

**Hydro-Diplomacy for Justice and Sustainability: Applying Negotiation, Cooperation and Collaboration to Transform Water Resources Conflicts**

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## **Table of Contents**

|                                                                                                     |   |
|-----------------------------------------------------------------------------------------------------|---|
| Abstract.....                                                                                       | 3 |
| 1.0 Introduction .....                                                                              | 3 |
| 2.0 Water Resources Conflicts: Causes and Effects .....                                             | 4 |
| 3.0 Applying Negotiation, Cooperation and Collaboration to Transform Water Resources Conflicts..... | 6 |
| 4.0 Conclusion .....                                                                                | 8 |
| References .....                                                                                    | 9 |

## **Hydro-Diplomacy for Justice and Sustainability: Applying Negotiation, Cooperation and Collaboration to Transform Water Resources Conflicts**

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### **Abstract**

*This paper discusses how hydro-diplomacy can be effectively embraced for peace, justice and sustainability. It argues that effective hydro-diplomacy is a pertinent concern at all levels especially due to the prevalence of water resources conflicts. The paper examines the causes and effects of water resources conflicts. It observes that these conflicts can impede Sustainable Development. Consequently, the paper posits that by strengthening hydro-diplomacy, it is possible to transform water resources conflicts towards achieving justice, sustainability and development. The paper discusses how this the idea of hydro-diplomacy can be promoted by applying negotiation, cooperation and collaboration to transform water resources conflicts towards Sustainable Development.*

### **1.0 Introduction**

Diplomacy involves the use of negotiation, dialogue and collaboration among other peaceful approaches towards fostering international and regional peace and security<sup>1</sup>. In addition, diplomacy has been defined as a method that governments use to influence the actions of foreign governments through peaceful tactics such as negotiation and dialogue<sup>2</sup>. Diplomacy can also be described as the art and practice of conducting negotiations and maintaining relationships among nations in order to address common concerns, settle disputes, and promote mutual interests without resorting to violence or coercion<sup>3</sup>. It has been observed that diplomacy is the cornerstone of international relations providing a suitable and peaceful approach for nations to engage with one another<sup>4</sup>. For example, diplomacy provides critical strategies utilised by nations to navigate complex issues in the global landscape, often involving negotiations, alliances, and policies aimed at achieving national interests while maintaining international peace and security<sup>5</sup>.

Diplomacy is applicable in different contexts. For example, it has been observed that hydro-diplomacy is a critical tool that can ensure that shared water resources are managed efficiently, sustainably and equitably, including through balancing interests related to national sovereignty while strengthening regional cooperation and collaboration with countries sharing common

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<sup>1</sup> United Nations., 'Diplomacy for Peace' Available at <https://www.un.org/en/peaceandsecurity/Diplomacy-for-peace#:~:text=It%20provides%20a%20blueprint%20to,a%20powerful%20tool%20for%20peace>. (Accessed on 07/08/2026)

<sup>2</sup> What is Diplomacy? Available at <https://www.cyber-diplomacy-toolbox.com/Diplomacy.html#:~:text=Diplomacy%20is%20the%20art%2C%20the,relations%2C%20while%20maintaining%20peaceful%20relationships> (Accessed on 07/08/2026)

<sup>3</sup> The Role of Diplomacy in Resolving Global Conflicts., Available at <https://medium.com/@tnnpub/the-role-of-diplomacy-in-resolving-global-conflicts-d3285871a2b9#:~:text=Preventive%20diplomacy%20is%20a%20vital,maintain%20international%20peace%20and%20security> (Accessed on 07/08/2026)

<sup>4</sup> Ibid

<sup>5</sup> Diplomatic Strategies., Available at <https://www.studysmarter.co.uk/explanations/spanish/spanish-social-issues/diplomatic-strategies/#:~:text=Diplomatic%20strategies%20are%20critical%20tools,interests%20while%20maintainin%20international%20peace> (Accessed on 07/08/2026)

water resources<sup>6</sup>. Hydro-diplomacy has been identified as a strategic tool for preventing conflicts and tensions over shared water resources and promoting cooperative and collaborative governance of transboundary water basins<sup>7</sup>. It has been observed that this approach relies on several institutional and political mechanisms such as cooperation agreements between riparian states, transboundary river basin management organisations, mechanisms for sharing hydrological data, and regional consultation frameworks<sup>8</sup>. Hydro-diplomacy is therefore a key approach that involves the use of diplomatic tools and instruments to make transboundary and shared water sources a domain for peace, justice, collaboration and cooperation rather than a source of conflicts, tensions and disputes<sup>9</sup>. Promoting hydro-diplomacy is therefore crucial towards transforming water resources conflicts for peace, justice and sustainability.

