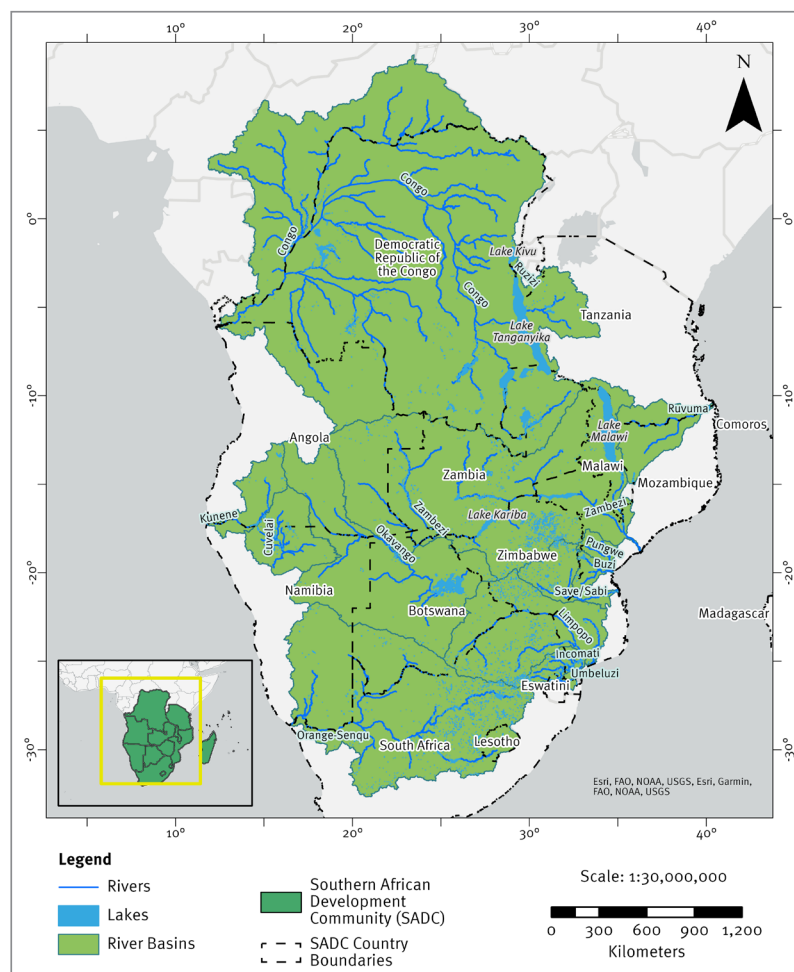
Building on from the SADCC, States came together in 1992 to sign the Southern African Development Community Declaration and Treaty, which formally established SADC as a regional intergovernmental cooperation organisation. SADC is committed to regional integration and poverty eradication within Southern Africa through economic development and ensuring peace and security ([Southern African Development Community, 2022a](#)). Since its establishment, SADC has developed several strategies and legal frameworks to address the regional challenges and accomplish its member states' objectives through regional cooperation and dialogue. For this purpose, 26 legally binding arrangements have been developed ([Southern African Development Community, 2022c](#)), addressing issues such as energy supply, fisheries, and shared waters.

### 1.3. Transboundary water resources: use and challenges

The SADC region is home to many large river basins and accumulates approximately 2,300 km<sup>3</sup> of renewable water resources per year (**Figure 18**). Although this region receives a fair amount of precipitation, this varies seasonally and geographically, impacting the availability of water across the region (Scheumann and Neubert, [2006](#)). Its tropical and northern areas are known for their high rainfall, while the southern and central parts have more arid and semi-arid climates. Out of the SADC States, five countries rely on water generated outside their borders to supply more than half of their total available water resources, having a water dependency ratio of over 50 percent (Food and Agriculture Organization of the United Nations, [2022](#)). With the effects of climate change expected to increase, coupled with growing concerns regarding water use and pollution, water availability and water quality are becoming priority issues for the region.

**Figure 18. Geographic distribution of the 21 transboundary rivers to which one or more SADC members is a riparian.**

Sources: Esri (2022); Lehner and Grill (2013); Messenger et al. (2016).





Poor and unequal infrastructure development is a major concern in the SADC countries. For instance, only 61 percent of the population has access to safe drinking water and 39 percent has access to sanitation services ([Global Water Partnership Southern Africa](#), 2019). Despite the region's high hydropower and solar energy potential, access to electricity is low: overall, only 24 percent of residents have electricity, dropping to only 5 percent in rural areas. A lack of infrastructure inhibits hydropower potentials. While the hydropower generation potential exceeds 150 GW electricity, only 12 GW is produced (IEA, [2019](#)). Similarly, the region uses only 3.5 million ha irrigable land out of 50 million ha available, while only 20 percent of agricultural land is cultivated ([Global Water Partnership Southern Africa](#), 2019).

Most of the major rivers in the SADC region are transboundary such as the Zambezi, Limpopo, Okavango, Orange, and Congo, which all originate in the central plateau of the region and flow eastward or westward, crossing or forming the boundaries between several countries. All 15 major rivers of the SADC region are transboundary and shared only among the SADC countries, except for the Congo River, which is shared with Central African countries. Overall, there are 21 transboundary basins in which at least one SADC country is a riparian (Table 9). At present, a total of 61 water-related treaties were signed by riparians in the SADC region on matters concerning transboundary water basins (Oregon State University, 2019). Table 9 provides an overview of shared river basins in the SADC region and their respective transboundary management agreement and responsible authority.

**Table 9. Overview of shared river basins in the Southern African Development Community region.<sup>18</sup>**

Water body	Riparians	Agreement	River basin organisation
Buzi*	Mozambique and Zimbabwe	2016 Buzi Water Sharing Agreement	n/a
Congo*	Angola, Cameroon, Democratic Republic of the Congo (DRC), Republic of the Congo, Rwanda, Tanzania, and Zambia	1999 Agreement Establishing a Uniform River Regime and Creating the International Commission of the Congo-Ubangi-Sangha Basin	International Commission of Congo-Oubankui-Sangha (CICOS in French)
Chiloango	Angola, DRC, and Republic of the Congo	n/a	n/a
Cuvelai*	Angola and Namibia	2014 Agreement on the Establishment of Cuvelai Watercourse Commission	Cuvelai Watercourse Commission (CUVECOM)
Incomati*	Eswatini, Mozambique, and South Africa	2002 Water Quality Incomaputo Treaty	Tripartite Technical Committee
Kunene*	Angola, Namibia	1990 Agreement on the Establishment of Permanent Joint Technical Committee; 1991 Fifth Water Use Agreement	Permanent Joint Technical Committee (PJTC)
Lake Chilwa	Malawi and Mozambique	n/a	n/a
Lake Natron	Kenya and Tanzania	n/a	n/a

18. Source: Salman (2004); Turton (2010); Oregon State University – Transboundary Freshwater Dispute Database (2019).

Water body	Riparians	Agreement	River basin organisation
Limpopo*	Botswana, Mozambique, South Africa, and Zimbabwe	2003 Agreement on the Establishment of the Limpopo Watercourse Commission	Limpopo Watercourse Commission (LIMCOM)
Maputo	Mozambique and South Africa	Water Quality Incomaputo Treaty, 2002	Tripartite Technical Committee
Nile	Burundi, DRC, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda	2010 Cooperative Framework Agreement (ratified by five member states)	Nile Basin Initiative (intergovernmental partnership). Upon ratification of the Cooperative Framework Agreement, the Nile River Basin Commission would be established.
Nyanga	Gabon and Republic of the Congo	n/a	n/a
Okavango*	Angola, Botswana, Namibia, and Zimbabwe	1994 Agreement on the Establishment of a Permanent Okavango River Basin Water Commission	The Permanent Okavango River Basin Water Commission (OKACOM)
Orange-Senqu*	Botswana, Lesotho, Namibia, and South Africa	2000 Agreement for the Establishment of the Orange-Senqu Commission	The Orange-Senqu River Commission (ORASECOM)
Pangani	Kenya and Tanzania	n/a	Pangani Basin Water Board (PBWB)
Pungwe*	Mozambique and Zimbabwe	2016 Pungwe Basin Sharing Agreement	n/a
Ruvuma/ Rovuma*	Mozambique and Tanzania	2006 Agreement for the Joint Water Commission	Ruvuma Joint Water Commission
Save/ Sabi*	Mozambique and Zimbabwe	2002 Agreement between Mozambique and Zimbabwe on the Joint Water Commission	Save/Sabi Joint Water Commission
Umba	Kenya and Tanzania	2013 Memorandum of Understanding (MoU) on the Joint Cooperative Framework for Chala and Jipe Lakes, Umba River	Pangani Basin Water Board (PBWB)
Umbeluzi*	Eswatini, Mozambique, and South Africa	Umbeluzi River Basin Agreement	Tripartite Technical Committee
Zambezi*	Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe	2004 Agreement on the Establishment of Zambezi Watercourse Commission	The Zambezi Watercourse Commission (ZAMCOM)

\*Shared only by SADC countries

In addition to these bilateral treaties, countries in the region also signed onto the Revised SADC Protocol on Shared Watercourses (PoSW) ([Southern African Development Community](#), 2022e). Originally adopted in 1995 and revised in 2000, the protocol serves as an essential element in regional management of transboundary waters. Its main objectives are to promote and facilitate the establishment of shared watercourse agreements and basin organisations, as well as to advance the sustainable, equitable, and reasonable management of shared watercourses. The implementation of the PoSW is coordinated by the SADC Water Division, operating within the framework of the SADC Regional Water Strategy ([Southern African Development Community](#), 2022f). Its operational tools – the SADC Regional Water Policy, and the five-year rolling Regional Strategic Action Plans (RSAPs) – play a key role in fostering regional integration in the management of water resources. The protocol has facilitated the establishment of several river basin organisations as autonomous institutions for the governance of the region's shared rivers (Limpopo River Awareness Kit, 2011).

## 2. Regional multi-stakeholder dialogue processes in Southern Africa

### 2.1. Multi-stakeholder dialogue phases and key partners

The SADC MSD processes can be divided into three distinct phases: (i) SADC Multi-Stakeholder Water Dialogues, Phase I (2007–2011); (ii) SADC Multi-Stakeholder Water Dialogues, Phase II (2012–2017) and; (iii) SADC Regional Dialogue under the European Union (EU) Nexus Regional Dialogues Programme, Phases I–II (2017–2023).

The SADC Multi-Stakeholder Water Dialogues, Phase I (2007–2011) was set up as part of the implementation process for the 2006 SADC Water Strategy ([Southern African Development Community](#), 2022f). The SADC dialogue process was organised by the SADC Water Division through partnership with the Global Water Partnership Southern Africa (GWP SA) and financially supported in 2007–2017 by the Danish International Development Agency (DANIDA) under the SADC–DANIDA Regional Water Sector Programme.

This was followed by the SADC Multi-Stakeholder Water Dialogues, Phase II (2012–2017), which had a more thematic focus on the water, energy, and food sectors. Additional financial support for the fifth, sixth, and seventh dialogues was

provided by the Federal Ministry for Economic Cooperation and Development of Germany, German Technical Cooperation (GTZ in German), and UK Aid, joined by the European Union's Water Initiative Plus (EUWI+) project and Australian Aid. Another defining aspect of the Phase II dialogues was the wider participation from various sectors and stakeholders among SADC countries, including but not limited to policy- and decision-makers.

The subsequent phases of the dialogue, SADC Regional Dialogue under the EU Nexus Regional Dialogues Programme, Phases I–II (2017–2023), took place within the framework of the Fostering a Water, Energy and Food Security Nexus Dialogue and Multi-Sector Investment in the SADC Region project, financed by the European Commission in 2016 and implemented by the GWP SA. This project falls within the global EU Nexus Regional Dialogues Programme, jointly funded by the SADC Transboundary Water Programme, the European Union, and the Governments of Germany and the United Kingdom, and is implemented by the German Agency for International Cooperation (GIZ) and the EU Directorate-General for International Partnerships (formerly EU DEVCO). The EU Nexus Regional Dialogues Programme has two separate phases itself: Phase I in 2017–2019 and Phase II in 2021–2023 ([Southern African Development Community and Global Water Partnership Southern Africa](#), 2019). Phase II has been additionally financially supported by the German Federal Ministry for Economic Cooperation and Development (BMZ), EU DEVCO, and GIZ. In the coming year, GWP SA will continue implementing the SADC Water–Energy–Food (WEF) Nexus Dialogue Programme, Phase II (2020–2023). It is within this framework that SADC will convene WEF dialogues on policy and investment issues (Global Water Partnership Southern Africa, 2021).

### 2.2. Multi-stakeholder dialogue events and activities

A total of five events were conducted during the first phase of the SADC dialogues, one per year between 2007 and 2011 (Table 10). Held under the comprehensive theme of Watering Development in SADC, the dialogues raised awareness of integrated water resources management (IWRM) approaches through interactive stakeholder discussions (Southern African Development Community, 2015). As such, dialogue sessions aimed to provide a forum for practitioners to exchange ideas on how to unlock the potential of sustainable water development to contribute to regional integration and poverty eradication and enhance socio-economic development. Each SADC dialogue event aimed to build on the previous ones by outlining key lessons and learnings from previous experiences.

**Table 10. Southern African Development Community Multi-Stakeholder Water Dialogues, Phase I.<sup>19</sup>**

Title	Time and location
First dialogue 'Watering Development in SADC: Beyond IWRM Concepts and the Converted'	2007, Maputo, Mozambique
Second dialogue 'Watering Development in SADC: Rising above the Climate Change Threat – Towards Security'	2008, Maseru, Lesotho
Third dialogue 'Watering Development in SADC: Surfacing of the Hidden Resource – Groundwater'	2009, Johannesburg, South Africa
Fourth dialogue 'Watering Development in SADC: Toward Climate Resilience through Benefit Sharing'	2010, Maun, Botswana
Fifth dialogue 'Watering Development in SADC: Financing Water for Climate Resilience to Ensure Regional Security'	2011, Ezulwini, Eswatini

The sixth, seventh, and eighth dialogues were held under the SADC Multi-Stakeholder Water Dialogues, Phase II (2012–2017) (Table 11), specifically under the theme of the WEF nexus. This strategic focus came from the SADC Water Division which, based on the key issues discussed in the first phase of the dialogues work, identified the WEF nexus as a key entry point to further transboundary collaboration in the region (Global Water Partnership Southern Africa, 2019). Table 11 presents an overview of activities within Phase II.

The subsequent phase of the regional MSD process was funded by the global EU Nexus Regional Dialogues Programme, which designed the Nexus Regional Dialogues

in five regions, including the SADC region. The global EU Nexus Regional Dialogues Programme has four action pillars, focusing on knowledge exchange, networking, and nexus resource platform at the global level, and working on human capacity development at the national and regional levels (Beerhalter, 2018). The overall aim of the SADC–EU Nexus Regional Dialogues Project was to encourage analysis of nexus challenges and implement multisector investments, especially during Phase II (Global Water Partnership Southern Africa, 2019). Table 12 presents an overview of MSD activities at the regional and national levels that took place as part of the SADC–EU Nexus Dialogues Project, Phases I–II.



19. Source: Global Water Partnership Southern Africa (2019a).

**Table 11. Southern African Development Community Multi-Stakeholder Water Dialogue, Phase II.<sup>20</sup>**

Title	Time and location	Key highlights
The sixth SADC Multi-Stakeholder Water Dialogue: 'Watering Development in SADC: Exploring the Water, Energy, and Food Nexus for Regional Cooperation and Development'	2013, Lusaka, Zambia	<ul style="list-style-type: none"> <li>• Additional support from DANIDA and the Government of Germany in cooperation with the Governments of Australia and the United Kingdom.</li> <li>• Target audience was principally governmental heads of departments dealing with energy, agriculture, and water issues.</li> </ul>
The seventh SADC Multi-Stakeholder Water Dialogue: 'Watering Development in SADC: The Central Role of Water in Driving Industrialization'	2015, Windhoek, Namibia	<ul style="list-style-type: none"> <li>• The SADC Regional Industrialisation Roadmap that was developed indicated the important role of water in energy and food security, and demonstrated its role in industrialisation.</li> <li>• Stakeholders validated the RSAP IV which stresses the linkages between the nexus approach and industrialisation.</li> <li>• Special joint meeting with water and energy ministers took place in 2015 in Botswana and called for meaningful engagement of all relevant sectors.</li> </ul>
The eighth SADC Multi-Stakeholder Water Dialogue: 'Watering Development in SADC: Fostering Regional Value Chains and Job Creation Through the Water–Energy–Food Nexus'	2017, Boksburg, South Africa	<ul style="list-style-type: none"> <li>• Launch of the SADC–EU Nexus Dialogues Project.</li> <li>• Initiated the development of the Nexus Governance Framework and criteria of SADC Nexus Dialogue Project Investment Framework.</li> </ul>

20. Source: [Global Water Partnership Southern Africa](#) (2019a).



Table 12. SADC–EU Nexus Dialogues Project, Phases I–II.<sup>21</sup>

	Title	Time and location	Key highlights
Regional-level dialogue events	Ninth SADC MSD	March 2019, Johannesburg, South Africa	<ul style="list-style-type: none"> <li>Stakeholder discussion on applying WEF nexus approach in investment processes.</li> <li>Presented youth engagement in WEF sectors as essential for achieving the Sustainable Development Goals (SDGs). Focused on SADC industrialisation agenda.</li> </ul>
	Joint meeting of SADC water and energy ministers	May 2019, Windhoek, Namibia	Discussed the draft SADC WEF Nexus Governance Framework.
	Regional Workshop on the Regional WEF Nexus Governance Framework	September 2019, Johannesburg, South Africa	<ul style="list-style-type: none"> <li>Validated the SADC WEF Nexus Governance Framework, Investment Project Screening Tool and Guidelines.</li> <li>Tested the relevance of a web-based tool for identifying investment projects at the national level.</li> </ul>
	Joint meeting of SADC water and energy ministers	October 2020, Mozambique (virtual)	Adopted the SADC WEF Nexus Governance Framework.
	Tenth SADC MSD	September 2022, Maseru, Lesotho	Identified strategies that will bolster the productive capacities for water, food, and energy security in the region while ensuring environmental security.
National-level dialogue events	Lesotho Nexus Dialogue	December 2021, Berea District, Lesotho	Discussed the outcomes of the Lesotho nexus background paper and potential application of WEF nexus approach in the Lesotho Integrated Catchment Management (ICM) project.
	Zambia Nexus Dialogue	December 2021, Lusaka, Zambia	Presentation on the Zambia WEF nexus background paper.
	Malawi Nexus Dialogue	December 2021, Malawi	<ul style="list-style-type: none"> <li>Discussed the WEF nexus background paper for Malawi.</li> <li>Served as a follow-up to the adoption of Decision 30 by SADC ministers of energy and water during their joint meeting in Malawi several weeks earlier, which urged member states to support and participate actively in the WEF national dialogues.</li> </ul>
	Tanzania Nexus Dialogue	April 2022, Dar es Salaam, Tanzania	Discussed the WEF nexus challenges and potential investment opportunities with WEF sectoral ministers.
	Madagascar WEF Dialogue	May 2022, Madagascar	<ul style="list-style-type: none"> <li>Commitment to establishing a nexus technical working group among the governmental representatives at the country level.</li> <li>Identified national WEF nexus investments that have a potential to be added to the AIP SDG Water Investments Support Programme's project pipeline.</li> </ul>
	Zimbabwe Nexus Dialogue	June 2022, Harare, Zimbabwe	Discussed challenges for implementing WEF projects in Zimbabwe and identified a few priority WEF nexus national investment projects.

21. Source: Global Water Partnership Southern Africa ([2019](#), [2019a](#), [2021a](#), [2022](#), [2022a](#), [2022b](#); GIZ [2022](#), [2022a](#)).

### 3. Key results and outcomes from the regional Multi-stakeholder dialogue

The SADC dialogues have led to positive outcomes for regional cooperation in two areas, as discussed below.

#### Key outcomes and spin-off actions from the SADC regional MSD

- **Adoption of common regional policy framework:** The SADC WEF Nexus Regional Governance Framework was adopted by the SADC water and energy ministers in October 2020. In addition, the Southern Africa Youth WEF Nexus Innovation Network (SAYWIN) was established to foster integrated planning and implementation of the WEF approach across SADC.
- **Adoption of the nexus approach in basin-level planning:** The nexus approach was adopted in the Lake Kivu and Ruzizi River Basin, Zambezi Basin, Save River Basin, and Limpopo River Basin.

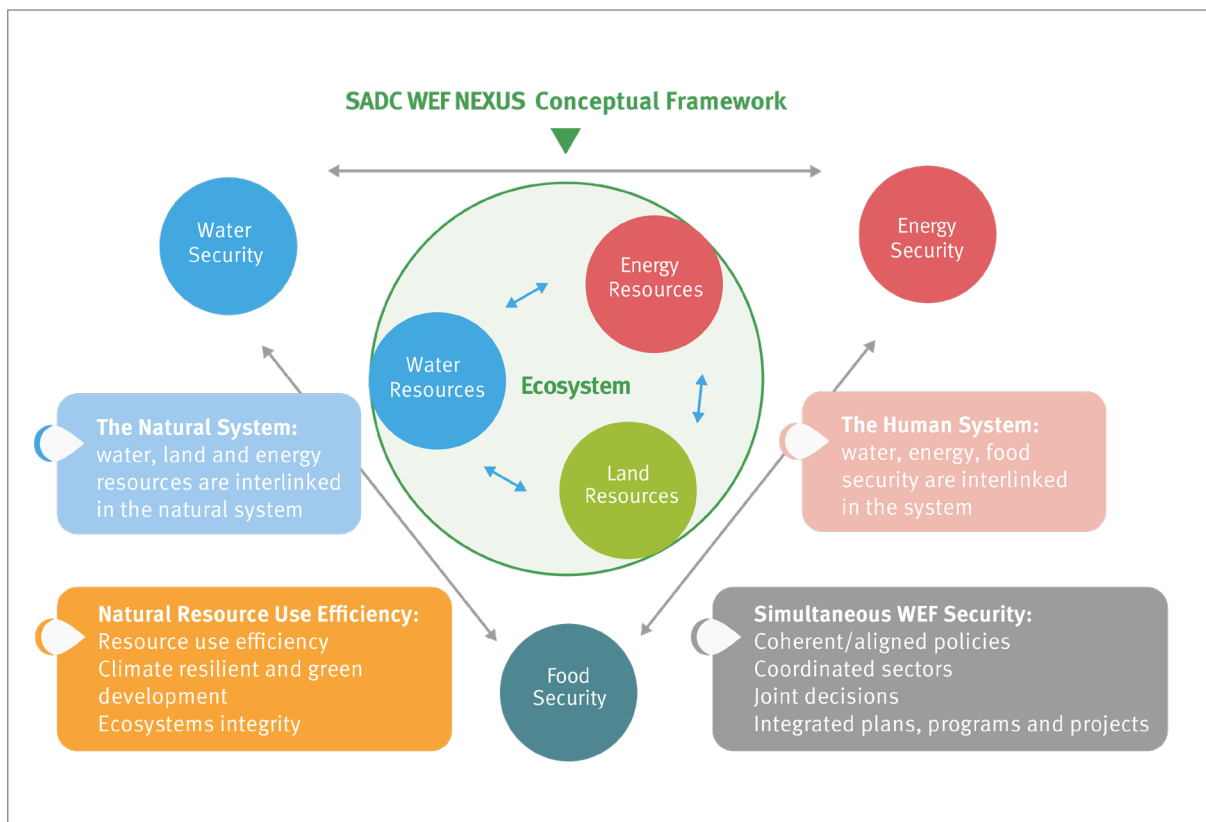
Adoption of the nexus approach at both the regional and basin levels is expected to accelerate integration among sectoral policies at both levels. The following provides more details of these outcomes.

#### 3.1. SADC WEF Nexus Regional Governance Framework

The adoption of the SADC WEF Nexus Regional Governance Framework was a major outcome in the cooperation process and nexus implementation. Officially adopted in October 2020 by the SADC water and energy ministers (Global Water Partnership Southern Africa, 2021) together with the Investment Project Screening Tool and Guidelines, the framework provided guidance on coordinating three sectors at the regional, technical level and within the SADC Secretariat, as well as strengthening regional multi-stakeholder platforms (Takawira, 2021). Developed during Phase I of the SADC-EU Nexus Regional Dialogues Project (2017–2019) as a conceptual approach responding to common challenges based on background nexus assessments in SADC countries (**Figure 19**), the framework is expected to promote the WEF nexus agenda in the SADC region and maintain a high level of political buy-in.

A common understanding of the WEF nexus approach in the region (which is a prerequisite for political support) was gradually achieved as the dialogue discussions evolved. While the outcomes of Phase I (2007–2011) were key for securing stronger political will for cooperation among the countries, in Phase II (2012–2017) the WEF nexus approach took centre stage in the dialogues. Stronger political buy-in at the ministerial level stemmed from a broader range of development partners being present at the dialogue workshops, culminating in the first Water and Energy Ministers Meeting in 2015 in Botswana, whose commitment to integrate the WEF nexus approach at the national levels later took the form of the 2018 SADC Council Decision. The newly introduced format of discussing water and energy issues at the ministerial level has been successful and continued from 2016 onwards, resulting in the incorporation of the nexus programme into the RSAP IV (2016–2020).

**Figure 19. The SADC WEF Nexus Conceptual Framework.**  
Source: Southern African Development Community (2019).



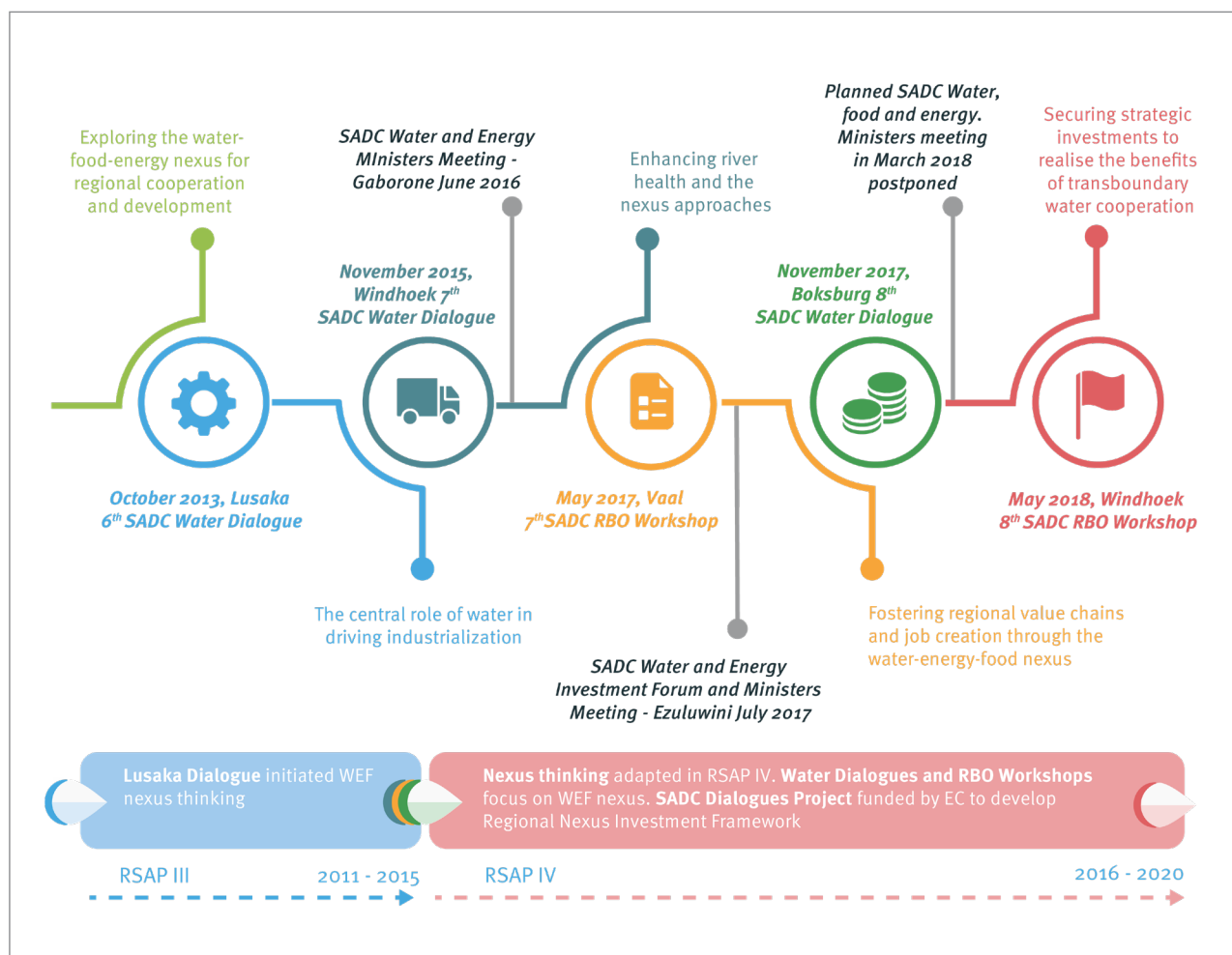
The WEF nexus approach has since received formal political recognition as a primary regional tool to meet water, energy, and food security targets, and to improve natural resource use efficiencies in the region, driven by the Nexus Working Group established within the SADC Secretariat (Kabeya et al., 2022). These commitments for sectoral integration were subsequently reflected in the revised Regional Indicative Strategic Development Plan (2015–2020), which serves as a blueprint for regional integration. **Figure 20** shows the interlinkages between the dialogues and building on the outcomes of previous exchanges. Here we can trace the evolution of the WEF nexus approach starting at the regional level, then spinning over to the national and basin levels (Southern African Development Community, 2019).