This paper discusses how hydro-diplomacy can be effectively embraced for peace, justice and sustainability. It argues that effective hydro-diplomacy is a pertinent concern at all levels especially due to the prevalence of water resources conflicts. The paper examines the causes and effects of water resources conflicts. It observes that these conflicts can impede Sustainable Development. Consequently, the paper posits that by strengthening hydro-diplomacy, it is possible to transform water resources conflicts towards achieving justice, sustainability and development. The paper discusses how this the idea of hydro-diplomacy can be promoted by applying negotiation, cooperation and collaboration to transform water resources conflicts towards Sustainable Development.

## **2.0 Water Resources Conflicts: Causes and Effects**

Water resources conflicts are being witnessed all over the world. It has been observed that water resources conflicts usually arise when the demand for clean and safe water is higher than the supply<sup>10</sup>. In many contexts, water usually features as weapon or victim of wars and conflicts due to instances such as destruction of water resources and supply systems and denial of vulnerable communities from accessing water resources<sup>11</sup>. However, it has been observed that water also increasingly constitutes a contributing trigger of conflict as competing users assert their claims to vital and dwindling resources<sup>12</sup>.

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<sup>6</sup> What is Hydrodiplomacy and why is it relevant today?., Available at <https://www.bluepeace-centralasia.ch/about/hydrodiplomacy/> (Accessed on 07/08/2026)

<sup>7</sup> International Union for Conservation of Nature., 'Hydro-diplomacy: a driver of regional cooperation and transboundary water management in West Africa' Available at <https://iucn.org/news/202607/hydro-diplomacy-driver-regional-cooperation-and-transboundary-water-management-west> (Accessed on 07/08/2026)

<sup>8</sup> Ibid

<sup>9</sup> Hydro Diplomacy., Available at <https://space4water.org/water/hydro-diplomacy> (Accessed on 07/08/2026)

<sup>10</sup> Center for Strategic and International Studies., 'What Causes Water Conflict?' Available at <https://www.csis.org/analysis/what-causes-water-conflict> (Accessed on 08/08/2026)

<sup>11</sup> Ibid

<sup>12</sup> Ibid

Conflicts related to water can be attributed to several causes. For example, water scarcity, increasing water demand due to rapid population growth and poor management of water resources are causing rising competition over water allocation leading to conflicts and disputes<sup>13</sup>. In particular, it has been observed that the rising demand for water globally due to rapid population growth, escalating environmental pressures including climate change and pollution, and unsustainable management practices increasingly strain global water resources and supplies fueling disputes and conflicts<sup>14</sup>. Further, it has been pointed out that food production, urbanisation and changes in consumption are responsible for higher water demand with increased competition often provoking violent conflicts<sup>15</sup>. Climate change has also been identified as a key trigger of water resources conflicts since it disrupts natural water cycles, putting freshwater ecosystems under pressure and fuelling migration and conflicts over dwindling water resources<sup>16</sup>. In addition, pollution, infrastructure development and unsustainable resource extraction also pose additional challenges to water resources resulting in degradation and scarcity of water thus creating conditions that can trigger water resources conflicts<sup>17</sup>.

Water resources conflicts and disputes can therefore be attributed to several human-induced and environmental factors including rising demand for water due to rapid population growth, unsustainable development and infrastructure projects which strain water resources, the impacts of climate change such as severe and prolonged drought, pollution and poor governance of water resources<sup>18</sup>. It has been observed that developing countries are more vulnerable to water resources conflicts since they are less able to adapt to mounting challenges including climate change, rapid population growth and water scarcity<sup>19</sup>. This situation is more severe in arid and semi-arid regions where water scarcity is prevalent raising challenges relating to access and control of water with vulnerable groups including pastoralists, herders and farmers often involved in conflicts and disputes over scarce water resources<sup>20</sup>. In addition, as the effects of

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<sup>13</sup> Houdret. A., 'Scarce Water, Plenty of Conflicts? Local Water Conflicts and the Role of Development Cooperation' Available at <https://gsdrc.org/document-library/scarce-water-plenty-of-conflicts-local-water-conflicts-and-the-role-of-development-cooperation/> (Accessed on 08/08/2026)

<sup>14</sup> Center for Strategic and International Studies., 'What Causes Water Conflict?' Op Cit

<sup>15</sup> Houdret. A., 'Scarce Water, Plenty of Conflicts? Local Water Conflicts and the Role of Development Cooperation' Op Cit

<sup>16</sup> United Nations Environment Programme., 'About Water' Available at <https://www.unep.org/explore-topics/water/about-water> (Accessed on 08/08/2026)