The implementation of the Regional Framework within the SADC-EU Nexus Regional Dialogues Project takes place through establishing an SADC regional mechanism for technical coordination among three sectors. For this purpose, the SADC Nexus Working Group has been identifying potential nexus investment projects (e.g. in Madagascar, Niger and Zambia) ([Global Water Partnership Southern Africa, 2021](#))

through the newly adopted Investment Project Screening Tool. In particular, the nexus dialogues in Zambia and Madagascar have identified national nexus projects that could feed into the project pipeline being developed by the AIP SDG Investments Support Programme<sup>22</sup> for further project preparation support with strengthening the WEF nexus approach.

In Madagascar, potential projects focus on multipurpose hydroelectric dams, renewable energy, IWRM, and strengthening the existing institutions and structures (Global Water Partnership Southern Africa, 2022b). In Zambia, stakeholders have identified the following investment projects: the Climate Resilient Rural Water Supply and Sanitation project, the Pilot Program for Climate Resilience (PPCRII), Strengthening Climate Resilience of Agricultural Livelihoods in Agro-Ecological Regions I and II (SCRALA), Enhanced Smallholder Agribusiness Promotion Programme (E-SAPP), Climate Resilient Livestock Management Project (CRLMP), and Irrigation Development Support Project (IDSP) ([Global Water Partnership Southern Africa, 2022a](#)).

**Figure 20. Nexus thinking embedded in regional dialogues as part of implementing the Regional Strategic Action Plan.**  
Source: Global Water Partnership Southern Africa (2018).



It is also notable that the ninth dialogue influenced the creation of the SAYWIN with the support of GWP SA, thanks to the inclusion of ‘youth engagement’ as an anchoring theme of the dialogue. This initiative aims to establish a regional youth network and foster integrated planning and implementation in WEF nexus projects in all 16 member states (GWP, 2019b). Catalysing youth, who will be future leaders of the WEF nexus approach, is important, particularly in this region with a very youthful population.

### 3.2. Using the nexus approach in basin-level planning

Since securing the commitment from the highest political levels and becoming a part of the yearly political agenda among the SADC countries, the WEF nexus approach has produced numerous effects at the country and basin levels (Takawira, 2021). At the basin level, the political commitments reached at the sixth dialogue influenced the agenda of the seventh RBO Workshop in 2017, as well as the eighth SADC River Basin Organisation (RBO) Workshop in Windhoek, convened by OKACOM, SADC Water Division, and GWP SA.

22. Source: The Continental Africa Water Investment Programme (AIP), executed by GWP SA, seeks to close the water investment gap and contribute towards SDG 6 targets on water and sanitation by addressing systemic challenges in the preparation and delivery of water investments. The AIP SDG Investments Support Programme aims to promote the integration of SDG water investments into planning, decision-making, and implementation of SDGs on energy, food, ecosystems, and health while also aligning with COVID-19 economic recovery plans. The programme is implemented until 2025, covering 18 countries

Political recognition of the WEF nexus approach resulted in affirming its importance for investment facilitation at the basin level during the eighth dialogue in 2017, while providing a platform for RBOs to realise the benefits of transboundary water cooperation and basin-wide planning (Global Water Partnership Southern Africa, 2018). Influenced by the eighth dialogue, the 2018 third Zambezi Basin Stakeholder Forum analysed ways to apply the approach at the basin level and called for the promotion of multisector investments in the Zambezi Basin ([Zambezi Watercourse Commission](#), 2018). The forum discussions continued through a basin-wide analysis undertaken by the World Bank in the Zambezi River Basin to identify multisector investments in 2019, within the framework of the SADC-EU Nexus Regional Dialogues Project ([International Union for Conservation of Nature](#), 2019).

The impact on basin-level planning and applying the nexus approach to transboundary water governance can also be traced through the project applying the nexus approach to address the negative impacts of hydropower development and gas extraction on water quality, titled Support to the Integrated Management of Water Resources of the Lake Kivu and Ruzizi River Basin ([United Nations Economic Commission for Europe](#), 2021). The project is supporting the RBO capacity (Lake Kivu and Ruzizi Basin Authority) to institutionalise the WEF nexus approach to transboundary water management involving multiple sectors at multiple scales.

Another prominent example of influencing outcomes at the basin level is the ninth SADC RBOs/SWIs (Shared Watercourse Institutions) Workshop in 2021, which was convened under the auspices of the ZAMCOM. The WEF nexus approach has been successfully integrated in the Save River Basin Programme, specifically in the livelihood projects to address transboundary challenges (Zambezi Watercourse Commission and Southern African Development Community, 2021). Besides integrating the WEF approach into ZAMCOM planning, ZAMCOM representatives have committed to better using the WHEF (water–health–energy–food) nexus for resolving the competing uses of water, which has already been incorporated into the Strategic Plan for the Zambezi Watercourse. These commitments will be achieved through stakeholder dialogues during joint planning.

Similar outcomes could be seen at the basin level in the Limpopo River Basin, where GWP SA supports the Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin project to align LIMCOM's strategic framework with the SADC Nexus Investment Framework, which involves the LIMCOM Nexus Assessment to identify opportunities and investments. Such support will contribute to the TDA and the SAP development

process. The financing for the project comes from a long-standing financing partner of the SADC dialogues, the USAID Resilience in the Limpopo Basin (RESILIM) programme ([Global Environment Facility](#), 2019).

These basin-level activities were used to demonstrate concrete benefits of greater transboundary water cooperation using the WEF nexus approach. Based on previously conducted basin assessments, the RBO workshops served as a platform to identify the role of basin organisations in implementing multisector investment programmes in parallel with regional discussions on similar matters. This highlights the progress of cooperation on its way from collaboration to joint action, such as joint investments and basin-wide planning.

## 4. Enabling factors

Having considered the evolution and the spin-off effects of the regional MSD in SADC, we now focus on analysing some of the key factors that influenced the dialogue process.

### 4.1. Inclusion and role of facilitators

The MSD process in Southern Africa has benefited from having SADC as the principal convening actor. Trust in the organisation played a key role in fostering regional integration in the management of water resources. Being a powerful regional organisation, SADC had the means to convene crucial stakeholders under the umbrella of implementing its regional water programme, through rolling Regional Strategic Action Plans. Having strong commitment to implementing the policies agreed at the regional level, the SADC member states were eager to discuss their national and basin-level challenges cooperatively. The expertise of SADC as a convener further helped define the conceptual understanding and key objectives of applying the WEF nexus approach for regional development.

GWP SA has also played a central role in facilitating the SADC Multi-Stakeholder Water Dialogues as a SADC implementing partner, which further helped drive the MSD process. The dialogues were implemented to contribute to the overall GWP SA support to implementation of the SADC regional water programme and the Regional Strategic Action Plan for IWRM (RSAP-IWRM). Following the emergence of the EU as a new key donor, GWP SA was mandated to technically support the EU WEF Nexus Dialogue Project (Phase I and Phase II) as the SADC implementing partner, jointly funded by the European Commission and SADC. Within this framework, facilitation by the GWP SA was crucial for inclusion of non-State actors and resulted in youth engagement and empowerment in the sectors critical to the WEF nexus. The expertise of the



facilitator helped strike a balance between convening high-level discussions at the ministerial level, and at the same time influencing the multi-stakeholder consultative processes at the country level.

#### **4.2. Using existing regional political and economic processes**

Another key enabling factor is that the SADC regional dialogues have been building on existing political and economic processes under the SADC institutional mechanisms. The dialogue objectives were well aligned with commitments from SADC member states towards regional integration and helped advance the discussion from general challenges in water management within the region to focused joint planning on using the WEF approach to address common issues in three sectors – water, energy, and agriculture. As reflected in the SADC Water Strategy and Revised SADC Protocol on Shared Watercourses, member states committed to align their national policies by means of coordinated development, utilisation, protection, and control of national and transboundary water resources in the SADC region.

Implementation of said commitments took place through the development and operationalisation of RSAPs, two of which were discussed and adopted during the SADC regional dialogues. For example, RSAP IV included key activities implementing the WEF nexus approach at the national level to advance integration of national water, energy, and agricultural policies.

The dialogue events' integration within existing political processes influenced new formats of cooperation. In particular, the political will to adopt the WEF nexus approach within SADC was clearly evidenced by the recurring joint ministerial meeting, which had not been the case previously. These ministerial meetings were triggered and influenced by dialogue outcomes as well as new issues emerging during discussions, hence the dialogues being a platform for multi-stakeholder discussions and agreeing on actionable outcomes (Global Water Partnership Southern Africa, 2018).

#### **4.3. Fostering social learning across scales**

The well-designed knowledge management components of the MSD processes certainly contributed to its positive outcomes. Throughout dialogue events, the workshop design aimed for peer-to-peer learning and exchange among stakeholders at various scales. During Phase I, the target stakeholder group was exposed to the IWRM concepts and their practical illustrations on the ground, while also having an open dialogue with the panellists. The dialogues were structured in such a way to allow for background information

to be shared in advance. During some of the meetings (such as the second dialogue), the key messages from the dialogue were filmed and further disseminated through regional television media, which allowed for greater participation and ownership by the local stakeholders (Global Water Partnership Southern Africa, 2018).

Furthermore, the external communication materials have often been specifically targeted to stakeholders from the non-water sector, thus communicating messages to the decision-makers by using clear language. The lessons learned from Phase I of the dialogues were incorporated into Phase II, particularly the need to engage on a deeper level with engaged stakeholders and narrowing down the theme for discussion, rather than allowing for a wider agenda. The media played a particularly important role in consolidating IWRM's role in the political agenda, by creating an environment for IWRM advocates that built on SADC's media capacity building with international press services (Global Water Partnership Southern Africa, 2018).

The incremental presence of actors beyond the water sector also helped enhance the social learning processes. Initially, the dialogues were attended only by representatives from the water sector. However, there was a clear increase in technical contributions from the other sectors with each new exchange, beginning with the energy sector and later spinning off into the agricultural sector. The dialogue workshops were often scheduled with a view to upcoming ministerial meetings (e.g. SADC Council of Ministers) or basin-level events (e.g. RBO workshops), which allowed the results of a wider regional dialogue to feed into more focused exchanges and helped obtain political adoption of the WEF nexus framework. As such, the results of the initial scoping mission through the SADC dialogues platform contributed to establishing the EU Nexus Dialogue Project, attracting new financing partners, and continuing the dialogue format on an even more advanced level.

#### **4.4. Leveraging sustainable finance**

The sustainability of funding for the SADC dialogues has enabled the MSD process to have a long-lasting presence and deeper impact on transboundary cooperation in the region. This was achieved by securing funding for the very initial phases, negotiating core funding from a large international partner, and linking upcoming activities with existing regional economic processes. From 2007 until 2017, DANIDA supported the SADC Multi-Stakeholder Water Dialogues which aimed to use this platform as a bridge between multiple sectors, encouraging their representatives to discuss transboundary and cross-sectoral water issues. The support from DANIDA has provided the necessary base funding for the SADC MSDs.



At subsequent phases or even for particular dialogues, facilitators have been successfully leveraging additional funding from active regional projects with common objectives, in order to boost cooperation efforts. Using the DANIDA core funding support, GWP SA and SADC were particularly active in terms of fundraising further resources from other regional projects and partners (Global Water Partnership Southern Africa, 2018). For instance, the 2013 sixth Lusaka Dialogue was supported by UK Aid, the Climate Resilient Infrastructure Development Fund (CRIDF), the USAID RESILIM programme, the GWP Global Water, Climate and Development Programme (WACDEP); the 2015 seventh Windhoek Dialogue – supported by the CRIDF, RESILIM, and SADC Transboundary Water Management (TWM) Programme (UK Aid and BMZ support through GIZ); the 2017 eighth Boksburg Dialogue – supported by the GIZ SADC TWM Programme and the EU Nexus Dialogue Programme.

This ultimately led to the EU entering the dialogue process as a key financing actor, which further boosted the existing exchange on implementing the WEF nexus approach in the region. The EU's ability to attract new financing partners stemmed from its experience in implementing the MSDs and using this platform to sustain the level of political commitment needed in order to continue the exchanges. Launched at the 2017 ninth dialogue, the EU WEF nexus project has been continuing the efforts of the initial SADC dialogues, due to strong political commitment created by the awareness-raising activities at the basin and global levels. While its Phase I laid the foundations for regional mechanisms and technical coordination, it also created an enabling environment for Phase II in 2021–2023 with the continued support from the BMZ, EU DEVCO and GIZ ([Beerhalter, 2018](#)).









# Chapter 5:

# **Conclusion and Discussion**



With the right approaches, partners, and enabling environment, regional multi-stakeholder dialogues can be a powerful mechanism in fostering cooperation over shared waters.

# Chapter 5: Conclusion and Discussion

## 1. Discussion on regional multi-stakeholder dialogue contributions to advancing transboundary water cooperation

This paper has discussed how regional multi-stakeholder dialogues (MSDs) can contribute to advancing transboundary water cooperation, through examining the evolution and results of dialogue initiatives that have developed in South East Europe, Southern Africa, and South Asia. These case studies have offered insights into how regional dialogues were initiated and nurtured, and how they resulted in various outputs and results that influenced the types and levels of transboundary water cooperation to different degrees.

This concluding chapter summarises key findings from the analysis of case studies, particularly regarding the two key objectives of this paper, namely: 1) to identify the extent to which regional MSDs contribute to advancing transboundary water cooperation; and 2) to reflect upon key factors that enable regional MSDs to positively influence transboundary water cooperation. Through these key findings, this conclusion also aims to provide insights into how to best establish and sustain regional MSDs to facilitate transboundary water cooperation.

The level and type of results of regional dialogues – i.e. advancing transboundary cooperation at the basin level – are influenced by a range of factors. These include: the background in each area and basin; the existing level of cooperation; geopolitical and socio-economic situations; water uses; institutional and legal frameworks, and; human and financial capacities. These factors – or, better, a combined set of factors that differ for different basins – cannot be influenced by the regional dialogues. Rather, they create the backdrop against which the regional dialogues unravel their activities and seek results. An exception is human capacities, which can be influenced by regional dialogues. Thus, to deliver results, the regional dialogues need to adapt to the conditions created by the combination of the aforementioned factors.

These factors are not assessed for each case in this paper. However, the factors that can be controlled by the regional dialogues, or convenor of the dialogues – what we refer to as ‘enabling factors’ – are assessed. The three case studies indicate that regional dialogues can lead to the establishment of conditions or processes for enhanced transboundary-basin-level collaboration. In these cases, there has been a range of results influencing both basins where cooperation was non-existent and basins where cooperation was advanced. These

include: basin-level dialogues that led to the establishment of official cooperation or collaboration among Track 2 and 3 level actors, joint actions towards basin management, or adoption of policy that influences the management of transboundary basins.

**In South East Europe**, the regional MSD was initiated within a post-conflict environment while countries were rebuilding and regional integration was high on the political agenda. The existence of the United Nations Economic Commission for Europe (UNECE) Water Convention and the EU water- and environment-related body of law provided a harmonised set of principles and provisions for transboundary water resources management that constituted the basis for, and enabled, the discussions during the dialogues. The regional process resulted in basin-level dialogues being established in the Drin Basin and the Mesta/Nestos Basin. The MSD also enabled the initiation of cooperation in the Dinaric Karst Transboundary Aquifer System, created the conditions for advanced cooperation in the Drina Basin, and assisted in enhancing cooperation in the Sava River Basin.

**In South Asia**, complex regional politics and asymmetric relationships have dominated the regional context, translating into competition over shared resources. Historically, countries approached transboundary water cooperation at the bilateral level, not necessarily taking a whole-of-basin approach. Geography also affects this situation, since as a middle riparian country, India shares three key river basins (Indus, Ganges, and Brahmaputra) more directly with its neighbours Bangladesh, Bhutan, China, Nepal, and Pakistan. In this context, the significance of the Abu Dhabi Dialogue (ADD) lies in the fact this multi-stakeholder regional dialogue took place in an environment where historically, the level of regional cooperation has been rather low without any strong political and economic integration mechanism. The key conclusion from this process that took place between 2006 and 2012 was to continue the dialogue at the basin levels, which provided a breakthrough in turning the bilateral-focused conversation of the past into basin-level conversation. Subsequent basin-level dialogues proceeded in the Indus, the Brahmaputra, and the Sundarbans while for the Ganges, basin-level dialogue did not materialise and national-level initiatives followed.

**In Southern Africa**, the dialogue process took the form of Southern African Development Community (SADC) water dialogues. The SADC countries had already agreed on the SADC Protocol on Shared Waters, a regional framework agreement that outlines the key principles of cooperation. The dialogue started in 2007 and is still under way. The key outcome is the adoption of harmonised/common approaches in water resources management/basin management in

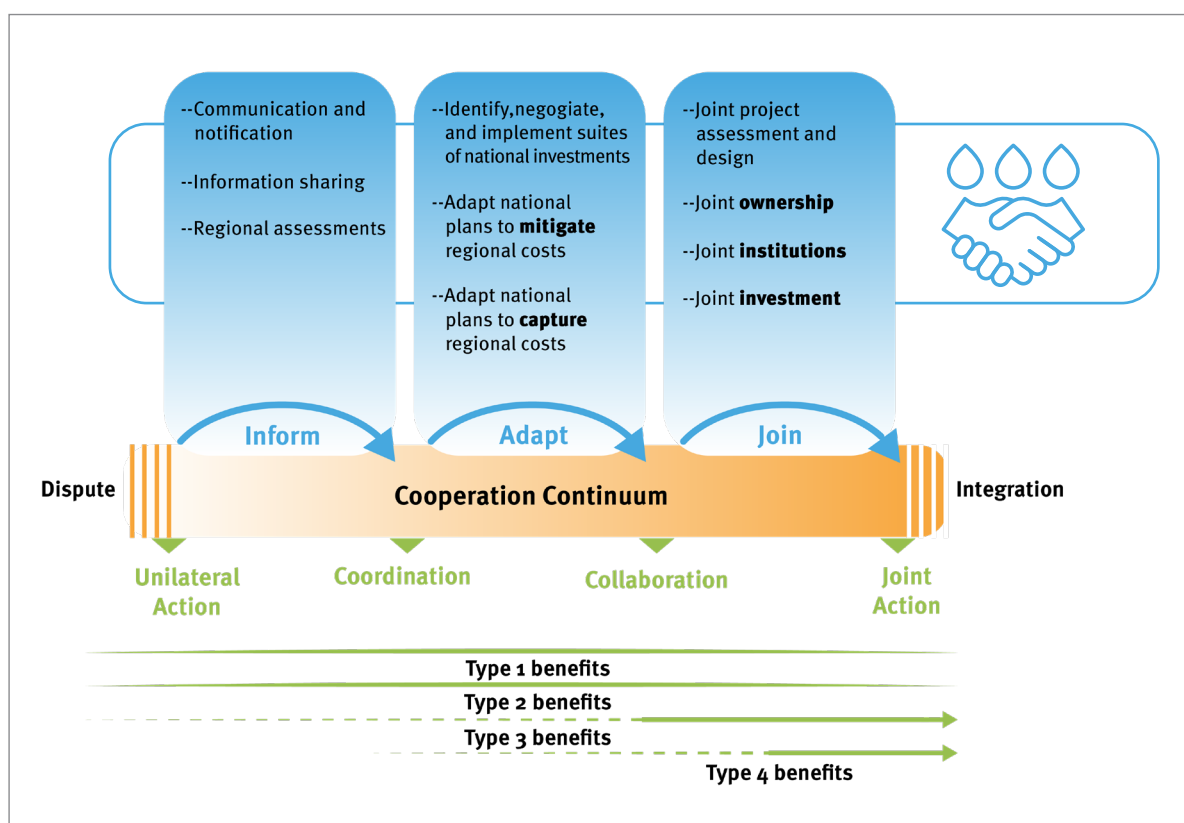


the form of the Water–Energy–Food Governance Nexus Framework, which forms a political commitment to ensure water uses and management are balanced through different sectors and countries across borders. Although not constituting a legal framework, the nexus-related body of declarations, SADC documents, etc. resemble the European Union Water Framework Directive (EU WFD) in terms of creating a harmonised approach adopted by countries

towards managing basins, hence creating a set of potential entry points for initiating or advancing cooperation in transboundary basins.

In Chapter 1, we introduced the cooperation continuum framework developed by [Sadoff and Grey \(2005\)](#), which we will now use to analyse how regional dialogues advanced transboundary cooperation at each basin level.

**Figure 1. The cooperation continuum. Seen in chapter 1.**  
Source: Adapted from Sadoff and Grey (2005).



## 1.1. Regional multi-stakeholder dialogue contributions to basin-wide cooperation where it did not exist previously

Where basin-wide cooperation was not in place, the analysis shows that regional dialogues have had positive effects in terms of advancing cooperation. There have been cases where spin-off basin dialogue processes have been initiated, some of which resulted in countries signing agreements or taking joint action.

The Drin Basin dialogue process was a direct result of the South East Europe (SEE) dialogue. It led to the signing of a Memorandum of Understanding (MoU) for the management of the basin. This Drin MoU established a joint coordination mechanism and provided for short-, medium-, and long-term measures towards enhanced basin management. The resulting joint action manifests in the information management system established, the transboundary diagnostic assessment jointly developed, and the Strategic Action Programme adopted at the ministerial level. These are some of the MoU-provided actions supported by the Global Environment Facility (GEF), the Adaptation Fund (AF), and donors that led to the riparians' decision to develop a draft text for an international agreement and negotiate its signing. Referring to the cooperation continuum framework discussed in Chapter 1, we can observe that regional dialogue has catalysed countries to coordinate (starting with basin-level dialogues) and take joint action (such as signing of the Drin MoU, establishing a joint coordination mechanism, and developing joint projects).

Nevertheless, the Mesta/Nestos dialogue process, which had its roots in the same regional dialogue, had no result other than raising awareness among stakeholders. The main reason for this was the lack of political will from both countries, which translated into the reluctance of representatives of institutions to support the dialogue's continuation.

In South Asia, the ADD catalysed the initiation of basin/landscape-level dialogues in the Indus River and Sundarbans Landscape. The Indus dialogue, which took the form of a Track 2 dialogue (Indus Forum) to start with, evolved into the Indus Basin Knowledge Forum which incorporated more technical aspects and conversations over basin-related issues. Direct linkages between ADD and the initiation of the Brahmaputra dialogue were not clearly identified through this study. Nevertheless, the Brahmaputra dialogue has provided space for multi-stakeholders in four riparian countries to meet and talk at least annually, resulting in information- and knowledge-sharing, which are key steps towards creating trust and confidence. The dialogue started as 'people-to-people' (Track 3) dialogue before shifting towards Track 2 and Track 1.5 dialogues. Spin-off from the Ganges River MSD had a slightly different nature as many of the activities focused on the national level and did not clearly result in either coordination or collaboration at the whole-basin level.

Both the Indus and Brahmaputra dialogues engaged State and non-State actors, and resulted in dialogues at a whole-basin scale involving stakeholders from all riparian countries, rather than taking the conversation bilaterally, which had historically been the case for these shared waters in South Asia. While these dialogues did not result in Track 1 level coordination nor joint action among States (which was the case for SEE and SADC dialogues), concrete joint action materialised at Track 2 and 3 levels, with researchers and academics from the riparian States collaborating on joint research. Reflecting on these results in the continuum framework, one can argue that both dialogues generally contributed to cooperation and advanced to 'coordination' through information-sharing among the stakeholders who joined them.

The South Asia regional dialogue resulted in advancing Track 1 level cooperation over the Sundarbans Landscape. The MSD initiated in 2015 catalysed the operationalisation of the MoU on Conservation of the Sundarbans signed in 2011 between Bangladesh and India. The Bangladesh-India Sundarbans Regional Cooperation Initiative (BISRCI) and the Joint Working Group (JWG) that were established as institutional mechanisms to foster the dialogue continued beyond the dialogue period. The process also resulted in Bangladesh and India signing the Protocol on Inland Water Transit and Trade, which empowered policy action to commence an eco-tourism river cruise between Dhaka and Kolkata via the Sundarbans in March 2019 after signing the MoU in 2015. Subsequently, the process also provided inputs for designing and implementing three World-Bank-funded projects that include the Sundarbans Landscape. In reference to the cooperation continuum, the regional dialogue catalysed subsequent landscape-level dialogues where governments and stakeholders coordinated, resulting in ‘joint action’.

## 1.2. Regional multi-stakeholder dialogue contributions to pre-existing basin-level cooperation

In cases where basin-wide cooperation was already in place, regional dialogues have assisted in raising the capacities of staff from joint institutions or further articulating/creating entry points for advanced cooperation.

In the Sava Basin in SEE, cooperation among countries was already advanced following the signing of the Framework Agreement on the Sava River Basin (FASRB) in 2002. This agreement led to the establishment of the International Sava River Basin Commission (ISRBC). In this context, regional dialogue played a role in building the capacity of ISRBC staff who were the key drivers for formulating the FASRB or carrying out its work in its early stages. The development of the ISRBC Public Participation Plan led to enhanced stakeholder engagement. Where coordination already existed, regional dialogues catalysed pre-existing basin agreements to move towards concrete implementation of ‘joint action’ among basin States.

As the Drina Basin is a tributary of the Sava Basin, it is covered by the FASRB. The SEE regional dialogue assisted in deepening cooperation among the riparian countries through a nexus dialogue for the management of the Drina Basin, deepened the discussion regarding renewable energy – and the role of hydropower in particular – and flow regulation in the basin, and led to the development of a Drina Nexus Roadmap/Strategy that describes next steps towards enhanced cooperation, which would lead to ‘collaboration’ among riparian countries.

In Southern Africa, regional cooperation existed prior to regional dialogues as countries had signed the SADC Protocol on Shared Watercourses. The protocol and the existence of SADC as a regional integration body furthered this cooperation in terms of adopting policies and frameworks agreed at the SADC level through the regional dialogues that would be applied in the region and to its transboundary basins.

Such outputs include the ministerial adoption of the SADC Regional Nexus Governance framework, which is a joint policy document illustrating commitment by all countries in the region to use this approach towards integrating sectoral policies. Countries also adopted a revised Regional Indicative Strategic Development Plan based on inputs from dialogues, which serves as a blueprint for SADC’s regional integration agenda. Similarly, at the basin level, the nexus approach was integrated in the Save River Basin Programme, as well

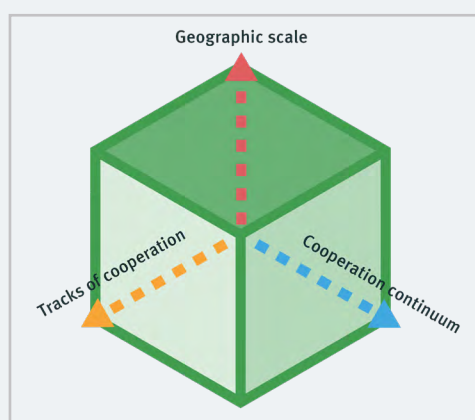
as the Strategic Plan for the Zambezi Watercourse. In the Limpopo River Basin, a project titled Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin was developed, which aims to align the Limpopo Watercourse Commission's (LIMCOM) strategic framework with the SADC Nexus Investment Framework. Reflecting on these results where transboundary basin States have developed specific basin-level frameworks and projects to implement the SADC nexus framework, it appears that regional dialogues catalysed existing cooperation at the respective basin level to have more concrete 'joint action' in the context of the cooperation continuum.