<sup>17</sup> Ibid

<sup>18</sup> Iceland. C., 'How to Solve Water-Related Conflicts' Available at <https://www.wri.org/insights/how-solve-water-related-conflicts> (Accessed on 08/08/2026)

<sup>19</sup> Houdret. A., 'Scarce Water, Plenty of Conflicts? Local Water Conflicts and the Role of Development Cooperation' Op Cit

<sup>20</sup> Ngonge. D.N., Muigua. K., & Nyukuri. E., 'Ripples of Conflict: Drivers and Resolutions of Vol 21/1 Water Resource Disputes - A Case Study of Lake Turkana Basin of Kenya' *Law, Environment and Development Journal.*, Volume 21, No. 1., 2025

climate change intensify all over the world, competition for water is expected to continue to grow a situation that is likely to cause more water resources conflicts in future<sup>21</sup>.

Water resources conflicts are a major threat to Sustainable Development. It has been observed that these conflicts often turn violent in nature resulting in loss of human lives<sup>22</sup>. In addition, at the local level, water resources conflicts usually fuel ethnic tensions and insecurity undermining peace and development<sup>23</sup>. These conflicts can undermine the availability, security and stability of water which is need to unlock key socio-economic activities including food production, healthcare, education and energy<sup>24</sup>.

Transboundary water conflicts also undermine peaceful and friendly relations among countries with shared water resources affecting regional peace, security and development. It has been observed that transboundary water resources conflicts and disputes are on the rise as nations compete over shared water resources, a situation that is worsened by climate change, socio-economic inequalities, and geopolitical tensions<sup>25</sup>. If not effectively managed, transboundary water resources conflicts and disputes can undermine regional stability, water security, and ecological sustainability<sup>26</sup>.

In light of their impacts on peace, security and development, it is imperative to embrace appropriate conflict prevention and management techniques in order to transform water resources conflicts.

### **3.0 Applying Negotiation, Cooperation and Collaboration to Transform Water Resources Conflicts**

Due to their negative impacts, it is imperative to transform water resources conflicts in order to ensure peace, water security, sustainability and development. In particular, hydro-diplomacy provides an effective and appropriate means towards transforming water resources conflicts into opportunities for cooperation and collaboration especially in relation to transboundary and shared water resources<sup>27</sup>. It has been observed that through hydro-diplomacy, it is possible to utilise joint efforts towards tackling and addressing concerns such as water scarcity, climate

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<sup>21</sup> Houdret. A., 'Scarce Water, Plenty of Conflicts? Local Water Conflicts and the Role of Development Cooperation' Op Cit

<sup>22</sup> International Institute for Sustainable Development., 'Climate change and conflict: Lessons from Community Conservancies in Northern Kenya' Available at [https://www.iisd.org/system/files/publications/climate\\_change\\_conflict\\_kenya.pdf](https://www.iisd.org/system/files/publications/climate_change_conflict_kenya.pdf) (Accessed on 08/08/2026)

<sup>23</sup> Ibid

<sup>24</sup> Ibid

<sup>25</sup> Azizi. M. A., & Leandro. J., 'Factors Affecting Transboundary Water Disputes: Nile, Indus, and Euphrates-Tigris River Basins' *Water* Volume 17, No. 4., 2025

<sup>26</sup> Ibid

<sup>27</sup> International Union for Conservation of Nature., 'Hydro-diplomacy: a driver of regional cooperation and transboundary water management in West Africa' Op Cit

change and different development needs and priorities among neighboring countries and communities<sup>28</sup>.

In light of mounting water resources conflicts including those involving neighboring countries and communities, it has been observed that hydro-diplomacy can provide effective cross-border water solutions for people and planet<sup>29</sup>. Since most water resources transcend state borders via shared river and lake basins or groundwater aquifers, the underlying political, economic, social and environmental interdependencies give water resources the crucial potential to either foster cooperation or trigger conflicts<sup>30</sup>. Consequently, it has been correctly asserted that encouraging greater cooperation and collaboration over transboundary water resources provides significant prospects for the resolution of political, social, economic and environmental conflicts towards greater regional integration, peace and development<sup>31</sup>.