### 1.3. Conclusion on regional multi-stakeholder dialogue contributions to advancing transboundary water cooperation

The first objective of this paper was to understand the extent to which regional MSDs contribute to advancing transboundary water cooperation. As discussed above, all regional dialogues advanced transboundary water cooperation to some extent, varying from case to case. In cases where basin-wide cooperation did not already exist, the regional dialogue played a catalytic role in initiating basin-wide cooperation, or at least in creating a 'safe space' for basin actors to speak with each other and gain trust, which is a critical aspect for cooperation. It catalysed basin-wide dialogues and some degree of cooperation by different actors, depending on the case. Where cooperation already existed, regional dialogue played a role in taking the cooperation to the next stage, particularly for actors to take 'joint action'.

The analysis also suggests an additional dimension that can be added to the existing cooperation continuum framework by Sadoff and Grey (2005). As pointed out in each case study, types of cooperation vary from Track 1 (government to government) to cooperation involving multiple stakeholders (Tracks 1.5, 2, and 3). We also need to consider the geographic and administrative scales and levels of cooperation, as in many cases, cooperation over specific tributaries or bilateral levels can be a starting point for cooperation where basin-scale cooperation faces challenges. Considering these factors, the cooperation continuum framework could be adjusted in the future to consider three dimensions to analyse different types and levels of cooperation, as conceptualised in **Figure 21**.

**Figure 21. Suggested three dimensions of cooperation continuum framework.**  
Source: Adapted from the authors.



Regional dialogues have arguably created an enabling environment for furthering cooperation and bringing different types of benefits at specific regional and basin levels. They have notably led to the creation of communities of practice (CoPs), which are “a group of people who share a concern or passion for something that they do and learn how to do it better as they interact regularly” (Wenger and Wenger, 2015, pg.7). CoPs in this context include a large group of stakeholders in the SEE region, continued basin-level CoPs in the case of SEE and South Asia dialogues, and further strengthening of existing collaboration among CoPs within the SADC region. Building relationships and trust among key stakeholders around transboundary basins is a crucial factor leading to successful cooperation in a specific transboundary basin, and CoPs at the regional and at basin levels created through dialogues can play a critical role in this (CADRI Partnership, 2020; Susskind and Islam, 2012). Regional dialogues can provide neutral and ‘safe’ space for exchange, which catalyses creation of these CoPs. Regional dialogues have also enhanced the capacities of these key stakeholders and members of CoP who are in a position to lead basin- or regional-level cooperation in the future.

Having analysed the outcomes from all three cases, we conclude that regional dialogues contribute to advancing transboundary cooperation at different levels and scales. This ranges from initiation to advancement of basin-level cooperation, and from dialogues to adoption of regional frameworks for advancing cooperation. These can include not only cooperation among Track 1 actors, but also cooperation among Track 2 and 3 actors. The extent of such contribution varies depending on factors such as cooperation status prior to the dialogue. Dialogues also create CoPs among participants, becoming the vehicle to mobilise cooperation by building their capacity while promoting peer-to-peer learning.

## 2. Reflection on the enabling factors

The second objective of this paper was to reflect on the key enabling factors of regional MSD that contribute to advancing transboundary water cooperation. In the introduction, we examined enabling factors that are common to MSDs in general from the existing literature, and examined whether these factors also apply for regional MSDs that are intended to advance transboundary water cooperation. The factors examined are 1) inclusion and role of facilitators; 2) using regional political and economic processes; 3) fostering social learning across scales and; 4) leveraging sustainable finance.



### 2.1. Inclusion and role of facilitators: importance of convening actors and the role of facilitators

Inclusion and role of facilitators were key enabling factors for all three regional dialogues that aimed to advance transboundary water cooperation, in which this aspect translated into the importance of convening actors and the role of facilitators.

Political support by key national, regional, and international institutions who have legitimacy and a mandate to promote and further cooperation was observed as a key enabling factor for the success of regional MSDs. In the case of the SEE regional dialogue, engagement of the World Bank as technical supporter, as well as the convening power of the (then) German Ministry for Environment, Nature Conservation and Nuclear Safety, the Greek Ministry of Foreign Affairs, the UNECE Water Convention and the Austrian Development Agency, were crucial to the success of the dialogues.

In the case of the SADC dialogues, political leadership of SADC was a crucial factor in fostering the dialogues. As all countries were part of SADC regional processes, it was crucial to have SADC as a key convenor of the dialogue. In the case of South Asia regional dialogues, the World Bank was the main convenor. Spin-off basin-level dialogues had different actors who sustained dialogues, including non-governmental organisations (NGOs) and academic institutions. It is notable that the Brahmaputra dialogue was convened by institutions that are more directly connected to the basin’s water and natural resources, which helped establish the foundation for the process to build on the public support and move organically to the next level of engagement.

In all three regional dialogue processes, the existence of committed long-term facilitators was one of the key factors enabling the dialogue process to flourish. In the case of the SEE regional dialogue, the Global Water Partnership Mediterranean (GWP-Med) played this role. In the case of the



SADC regional dialogues, it was GWP Southern Africa, and in the case of the South Asia regional dialogue, it was the World Bank along with the International Water Management Institute (IWMI) and the International Centre for Integrated Mountain Development (ICIMOD). While there are different levels and degrees of relationships among facilitators and key stakeholders among the three case studies, in all cases facilitators are seen as a credible partner by water-related national, regional, and institutional partners, and are generally considered as relatively neutral convenors and facilitators. The long-term commitment of the facilitators ensured an eventual spin-off effect in moving transboundary water cooperation forward.



## 2.2. Regional political and economic context

The regional political and economic context gave the dialogues legitimacy, particularly in the case of the SADC regional dialogues and SEE regional dialogues. The SADC dialogues took place in the context where regional governments (SADC member states) had signed a regional binding agreement to collaborate over transboundary water (SADC Protocol on Shared Watercourses). This enabling environment allowed regional dialogues to take place in a context aligning with the SADC objectives: to advance socio-economic development and poverty reduction.

In the case of SEE, countries in the region shared the common objective of European Union (EU) integration, an important driving factor that affects the socio-political-economic development of countries in the region. This driver has also incentivised countries to closely follow the EU Water Framework Directive as well as the subsequent national transposition of the EU acquis into national legislation, as a vehicle for coordinating basin management plans in transboundary basins.

In contrast, the analysis of South Asia dialogues did not indicate clear use of existing regional political and economic processes. A lack of coherent political and economic processes and regional actors that would anchor such processes appears to be the reason for this and may, in turn, pose a challenge for further development of (particularly) Track 1 cooperation among regional governments. Furthermore, the political economy situation in the region did not allow the Ganges River dialogue to take place at the multi-country scale, despite its importance for moving basin-level cooperation forward.

Experience from these case studies shows that regional MSDs tend to be more impactful if they can align with, and embed themselves as part of, larger regional political and economic processes and entities such as the EU or the SADC. This alignment can take multiple forms, such as mobilising stakeholders that already know and work with each other through other regional processes, organising MSD events as part of (or back-to-back with) other political economic conferences, and centring and linking MSD activities to serve the vision and priorities of the regional political and economic agenda.



## 2.3. Fostering social learning across scales: design and structure of dialogues

Analysis of three regional dialogues showed that the design and structure of dialogues were key to fostering social learning across scales, particularly for dialogues aimed at advancing transboundary water cooperation, which is an often politicised and sensitive subject.

Conversations and discussions during dialogues centred around specific topics. As there are myriad issues around transboundary water resources, a wide range of topics were discussed in all the dialogues, ranging from the Water–Energy–Food (WEF) nexus, climate change and water-related disasters, to groundwater management. Topics were strategically and carefully chosen, depending on the process and timing of these dialogues. Dialogues and events were carefully designed so as not to touch on politically sensitive issues related to the management of any of the basins per se. Transboundary themes and issues already acknowledged as such by riparian States or cooperative management challenges were used as the basis for technical discussions on solutions. Categorising issues as those least contested, moderately contested, and immensely contested, and prioritising the least contested to appear on the MSD agenda at the early stage to reach consensus, helped create a positive environment.

Rule of engagement during the dialogue were another important design factor. The adoption of the Chatham House Rule for dialogues in South Asia created an environment where participants were able to express their opinions without being concerned about how the information would be utilised beyond the dialogue.

The analysis of the SEE dialogue revealed that adopting a long-term perspective helped build capacity for future changes in governance structures as rebuilding of the region took place. Supplementing the anchoring theme of dialogue

with a new topic in response to regional socio-economic developments proved to be very effective in sustaining high stakeholder engagement. In addition, each dialogue agenda had a set of roundtables addressing specific issues at the national and basin scales, which broadened stakeholders' outlook by revealing similar challenges in other regions and potential unique solutions to be agreed upon by riparians. The agenda's attention to details such as seating and the mix of stakeholders proved crucial to creating an environment that was conducive to learning. These commonalities and enablers helped identify entry points for cooperation, while the dialogue process established a CoP on anchoring themes (transboundary water resources management (TWRM) and Water–Energy–Food–Ecosystems (WEFE) nexus), which created a high level of trust among key stakeholders.

Combining different approaches was also observed to be a key design factor. For example, holding regional dialogues in between basin-level dialogues, and different political levels of dialogues (i.e. ministerial-level events), helped high-level decision-makers adopt key policies (in the case of SADC) and further concretised basin-level action (in the case of SEE and South Asia). Holding dialogues after site visits, exchange tours, and capacity building activities was also effective in fostering social learning, creating CoPs, and eventually building relationships and trust, which are crucial in fostering transboundary water cooperation.



#### 2.4. Leveraging sustainable financing

In all three dialogues, the existence of financing partners was the key enabling factor to foster dialogues. In the case of SEE, financing from GEF sustained the initial stage of the dialogue process through aligning objectives between IW:Learn and Petersberg Phase II/Athens Declaration Process activities. The successful launch of the dialogue process secured strong support from the World Bank as a key actor in both initiatives. Leveraging additional financing at later dialogue stages was made possible through a dialogue facilitator matchmaking needs with opportunities, in particular involving stakeholders in anticipation of funding opportunities. For the SADC dialogues, financial support from the German Federal Ministry for Economic Cooperation and Development (BMZ), EU DEVCO, and the German Agency for International Cooperation (GIZ) was essential in sustaining the dialogue effort. Regional dialogue continues at the time of writing this paper, with continued financial support from the EU.

In the case of the South Asia dialogue, financing from the World Bank was key to sustaining the dialogue that reached the basin levels. The South Asia Water Initiative's (SAWI) MSD processes at the basin levels and at the regional level through the ADD came to an end, with SAWI/the World Bank providing closer active support to the process in 2020. The process in the Indus Basin, particularly the collaborative research and knowledge generation to inform policy and action, can be expected to develop with the engagement of ICIMOD in anchoring the process through the Upper Indus Basin Network (UIBN). However, in the Ganges and Brahmaputra Basins, the processes that were ongoing over the 2018–2020 period ended in 2020 ([World Bank Group, 2020](#); [World Bank Group, 2022](#)). In the case of the Sundarbans, BISRCI and JWG are still working even after financial support from the World Bank to the Sundarbans dialogue ended. Support by the World Bank has now shifted to investments in the design and implementation of three World-Bank-funded projects for Bangladesh that include the Sustainable Forests and Livelihoods Project (USD 179 million), the Bangladesh Sustainable Coastal and Marine Fisheries Project (USD 272 million), and the proposed India Blue Revolution Program (USD 300 million) ([World Bank Group, 2022](#)).

Sustainable financing is a key challenge for effective continuation of the dialogues. While the key objective of the regional dialogues that are the focus of this paper is to advance transboundary water cooperation, it could be argued that the end point of such dialogues is the development of concrete basin-level cooperation. In this case, the need for financing can be shifted towards concretising more basin-specific cooperation seen in, for instance, investment by GEF and the Adaptation Fund in the Drin Basin, as well as World Bank project investments in Bangladesh that include support for the Sundarbans.

Deciding when and where regional dialogues should finish may depend on their key objectives (in this case, advancing transboundary water cooperation). Where many transboundary basins exist, regional dialogues can continue advocating for and fostering concrete cooperation in specific basins. Once cooperation has been established, regional dialogues can still play a role in furthering cooperation, becoming the avenue for peer-to-peer learning among basins and countries within the region. Dialogues also have the potential to advance regional stability, peace, and security, which are type four benefits as discussed by [Sadoff and Grey \(2005\)](#).

In terms of financing, the recent COVID-19 pandemic has added a new dimension to the need for finance in sustaining regional dialogues: while face-to-face interaction is crucial in building relationships, trust, and CoPs that can foster cooperation, a combination of online or hybrid regional dialogues, along with face-to-face events, can reduce the cost involved in regional dialogues and contribute to their long-term sustainability.

### 3. Looking forward: regional multi-stakeholder dialogues as a pathway to advance transboundary water cooperation

Our analysis of three regional MSDs has proved that these dialogues can catalyse/create an enabling environment for initiating or furthering transboundary basin-level cooperation. The approach can be replicated in other parts of the world where accelerating transboundary water cooperation is critical. A dialogue at the level of a defined geographical region (e.g. South Asia or South East Europe) or an economic cooperation area (e.g. SADC) would seek to enable pathways to enhance transboundary cooperation, for instance through: identifying practical solutions for transboundary problems where basin-/aquifer-level application would create an entry point for cooperation among States; agreeing on a regional code of conduct for transboundary water management that would in turn enable the States to work together to address basin-level transboundary issues; or creating spin-off dialogues and initiatives and actions for transboundary cooperation at the basin or aquifer level. Dialogues can also play a role in bringing certain topics of common interest into the regional political agenda. They also create a CoP of basin practitioners, who start to build relationships and trust.

A 'traditional' basin-/aquifer-level dialogue or any participatory planning process allows a wide range of stakeholders to make their voices heard and creates a sense of ownership around the process and its results. This is also true in multi-stakeholder regional-level dialogues. What is unique about regional dialogues is the fact that they allow stakeholders to exchange on transboundary issues – that are common in nature across the dialogue's spatial scale of reference – and their possible solutions, rather than trying to identify solutions to specific problems in a specific transboundary basin or aquifer. As such, these discussions are typically not 'charged' with the geopolitical and sovereignty aspects of transboundary problems and help bring about the benefits of cooperation. They allow the cross-fertilisation of ideas among participants, with each one bringing its unique experience, facilitate new relationships, and build trust among officials and decision-makers. The common understanding in terms of solutions against common problems, and the relationships and trust developed among officials or important stakeholders, are key to the initiation of basin-level exchanges for transboundary cooperation. The existence of regional frameworks and cooperation processes, whether led by regional institutions or driven by international conventions, provides an enabling environment to foster these exchanges.

A dialogue in basins where cooperation among States is absent or low can facilitate the identification of transboundary problems and the creation of a shared vision among stakeholders on the level and type of cooperation that would enable solutions to these problems. In basins where cooperation is more advanced, dialogues may serve to further enhance cooperation addressing specific/already identified transboundary issues by establishing platforms for cooperation at different levels and with a specific focus or by providing "an opportunity for people and institutions from neighbouring countries or with similar geographic features to discuss the outcomes of long-term regional outlook studies and set up regional information systems, find common solutions, and develop regional strategies" ([International Secretariat of the Dialogue on Water and Climate](#), 2004). In such cases, dialogues enable action towards the ultimate goal of establishing legal and institutional cooperation arrangements. In cases where cooperation is established, dialogues can also facilitate higher levels of ownership by stakeholders in terms of identification of transboundary problems and their possible solutions, thereby enabling sustainable management of resources in transboundary basins.

In 2018, GWP transferred its regional dialogue approach that had been successful in SEE to Central America, where collaboration with the Central American Commission for Environment and Development (CCAD) on the dialogue has already resulted in countries taking joint action to develop regional guidelines on transboundary water. Through this process, GWP Central America and the UNECE Water Convention collaborated with CCAD on conducting training in transboundary water management. GWP Central America plays a key role as joint facilitator of the dialogues alongside CCAD. The dialogue built on several years of GWP Central America's work in the region, working closely with key regional institutions such as CCAD, conducting trainings on international water law, and conducting a regional assessment of transboundary water within Central America (Global Water Partnership, 2022).

In conclusion, regional MSDs have the potential to create entry points for initiating cooperation at the sub-regional level, among States on shared waters extending in multiple basins and aquifers, or at the transboundary basin level on waters shared by two or more States. With the right approaches, partners, and enabling environment, regional MSDs can be a powerful mechanism in fostering cooperation over shared waters.

# References

- Ali, A. (2013) *Indus Basin Floods: Mechanisms, Impacts, and Management*. Asian Development Bank, Mandaluyong City, Philippines. Also available at: <https://think-asia.org/handle/11540/810>
- Bahar, D., Hauptmann, A., Özgüzel, C., and Rapoport, H. (2019) Migration and post-conflict reconstruction: The effect of returning refugees on export performance in the Former Yugoslavia. Working Papers 2019-12, CEPII Research Center. Also available at <https://ideas.repec.org/p/cii/cepidt/2019-12.html>
- Barua, A. (2018) Water diplomacy as an approach to regional cooperation in South Asia: A case from the Brahmaputra basin. *Journal of Hydrology*, **567**: 60–70. Also available at: <https://www.sciencedirect.com/science/article/abs/pii/S0022169418307509>
- Barua, A., Deka, A., Gulati, V., Vij, S., Liao, X., and Qaddumi, H.M. (2019) Re-interpreting cooperation in transboundary waters: bringing experiences from the Brahmaputra basin. *Water*, **11**(12): 2589. Also available at: <https://www.mdpi.com/2073-4441/11/12/2589>
- Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (2021) *History*. [https://bimstec.org/?page\\_id=4863](https://bimstec.org/?page_id=4863)
- Beerhalter, S. (2018) *The Nexus Regional Dialogues (NRD) Programme*. Presentation at DEVCO Environment Week 2018, Brussels. <https://europa.eu/capacity4dev/file/83529/download?token=hbQKcvZr>
- Bishwajit, G., Sarker, S., Kpoghomou, M. A., Gao, H., Jun, L., Yin, D., and Ghosh, S. (2013). Self-sufficiency in rice and food security: a South Asian perspective. *Agriculture & Food Security*, **2**(1): 1–6. Also available at: <https://agricultureandfoodsecurity.biomedcentral.com/articles/10.1186/2048-7010-2-10>
- Brouwer, H., Hiemstra, W., van Vugt, S., and Walters, H. (2013) Analysing stakeholder power dynamics in multi-stakeholder processes: insights of practice from Africa and Asia. *Knowledge Management for Development Journal*, **9**(3): 11–31. Also available at: <https://www.researchgate.net/publication/283417668>
- Brouwer, H., Woodhill, J., Hemmati, M., Verhoosel, K., and van Vugt, S. (2015) *The MSP Guide: How to Design and Facilitate Multi-Stakeholder Partnerships (1st ed.)*. Centre for Development Innovation, Wageningen UR, Wageningen. Also available at: <https://edepot.wur.nl/358948>
- CADRI Partnership (2020) *Good Practices on Transboundary Water Resources Management and Cooperation*. Also available at: [https://www.cadri.net/system/files/2021-09/CADRI%20-%20Good%20Practices%20-%20Transboundary%20water\\_2020.pdf](https://www.cadri.net/system/files/2021-09/CADRI%20-%20Good%20Practices%20-%20Transboundary%20water_2020.pdf)
- Cheyns, E. (2011) Multi-stakeholder initiatives for sustainable agriculture: limits of the 'Inclusiveness' paradigm. pp. 318–354. In: *Governing Through Standards: Origins, Drivers and Limitations* (Ponte, S., Gibbon, P., and Vestergaard, J., Eds). Palgrave Macmillan, London. Also available at: <https://www.researchgate.net/publication/282354151>
- Danda, A.A. (2019) Environmental security in the Sundarbans in the current climate change era: Strengthening India-Bangladesh cooperation. ORF Occasional Paper. Also available at: [https://www.orfonline.org/wp-content/uploads/2019/11/ORF-OccasionalPaper\\_220\\_Sundarbans\\_NEW-13Nov.pdf](https://www.orfonline.org/wp-content/uploads/2019/11/ORF-OccasionalPaper_220_Sundarbans_NEW-13Nov.pdf)
- Dore, J. (2007) Mekong region water-related MSPs – Unfulfilled potential. pp. 205–235. In: *Multi-stakeholder Platforms for Integrated Water Management* (Warner, J., Ed.). Also available at: <https://www.taylorfrancis.com/books/edit/10.4324/9781315596396/multi-stakeholder-platforms-integrated-water-management-jeroen-warner>
- Esri (2022) ArcWorld Supplement. Esri; Garmin International, Inc.; U.S. Central Intelligence Agency. <https://www.arcgis.com/home/item.html?id=ac80670eb213440ea5899bbf92a04998#overview>
- European Commission (2018) *A Credible Enlargement Perspective for and Enhanced EU Engagement with the Western Balkans: Six New Flagship Initiatives to Support the Transformation of the Western Balkans*. Publications Office, Brussels. Also available at: <https://op.europa.eu/en/publication-detail/-/publication/e3f0797b-28cb-11e8-b5fe-01aa75ed71a1/language-en>
- European Commission (2021) *Stability Pact for South-Eastern Europe*. [https://ec.europa.eu/neighbourhood-enlargement/policy/glossary/terms/stability-pact\\_en](https://ec.europa.eu/neighbourhood-enlargement/policy/glossary/terms/stability-pact_en)
- European Environment Agency (2010) *Environmental Trends and Perspectives in the Western Balkans: Future Production and Consumption Patterns*. EEA Report No 1/2010. also available at: <https://www.eea.europa.eu/publications/western-balkans/file>
- Food and Agriculture Organization of the United Nations (2022) *AQUASTAT Core Database*. <https://www.fao.org/aquastat/en/databases/maindatabase/>



GEF IW:LEARN (2008) *Face-to-Face and Virtual Training, Knowledge Sharing and Capacity Building Cooperation Between Stakeholders in South East Europe and Mediterranean Sub-Region*. Final Report.

GEF IW:LEARN (Retrieved May 2022). *GEF International Waters Learning Exchange and Resources Network IW LEARN*. <https://www.thegef.org/projects-operations/projects/5729>

GEF IW:LEARN and Global Environment Facility (2018) *Methodological Approach for the Establishment and Sustaining of a Regional Dialogue and Community of Practice on Transboundary Water Resource Management*. Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization, Paris, France. Also available at: <https://iwlearn.net/resolveuid/94147002-f092-4da1-b93e-3af49afdb508>

GEF IW:LEARN and Global Environment Facility (2020) *Methodological Approach for the Establishment and Sustaining of a Regional Dialogue and Community of Practice on Transboundary Water Resources Management*. Paris, France. Also available at: <https://iwlearn.net/resolveuid/94147002-f092-4da1-b93e-3af49afdb508>

GEF IW:LEARN DIKTAS (2013) *Hydrogeological map of the Dinaric Karst*. <http://diktas.iwlearn.org/im/hydrogeological-map-of-the-dinaric-karst/view>

GLZ (2020) *Nexus Dialogue Programme – Mainstreaming the Nexus Approach in the Niger Basin*. Presentation. Enhancing transboundary water cooperation in the MENA region – progress, challenges and opportunities, Beirut, 3–4 March 2020. [https://unece.org/fileadmin/DAM/env/documents/2020/WATER/03Mar\\_3-4\\_Regional\\_WS\\_Enhancing\\_TWC-MENA\\_region/5.3\\_GWP-Leb-3-Nisreen.pdf](https://unece.org/fileadmin/DAM/env/documents/2020/WATER/03Mar_3-4_Regional_WS_Enhancing_TWC-MENA_region/5.3_GWP-Leb-3-Nisreen.pdf)

GLZ (2022) *Nexus Regional Dialogue Southern Africa: WEF Nexus Dialogues held in the Democratic Republic of Congo, Tanzania, Madagascar and the Seychelles*. Water, Energy & Food Security Resource Platform. <https://www.water-energy-food.org/news/nexus-regional-dialogues-programme-southern-africa-wef-nexus-dialogues-held-in-the-democratic-republic-of-congo-tanzania-madagascar-and-the-seychelles>

GLZ (2022a) *Nexus Regional Dialogue Southern Africa: WEF Nexus Dialogue held in Zimbabwe*. Water, Energy & Food Security Resource Platform. <https://www.water-energy-food.org/news/nexus-regional-dialogue-southern-africa-wef-nexus-dialogue-held-in-zimbabwe>

GLZ (2022b) *Nexus Regional Dialogue in the Niger Basin*. Factsheet. [https://uploads.water-energy-food.org/resources/NRD\\_factsheet\\_NIGER\\_EN.pdf](https://uploads.water-energy-food.org/resources/NRD_factsheet_NIGER_EN.pdf)

Global Environment Facility (2019) *Integrated transboundary river basin management for the sustainable development of the Limpopo River Basin*. Also available at: [https://www.thegef.org/sites/default/files/web-documents/10182\\_IW\\_PIF.pdf](https://www.thegef.org/sites/default/files/web-documents/10182_IW_PIF.pdf)

Global Environment Facility (undated). *Implementation of the SAP of the Dinaric Karst Aquifer System: Improving Groundwater Governance and Sustainability of Related Ecosystems*. <https://www.thegef.org/projects-operations/projects/9919>

Global Water Partnership (2022) Informe Final. IV Taller Regional de Aguas Transfronterizas, “Herramientas y procesos para acelerar el progreso de la Cooperación en la Gestión de Aguas Transfronterizas” [Final Report of the Fourth Regional Workshop on Transboundary Water “Tools and Processes to Accelerate Progress on Cooperation over Transboundary Water Management”].

Global Water Partnership Southern Africa (2018) *SADC Multi-Stakeholder Water Dialogue. Final Project Report 2012–2017*. Support to SADC Multi-Stakeholder Water Dialogue. Component 3. Support to SADC’s Water Division for the Regional Support Programme Water Management in the SADC Region 2012–2016. March 2018.

Global Water Partnership Southern Africa (2019) Promoting the water, energy and food nexus approach and youth empowerment for sustainable development. Background paper presented at the 9th SADC Multi-Stakeholder Water Dialogue, Pretoria, South Africa. [https://www.gwp.org/globalassets/global/gwp-saf-images/sadc-GLZ-twm/9th-dialogue-technical-background-paper\\_final.pdf](https://www.gwp.org/globalassets/global/gwp-saf-images/sadc-GLZ-twm/9th-dialogue-technical-background-paper_final.pdf)

Global Water Partnership Southern Africa (2019a) *SADC Multi-Stakeholder Water Dialogue: “Watering Development in SADC”*. <https://www.gwp.org/en/GWP-SouthernAfrica/WE-ACT/Key-Events/SADCDialogue/>

Global Water Partnership Southern Africa (2019b) *SADC Water Energy Food Nexus Youth Innovation Network launched*. <https://www.gwp.org/en/GWP-SouthernAfrica/WE-ACT/Anchor-Areas/sadc-water-energy-food-youth-network/>

Global Water Partnership Southern Africa (2021) *WEF Nexus framework to strengthen coordination of water, energy, and food sectors in the SADC Region*. <https://www.gwp.org/en/GWP-SouthernAfrica/About-GWP-SAF/more/News/wef-nexus-framework-to-strengthen-coordination-of-water-energy-and-food-sectors-in-the-sadc-region/>

Global Water Partnership Southern Africa (2021a) *Lesotho calls for the incorporation of the WEF Nexus Agenda into national planning*. <https://www.gwp.org/en/GWP-SouthernAfrica/About-GWP-SAF/more/News/lesotho-calls-for-the-incorporation-of-the-wef-nexus-agenda-into-national-planning/>

Global Water Partnership Southern Africa (2022) *Malawi WEF Nexus Dialogue discusses the role of the WEF nexus approach in advancing socio-economic development*. <https://www.gwp.org/en/GWP-SouthernAfrica/About-GWP-SAF/more/News/malawi-wef-nexus-dialogues-discusses-the-role-of-the-wef-nexus-approach-in-advancing-socio-economic-development/>

Global Water Partnership Southern Africa (2022a) *WEF Nexus key to advancing the socio-economic agenda in Zambia*. <https://www.gwp.org/en/GWP-SouthernAfrica/About-GWP-SAF/more/News/wef-nexus-key-to-advancing-the-socio-economic-agenda-in-zambia/>

Global Water Partnership Southern Africa (2022b) *Madagascar Government commits to leading change for investments in water, energy and food sectors*. <https://www.gwp.org/en/GWP-SouthernAfrica/About-GWP-SAF/more/News/madagascar-government-commits-to-leading-change-for-investments-in-water-energy-and-food-sectors/>

Globevnik, L., Kurnik, B., Snoj, L., and Šubelj, G. (2018) *Outlook on Water and Climate Change Vulnerability in the Western Balkans*. ETC/ICM Technical Report 1/2018. European Topic Centre on Inland, Coastal and Marine Waters, Magdeburg.