Hydro-diplomacy therefore provides a useful entry point that can transform transboundary water resources conflicts towards peace, justice and sustainability. It has been observed that this approach relies on negotiation, cooperation and collaboration among neighboring states and communities<sup>32</sup>. For example, negotiation has been identified as a useful tool for appropriate and effective management of natural resource-based conflicts including those involving water<sup>33</sup>. It has been observed that since negotiation is voluntary and consensus-based, it leads to resolutions and outcomes that are longer lasting and more sustainable than adversarial processes or otherwise imposed outcomes<sup>34</sup>. The United Nations Environment Programme (UNEP) observes that negotiation is ideal in resolving natural resource-based conflicts due to its potential to foster collaboration in the ownership, management, and use of such resources<sup>35</sup>. In addition, it has been argued that utilizing negotiation in managing natural resource-based conflicts at communal, national, and trans-boundary levels is vital in helping different parties move from a position of conflict to one of cooperation and collaboration<sup>36</sup>. In particular, in the context of hydro-

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<sup>28</sup> Ibid

<sup>29</sup> International Water Management Institute., 'The growing importance of hydro-diplomacy in delivering cross-border water solutions' Available at <https://www.iwmi.org/blogs/the-growing-importance-of-hydro-diplomacy-in-delivering-cross-border-water-solutions/> (Accessed on 08/08/2026)

<sup>30</sup> Climate Diplomacy., 'Water Diplomacy' <https://climate-diplomacy.org/water-diplomacy> (Accessed on 08/08/2026)

<sup>31</sup> Ibid

<sup>32</sup> International Union for Conservation of Nature., 'Hydro-diplomacy: a driver of regional cooperation and transboundary water management in West Africa' Op Cit

<sup>33</sup> United Nations Environment Programme., 'Natural Resources and Conflict: A Guide for Mediation Practitioners' Available at [https://peacemaker.un.org/sites/peacemaker.un.org/files/NRCMediation\\_UNDPAUNEP2015\\_0.pdf](https://peacemaker.un.org/sites/peacemaker.un.org/files/NRCMediation_UNDPAUNEP2015_0.pdf) (Accessed on 08/08/2026)

<sup>34</sup> Ibid

<sup>35</sup> Ibid

<sup>36</sup> African Union., 'Report of the African Union Panel of the Wise on Improving the Mediation and Resolution of Natural Resource-Related Conflicts Across Africa' Available at



diplomacy, negotiation can enable neighboring countries to agree on effective international and regional water agreements, establish joint regional water management institutions, and manage conflicts through appropriate, effective and collaborative approaches<sup>37</sup>.

Hydro-diplomacy can also be effectively embraced by applying cooperation and collaboration to transform water resources conflicts. It has been observed that most of the planet's surface water resources cross at least one national boundary, underlining the urgent need for collaborative and cooperative water management<sup>38</sup>. Lack of cooperation and collaboration in the management cross-border water resources often leads to transboundary pollution, degradation of water resources, overexploitation by upstream states leading to water scarcity in downstream states, and water conflicts involving states and communities across states<sup>39</sup>. Hydro-diplomacy therefore provides a suitable tool towards bolstering cooperation and collaboration for sound governance of trans-boundary water resources for peace, justice and sustainability. For instance through transboundary cooperation and collaboration, it is possible to prevent conflicts and achieve common solutions on shared water resources for the benefit of all<sup>40</sup>. Consequently, states have been urged to utilize cooperative and collaborative tools and platforms including joint management institutions, regional dialogue on common challenges and concerns, exchange of data and information and regional agreements towards effectively utilising hydro-diplomacy to transform water resources conflicts<sup>41</sup>. It has been observed that through cooperation agreements between riparian states, joint transboundary river basin management organisations, mechanisms for sharing hydrological data, and regional consultation frameworks, it is possible to strengthen water diplomacy by applying cooperation and collaboration<sup>42</sup>.

#### **4.0 Conclusion**

With conflicts over water resources being witnessed all over the world especially those involving transboundary waters, it is imperative to transform these conflicts in order to foster peace, justice and sustainability. In particular, by utilising hydro-diplomacy, it is possible to transform water resources conflicts through negotiation, cooperation and collaboration for justice and sustainability.

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<https://wedocs.unep.org/bitstream/handle/20.500.11822/31043/AUP.pdf?sequence=1&isAllowed=y>  
(Accessed on 08/08/2026)

<sup>37</sup> International Union for Conservation of Nature., 'Hydro-diplomacy: a driver of regional cooperation and transboundary water management in West Africa' Op Cit

<sup>38</sup> Africa's Transboundary Water Resources., Available at <https://www.au-pida.org/water-sector-2/>  
(Accessed on 08/08/2026)

<sup>39</sup> Ibid

<sup>40</sup> What is Hydrodiplomacy and why is it relevant today?., Op Cit

<sup>41</sup> Ibid

<sup>42</sup> International Union for Conservation of Nature., 'Hydro-diplomacy: a driver of regional cooperation and transboundary water management in West Africa' Op Cit



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