Gray, B. and Purdy, J. (2018) *Collaborating for Our Future: Multi-stakeholder Partnerships for Solving Complex Problems*. Oxford University Press. Also available at: <https://oxford.universitypressscholarship.com/view/10.1093/oso/9780198782841.001.0001/oso-9780198782841>

Grey, D., Sadoff, C., and Connors, G. (2016) *Effective Cooperation on Transboundary Waters: A Practical Perspective*. World Bank, Washington. Also available at: <https://openknowledge.worldbank.org/handle/10986/24047>

Grošelj, S. and Komatina, D. (2012) *Cooperative Water Management in the Sava River Basin*. International Roundtable on Transboundary Water Resource Management in the Southern Mediterranean, Rome, Italy, 26–27 November 2012. Also available at: [https://www.gwp.org/globalassets/global/gwp-med-files/news-and-activities/mena/rome-roundtable/4.2.groselj\\_isrbc.pdf](https://www.gwp.org/globalassets/global/gwp-med-files/news-and-activities/mena/rome-roundtable/4.2.groselj_isrbc.pdf)

Hanasz, P. (2017) *Transboundary Water Governance and International Actors in South Asia: the Ganges–Brahmaputra–Meghna Basin*. Routledge, London. Also available at: <https://www.taylorfrancis.com/books/mono/10.4324/9781315104836/transboundary-water-governance-international-actors-south-asia-paula-hanasz>

Hanif, M. (2002) *Management of water-resources in South Asia*. *Science Vision*, 7(3–4), January–June 2002. Also available at: [http://sciencevision.org.pk/BackIssues/Vol7/Vol7No3-4/Vol7No3&4\\_1\\_Management\\_of\\_Water\\_MHanif.pdf](http://sciencevision.org.pk/BackIssues/Vol7/Vol7No3-4/Vol7No3&4_1_Management_of_Water_MHanif.pdf)

Haran, V.P. (2018) Water and hydropower cooperation in BBIN countries: Policies and way forward. *International Journal of Water Resources Development*, 37(3): 424–438. Also available at: <https://www.tandfonline.com/doi/abs/10.1080/07900627.2018.1503076>

Hirji, R., Mandal, S., and Pangare, G. (Eds) (2017) *South Asia Groundwater Forum: Regional Challenges and Opportunities for Building Drought and Climate Resilience for Farmers, Cities, and Villages*. Academic Foundation, New Delhi, India. Also available at: <https://www.un-igrac.org/sites/default/files/resources/files/SAGF%20Proceedings-5%20November%202017%20for%20web.pdf>

Huntjens, P., Lebel, L., and Furze, B. (2017) The effectiveness of MSDs on water: Reflections on experiences in the Rhine, Mekong, and Ganga-Brahmaputra-Meghna river basins. *International Journal of Water Governance*, 5: 39–60. Also available at: [https://www.researchgate.net/publication/323199605\\_The\\_effectiveness\\_of\\_multi-stakeholder\\_dialogues\\_on\\_water\\_reflections\\_on\\_experiences\\_in\\_the\\_Rhine\\_Mekong\\_and\\_Ganga-Brahmaputra-Meghna\\_river\\_basins](https://www.researchgate.net/publication/323199605_The_effectiveness_of_multi-stakeholder_dialogues_on_water_reflections_on_experiences_in_the_Rhine_Mekong_and_Ganga-Brahmaputra-Meghna_river_basins)

Huntjens, P., Yasuda, Y., Swain, A., Man, R., and Magsig, B. (2016) *The Multi-Track Water Diplomacy Framework: A Legal And Political Economy Analysis for Advancing Cooperation over Shared Waters*. The Hague Institute for Global Justice, The Hague, The Netherlands. Also available at: [https://siwi.org/wp-content/uploads/2018/01/thijg\\_the-multi-track-water-diplomacy-framework\\_webversion-1-1.pdf](https://siwi.org/wp-content/uploads/2018/01/thijg_the-multi-track-water-diplomacy-framework_webversion-1-1.pdf)

Innes, J. E. and Booher, D. E. (2003) Collaborative policymaking: governance through dialogue. pp. 33–59. In: *Deliberative Policy Analysis: Understanding Governance in the Network Society* (Hajer, M. and Wagenaar, H., Eds). Cambridge University Press.

International Commission for the Protection of the Danube River (2006) *Sava River Basin overview map. Sub-river basin of the Danube River Basin District*. <https://www.icpdr.org/main/sites/default/files/SavaBasin.pdf>

International Energy Agency (2019). *Africa Energy Outlook*. World Energy Outlook Special Report. France. [https://iea.blob.core.windows.net/assets/2f7b6170-d616-4dd7-a7ca-a65a3a332fc1/Africa\\_Energy\\_Outlook\\_2019.pdf](https://iea.blob.core.windows.net/assets/2f7b6170-d616-4dd7-a7ca-a65a3a332fc1/Africa_Energy_Outlook_2019.pdf)

International Groundwater Resources Assessment Centre (2020) Administrative boundaries - DIKTAS. Dinaric Karst Transboundary Aquifer System (DIKTAS) Project, International Groundwater Resources Assessment Centre (IGRAC). Retrieved from [https://ggis.un-igrac.org/layers/diktas:diktas:DK\\_Boundary\\_AdmBoundDIKTAS](https://ggis.un-igrac.org/layers/diktas:diktas:DK_Boundary_AdmBoundDIKTAS)

International Secretariat of the Dialogue on Water and Climate (2004) Reflections of dialogue on water & climate after the 3rd

World Water Forum in Kyoto. International Secretariat of the Dialogue on Water and Climate. [https://www.hydrology.nl/images/docs/dutch/cpwc/Reflections\\_Dialogue\\_Water\\_and\\_Climate.pdf](https://www.hydrology.nl/images/docs/dutch/cpwc/Reflections_Dialogue_Water_and_Climate.pdf)

International Union for Conservation of Nature (2019) *Increasing Returns on Investment Opportunities by Applying a Nexus Approach: Best Practice Nexus Case Studies*. Belgrade, Serbia. <https://portals.iucn.org/library/sites/library/files/documents/2019-047-En.pdf>

Islam, S. and Susskind, L. (2015) Understanding the water crisis in Africa and the Middle East: How can science inform policy and practice? *Bulletin of the Atomic Scientists*, **71**(2): 39–49. Also available at: <https://journals.sagepub.com/doi/full/10.1177/0096340215571906>

Kabeya, P.K., Mandzebele, D., Ntlamelle, M., Samikwa, D., Simalabwi, A., Takawira, A., Jembere, K., Kumbirai, S. (2022) A regional approach to implementing the WEF nexus: a case study of the Southern African Development Community. Chapter 8. *Elsevier*, 145–167. <https://www.sciencedirect.com/science/article/pii/B9780323912235000174?via%3Dihub>

Kamidis, N. and Sylaios, G. (2017) Impact of river damming on sediment texture and trace metals distribution along the watershed and the coastal zone of Nestos River (NE Greece). *Environmental Earth Sciences*, **76**(10): 1–15.

Lehner, B. and Grill, G. (2013) Global river hydrography and network routing: baseline data and new approaches to study the world's large river systems. *Hydrological Processes*, **27**(15): 2171–2186. Also available at: <https://doi.org/10.1002/hyp.9740>

Limpopo River Awareness Kit (2011) *River basin organisations in SADC*. [http://www.limpopo.riverawarenesskit.org/limpoporak\\_com/EN/GOVERNANCE/SADC/RIVER\\_BASIN\\_ORGANISATIONS.HTM](http://www.limpopo.riverawarenesskit.org/limpoporak_com/EN/GOVERNANCE/SADC/RIVER_BASIN_ORGANISATIONS.HTM)

Matin, N. (2008) Specification of mechanisms and tools for MSD processes on poverty and gender in river basin planning. Stockholm Environment Institute, University of York. Also available at: <https://www.newater.uni-osnabrueck.de/deliverables/D242%20Specification%20of%20mechanisms%20and%20tools%20for%20multi.pdf>

Mena, S. and Palazzo, G. (2012) Input and output legitimacy of multi-stakeholder initiatives. *Business Ethics Quarterly*, **22**(3): 527–556. Also available at: [https://www.researchgate.net/publication/271114073\\_Input\\_and\\_Output\\_Legitimacy\\_of\\_Multi-Stakeholder\\_Initiatives](https://www.researchgate.net/publication/271114073_Input_and_Output_Legitimacy_of_Multi-Stakeholder_Initiatives)

Messenger, M.L., Lehner, B., Grill, G., Nedeva, I. and Schmitt, O. (2016) Estimating the volume and age of water stored in global lakes using a geo-statistical approach. *Nature Communications*, **7**: 13603. Also available at: <https://doi.org/10.1038/ncomms13603>

Ministry of External Affairs, Government of India (2022) *Question No.3265 construction of dams on Brahmaputra River by China*. [https://www.mea.gov.in/raiya-sabha.htm?dtl/35110/QUESTION\\_NO3265\\_CONSTRUCTION\\_OF\\_DAMS\\_ON\\_BRAHMAPUTRA\\_RIVER\\_BY\\_CHINA](https://www.mea.gov.in/raiya-sabha.htm?dtl/35110/QUESTION_NO3265_CONSTRUCTION_OF_DAMS_ON_BRAHMAPUTRA_RIVER_BY_CHINA)

Mohtar, R. H. and Daher, B. (2016) Water-Energy-Food Nexus Framework for facilitating MSD. *Water International*, **41**(5): 655–661. Also available at: <https://www.tandfonline.com/doi/abs/10.1080/02508060.2016.1149759>

Moisio, S. and Paasi, A. (2013) Beyond state-centricity: Geopolitics of changing state spaces. *Geopolitics*, **18**(2): 255–266. Also available at: <https://www.tandfonline.com/doi/full/10.1080/14650045.2012.738729>

Moss, T. and Newig, J. (2010) Multilevel water governance and problems of scale: Setting the stage for a broader debate. *Environmental Management*, **46**(1): 1–6. Also available at: [https://www.researchgate.net/publication/45272936\\_Multilevel\\_Water\\_Governance\\_and\\_Problems\\_of\\_Scale\\_Setting\\_the\\_Stage\\_for\\_a\\_Broader\\_Debate](https://www.researchgate.net/publication/45272936_Multilevel_Water_Governance_and_Problems_of_Scale_Setting_the_Stage_for_a_Broader_Debate)

Nepal, S. and Shrestha, A.B. (2015) Impact of climate change on the hydrological regime of the Indus, Ganges and Brahmaputra river basins: a review of the literature. *International Journal of Water Resources Development*, **31**(2): 201–218. Also available at: <https://www.tandfonline.com/doi/full/10.1080/07900627.2015.1030494>

Observer Research Foundation and Institute for Defence Studies & Analyses (undated) Executive summary. Vision for the Sundarban Region Rationale and Structure for Joint Action: Final Draft. <https://idsa.in/system/files/news/sundarban.pdf>

Observer Research Foundation and Institute for Defence Studies & Analyses (2018) Bangladesh-India Sundarban Region Cooperation Initiative. Background note. Also available at: <https://documents1.worldbank.org/curated/en/854711587108371012/pdf/Bangladesh-India-Sundarban-Region-Cooperation-Initiative-Background-Note.pdf>

Oregon State University – Transboundary Freshwater Dispute Database (2019) *International Freshwater Treaties (by River Basin)*. <http://gis.nacse.org/tfdd/treaties.php>

Oregon State University (2019) *International Freshwater Treaties Database*. Product of the Transboundary Freshwater Dispute Database, College of Earth, Ocean, and Atmospheric Sciences, Oregon State University. <https://transboundarywaters.science.oregonstate.edu/content/international-freshwater-treaties-database>

Payne, S.L. and Calton, J. M. (2017) Towards a managerial practice of stakeholder engagement: Developing multi-stakeholder learning dialogues. In: *Unfolding Stakeholder Thinking*. Routledge.

Also available at: <https://www.taylorfrancis.com/chapters/edit/10.4324/9781351281881-7/towards-managerial-practice-stakeholder-engagement-stephen-payne-jerry-calton>

Price, G., Alam, R., Hasan, S., Humayun, F., Humayun Kabir, M., Singh Karki, C., Mittra, S., Saad, T., Saleem, M., Saran, S., Ratna Shakya, P., Snow, C., and Tuladhar, S. (2014) *Attitudes to Water in South Asia. Chatham House Report*. [https://www.chathamhouse.org/sites/default/files/field/field\\_document/20140627WaterSouthAsia.pdf](https://www.chathamhouse.org/sites/default/files/field/field_document/20140627WaterSouthAsia.pdf)

Pulla, V., Ahmed, Z. S., and Pawar, M. (2018) Water and communities in South Asia: A case for regional cooperation. *Space and Culture, India*, **6**(3): 23–40. Also available at: <https://www.spaceandculture.in/index.php/spaceandculture/article/view/392>

Rahman, Z. (2022) *Interview: What now for the Ganges Treaty? The Third Pole*. <https://www.thethirdpole.net/en/regional-cooperation/interview-what-now-for-ganges-treaty/>

Ratner, B., Burnley, C., Mugisha, S., Madzudo, E., Oeur, I., Mam, K., Rüttinger, L., Chilufya, L., and Adriázola, P. (2018) Investing in multi-stakeholder dialogue to address natural resource competition and conflict. *Development in Practice*, **28**(6): 799–812. Also available at: <https://www.tandfonline.com/doi/full/10.1080/09614524.2018.1478950>

Ratner, B.D. and Stafford Smith, M. (2020) *Multi-stakeholder Dialogue for Transformational Change*. A STAP Advisory Document. Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, D.C. Also available at: <https://stapgef.org/sites/default/files/2021-03/54349%20STAP%20Multi-stakeholder%20dialogue%20WEB.pdf>

Raza, S.A. (2019) The future of water-sharing cooperation in South Asia. Geneva Global Water Policy Briefs. Also available at: [https://www.ceje.ch/files/2015/6879/5112/University\\_of\\_Geneva\\_-\\_GGPB\\_N9-2019\\_-\\_S.\\_A.\\_Raza.pdf](https://www.ceje.ch/files/2015/6879/5112/University_of_Geneva_-_GGPB_N9-2019_-_S._A._Raza.pdf)

Romshoo, S. (2012) *Indus River Basin: Common Concerns and the Roadmap to Resolution*. Centre for Dialogue and Reconciliation. Also available at: [https://www.researchgate.net/publication/236001988\\_Indus\\_River\\_Basin\\_Common\\_Concerns\\_and\\_the\\_Roadmap\\_to\\_Resolution](https://www.researchgate.net/publication/236001988_Indus_River_Basin_Common_Concerns_and_the_Roadmap_to_Resolution)

SaciWATERS (2014) *Transnational Policy Dialogue for Improved Water Governance of Brahmaputra River. Consolidated Report Phase I April 2013 - February 2014*. Telangana, India. Also available at: <http://www.saciwaters.org/brahmaputra-dialogue/assets/downloads/Consolidated%20Report,%20Phase-1.pdf>

SaciWATERS (2015) *Consolidated Report - Brahmaputra Dialogue Phase II. June 2014 - June 2015*. Andhra Pradesh, India. Also available at: <http://www.saciwaters.org/brahmaputra-dialogue/assets/downloads/consolidated%20report-brahmaputra%20dialogue%20phase%20II.pdf>

Sadoff, C.W. and Grey, D. (2002) Beyond the river: The benefits of cooperation on international rivers. *Water Policy*, **4**: 389–403. Also available at: [https://www.scirp.org/\(S\(vtj3fa45qm1ean45vvffcz55\)\)/reference/ReferencesPapers.aspx?ReferenceID=1540757](https://www.scirp.org/(S(vtj3fa45qm1ean45vvffcz55))/reference/ReferencesPapers.aspx?ReferenceID=1540757)

Sadoff, C.W. and Grey, D. (2005) Cooperation on international rivers: A continuum for securing and sharing benefits. *Water International*, **30**(4): 420–427. Also available at: [https://www.researchgate.net/publication/238182075\\_Cooperation\\_on\\_International\\_Rivers](https://www.researchgate.net/publication/238182075_Cooperation_on_International_Rivers)

Salman, S.M. (2004) Shared watercourses in the Southern African development community: challenges and opportunities. *Water Policy*, **6**: 25–38. Also available at: <http://www.salmanmasalman.org/wp-content/uploads/2013/02/Shared-Watercourses-in-SADC-WaterPolicy-Article.pdf>

Sarantakos, S. (2005) *Social Research*. Third Edition. Palgrave Macmillan, New York. ISBN: 978-1403943200.

Scheumann, W. and Neubert, S. (Eds) (2006) *Transboundary Water Management in Africa: Challenges for Development Cooperation*, Vol. 21. Deutsches Institut für Entwicklungspolitik. [https://www.idos-research.de/uploads/media/Studies\\_21.pdf](https://www.idos-research.de/uploads/media/Studies_21.pdf)

Sigalla, O. Z., Tumbo, M., and Joseph, J. (2021) Multi-stakeholder platform in water resources management: A critical analysis of stakeholders' participation for sustainable water resources. *Sustainability*, **13**(16): 926. Also available at: <https://www.mdpi.com/2071-1050/13/16/9260>

Southern African Development Community (2010) *The SADC Multi-Stakeholder Water Dialogue. Watering Development in SADC. Toward Climate Resilience through Benefit Sharing*. Maun, Botswana. Also available at: <https://www.sadc.int/document/7th-sadc-multi-stakeholder-water-dialogue-information-note>

Southern African Development Community (2015) Information note on the 7th SADC Multi-Stakeholder Water Dialogue. Windhoek, Namibia. <https://www.sadc.int/document/7th-sadc-multi-stakeholder-water-dialogue-information-note>

Southern African Development Community (2019) *Fostering Water, Energy and Food Security Nexus Dialogue and Multi-Sector Investment in the SADC Region. Progress Report: January 2018 – December 2018*. Also available at: <https://www.gwp.org/globalassets/documents/gwpsa/eoi-for-nexus-country-perspective-papers-updated.pdf>

Southern African Development Community (2022a) *Member States*. <https://www.sadc.int/member-states>

Southern African Development Community (2022b) *Social & human capital development*. <https://www.sadc.int/pillars/social-human-capital-development>



Southern African Development Community (2022c) *SADC protocols*. <https://www.sadc.int/pages/sadc-protocols>

Southern African Development Community (2022d) *SADC Protocol on Fisheries 2006*. <https://www.sadc.int/document/protocol-fisheries-2006>

Southern African Development Community (2022e) *SADC Revised Protocol on Shared Watercourses 2000*. <https://www.sadc.int/document/revised-protocol-shared-watercourses-2000-english>

Southern African Development Community (2022f) *SADC Regional Water Strategy 2006*. <https://www.sadc.int/document/regional-water-strategy-2006>

Southern African Development Community and Global Water Partnership Southern Africa (2019). *Fostering Water, Energy and Food Security Nexus Dialogue and Multi-Sector Investment in the SADC Region*. Factsheet. Also available at: <https://www.gwp.org/contentassets/442f4c50f2974bbfaef3159827781da2/sadc-wef-nexus-fact-sheet.pdf>

Susskind, L. and Islam, S. (2012) Water diplomacy: creating value and building trust in transboundary water negotiations. *Science & Diplomacy*, **1**(3). Also available at: [https://scienceimpact.mit.edu/sites/default/files/documents/water\\_diplomacy\\_science\\_diplomacy.pdf](https://scienceimpact.mit.edu/sites/default/files/documents/water_diplomacy_science_diplomacy.pdf)

Takawira, A. (2021) Global Water Partnership Southern Africa. 29 November 2021 [Online interview]

The World Bank (2021) *The World Bank in Eastern and Southern Africa*. <https://www.worldbank.org/en/region/afr/eastern-and-southern-africa>

Turton, A. (2010) *New Thinking on the Governance of Water and River Basins in Africa: Lessons from the SADC Region*. Research Report 6, South African Institute of International Affairs (SAIIA), Johannesburg. Also available at: <https://seors.unfccc.int/applications/seors/attachments/getattachment?code=44SPI00IWW0H6HDC3SI65A80MYQCQRB4>

TWRM-Med (undated) *Establishing cooperation among the Drin riparians*. <http://twrm-med.net/southeastern-europe/supported-processes-and-projects/drin-river-basin/establishing-cooperation-among-the-drin-riparians>

TWRM-Med (2007) *Integrated Management of Shared Groundwater in South Eastern Europe*. Brdo, Slovenia, 12 – 14 Nov. 2007. <http://twrm-med.net/southeastern-europe/regional-dialogue/activities/international-roundtables/integrated-shared-groundwater-in-southeastern-europe>

TWRM-Med (2018) *Principles for multipurpose water management in the Sava River Basin*. <http://twrm-med.net/southeastern-europe/regional-dialogue/activities/international-roundtables/principles-for-multipurpose-water-management-in-the-sava-river-basin>

United Nations Economic Commission for Europe (2011) *Second Assessment of Transboundary Rivers, Lakes and Groundwaters*. United Nations, New York and Geneva. Also available at: <https://doi.org/10.18356/57863ad2-en>

United Nations Economic Commission for Europe (2017) *Assessment of the Water-Food-Energy Ecosystems Nexus and Benefits of Transboundary Cooperation in the Drina River Basin*. United Nations, New York and Geneva. Also available at: [https://unece.org/DAM/env/water/publications/WAT\\_NONE\\_9\\_Drina/Drina-FINAL-EN-WEB\\_final-correct.pdf](https://unece.org/DAM/env/water/publications/WAT_NONE_9_Drina/Drina-FINAL-EN-WEB_final-correct.pdf)

United Nations Economic Commission for Europe (2021) *Solutions and Investments in the Water-Food-Energy-Ecosystems Nexus: A Synthesis of Experiences in Transboundary Basins*. ECE/MP.WAT/66. Geneva, Switzerland. [https://unece.org/sites/default/files/2021-10/ECE\\_MP.WAT\\_66\\_new\\_web.pdf](https://unece.org/sites/default/files/2021-10/ECE_MP.WAT_66_new_web.pdf)

United Nations Educational, Scientific and Cultural Organization (undated). *The Sundarbans*. <https://whc.unesco.org/en/list/798/>

United Nations Environment Programme – Danish Hydraulic Institute and United Nations Environment Programme (2016) *Transboundary River Basins: Status and Trends*. United Nations Environment Programme. Also available at: [https://www.unepdhi.org/wp-content/uploads/sites/2/2020/05/GEF\\_TWAPRB\\_FullTechnicalReport\\_compressed.pdf](https://www.unepdhi.org/wp-content/uploads/sites/2/2020/05/GEF_TWAPRB_FullTechnicalReport_compressed.pdf)

United Nations Office for the Coordination of Humanitarian Affairs (2020) China - Subnational Administrative Boundaries. United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Regional Office for Asia and the Pacific (ROAP). <https://data.humdata.org/dataset/cod-ab-chn>

Verzosa, C. C. and Fiutak, T. R. (2019) The “How” of Multi-stakeholder Engagement. Governance Brief No. 35. Asian Development Bank. Also available at: <https://www.adb.org/sites/default/files/publication/499181/governance-brief-035-how-multi-stakeholder-engagement.pdf>

Warner, J. (Ed.) (2007) *Multi-Stakeholder Platforms for Integrated Water Management (1st ed.)*. Routledge, London.

Warner, J. F., Hoogesteger, J., and Pablo Hidalgo, J. (2017) Old wine in new bottles: The adaptive capacity of the hydraulic mission in Ecuador. *Water Alternatives*, **10**(2). Also available at: <https://www.water-alternatives.org/index.php/alldoc/articles/vol10/v10issue2/358-a10-2-8/file>



Watanabe, L. (2010) The Stability Pact for South-Eastern Europe. In: *Securing Europe. New Security Challenges Series*. Palgrave Macmillan, London. Also available at: [https://link.springer.com/chapter/10.1057/9780230277021\\_5](https://link.springer.com/chapter/10.1057/9780230277021_5)

Wenger, E. and Wenger, B. (2015) Introduction to communities of practice: A brief overview of the concept and its uses. Also available at: <https://wenger-trayner.com/wp-content/uploads/2015/04/07Brief-introduction-to-communities-of-practice.pdf>

World Bank Group (2013) *South Asia Water Initiative (SAWI) Final Report (2009–2013)*. International Bank for Reconstruction and Development / International Development Association or The World Bank. Also available at: <https://documents1.worldbank.org/curated/en/956241468197632994/pdf/103874-AR-SAWI-Report-2009-to-2013-PUBLIC.pdf>

World Bank Group (2015) *South Asia Water Initiative: Annual Report from the World Bank to Trust Fund Donors (July 2014 – June 2015)*. The International Bank for Reconstruction and Development / World Bank Group, Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/442761468197632182/pdf/103878-AR-SAWI-Progress-Report-2015-PUBLIC.pdf>

World Bank Group (2016) *South Asia Water Initiative: Annual Report (July 2015 – June 2016)*. The International Bank for Reconstruction and Development / World Bank Group, Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/640441485347353894/pdf/South-Asia-water-initiative-annual-report-july-2015-june-2016.pdf>

World Bank Group (2017) *South Asia Water Initiative: Annual Report (July 2016 – June 2017)*. The International Bank for Reconstruction and Development / World Bank Group, Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/633761515588308264/pdf/South-Asia-water-initiative-annual-report-july-2016-june-2017.pdf>

World Bank Group (2018) *South Asia Water Initiative: Annual Report (July 2017 – June 2018)*. The International Bank for Reconstruction and Development / World Bank Group, Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/799921573109686061/pdf/South-Asia-Water-Initiative-SAWI-Annual-Report-for-July-2017-June-2018.pdf>

World Bank Group (2019). *South Asia Water Initiative: Annual Report (July 2018 – June 2019)*. The International Bank for Reconstruction and Development / World Bank Group, Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/266401578643583738/pdf/South-Asia-Water-Initiative-SAWI-Annual-Report-for-July-2018-June-2019.pdf>

World Bank Group (2020). *South Asia Water Initiative: Annual Report (July 2019 – June 2020)*. The International Bank for Reconstruction and Development / World Bank Group, Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/720411611563614917/pdf/South-Asia-Water-Initiative-SAWI-Annual-Report-for-July-2019-June-2020.pdf>

World Bank Group (2022) *From Source to Sea: 2013–2021 South Asia Water Initiative Completion Report*. Washington, D.C., United States of America. Also available at: <https://documents1.worldbank.org/curated/en/099312405272210424/pdf/IDU0274da53607b1704a6c0beba048461972fe3e.pdf>

World Weather Attribution (2022) Climate change likely increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan. Also available at: <https://www.worldweatherattribution.org/wp-content/uploads/Pakistan-floods-scientific-report.pdf>

Worldometer (2022) *Southern Asia population*. <https://www.worldometers.info/world-population/southern-asia-population/#:~:text=The%20current%20population%20of%20Southern,among%20subregions%20ranked%20by%20Population>

Yasuda, Y., Aich, D., Hill, D., Huntjens, P., and Swain, A. (2017) *Transboundary Water Cooperation over the Brahmaputra River: Legal Political Economy Analysis of Current and Future Potential Cooperation*. The Hague Institute for Global Justice. Also available at: [https://siwi.org/wp-content/uploads/2018/01/brahmaputra-basin-report-final\\_design.pdf](https://siwi.org/wp-content/uploads/2018/01/brahmaputra-basin-report-final_design.pdf)

Yin, R. K. (2003) *Case Study Research: Design and Methods. Third Edition*. Sage Publications, London. ISBN: 978-0761925538.

Zambezi Watercourse Commission (2018) *8–9 October, 2018: 3rd Zambezi Basin Stakeholders' Forum*, Lilongwe, Malawi. <https://zambezicommission.org/news/8-%E2%80%939-october-2018-3rd-zambezi-basin-stakeholders%E2%80%99-forum-lilongwe-malawi>

Zambezi Watercourse Commission and Southern African Development Community (2021) *Proceedings of the 9th SADC River Basin Organisations/Shared Watercourse Institutions (RBOs/SWIs) Workshop, "Promoting Inclusive and Collaborative Transboundary Water Financing for Sustainable Industrial Development"*. 22–23 September 2021.

Zeitoun, M. and Mirumachi, N. (2008) Transboundary water interaction I: Reconsidering conflict and cooperation. *International Environmental Agreements* **8**(4): 297–316. Also available at: <https://www.researchgate.net/publication/225905437>



**Global Water Partnership (GWP) Secretariat**

PO Box 24177, 104 51 Stockholm, SWEDEN

Visitor's address: Linnégatan 87D

Email: [gwp@gwp.org](mailto:gwp@gwp.org)

Websites: [www.gwp.org](http://www.gwp.org) | [www.gwptoolbox.org](http://www.gwptoolbox.org)

Facebook: [facebook.com/globalwaterpartnership](https://facebook.com/globalwaterpartnership)

Twitter: [@gwpnews](https://twitter.com/gwpnews)

Instagram: [@gwp\\_water](https://www.instagram.com/gwp_water)

