REGULATION OF FRESHWATER AND THE ACCESS TO RIGHT TO WATER IN INDIA

School of Law, University of Leeds (U.K.)
Name of Student: Amrisha Pandey.
"Submitted in accordance with the requirements for the degree of – Doctor of Philosophy"
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Abstract

Freshwater as a natural resource is finite on the planet earth, and India suffers from acute shortage, growing demand and variability in availability. Therefore, this thesis explores, in what ways, could the law be used as an instrument by the state of India to mitigate the crisis. By virtue of statehood and the powers vested in the sovereign, it is duty-bound to honour the emerging *right to water* for all. Therefore, this research is construed around the realisation which makes the regulation of the water resource, the primary responsibility and the legal obligation for the state. The central theme of research is woven around this idea, and it is committed to improving water regulation by examining the legal rights and entitlements associated with the resource; and by exploring the impact on the regulation of the resource due to constitutional understanding and division of power for its regulation.

The laws and policies involved in water regulation in a federal state are fragmented and non-coherent. Although, for the progressive realisation of the right sustainable and efficient management of the resource is a must. As a response, this thesis analysis the utility of the existing legal apparatus and constitutional framework to possibly address the issue of water regulation of this century. Further, it investigates the relevance of the constitutional philosophy, because the authority to regulate and manage the resource is distributed among different organs at a different level of governance, in accordance with the spatial and temporal ideology of the constitution. The foundational principles, the legal apparatus and the institutions involved are analysed to ascertain the utility or otherwise of these institutions and the legal and constitutional provisions, at present and in the foreseeable future.

The findings suggest that the contradictory norms and principles exist and hinder the swift regulation of the resource, the institutions involved, and the policies made to carry the task for the governance of the resource also suffer a setback. The means and mechanism involved are not up-to-date and often not regarded receptive to the modern approach. Therefore, this thesis argues in favour of a set of established legal principles and practices emerging from the international domain of law, policy and best practice, and those acceptable within the national domain. Based on this understanding, the task for the harmonisation of the law and policy is construed, and some of the avenues of law-making and policy-making will be re-engineered, as per the best scientific and legal information available. The recommendations are made to overcome the difficulties observed and to strengthen the regulation of the resource by being within the constitutional framework.

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IN TIME AND WITH WATER, EVERYTHING CHANGES
Leonardo Da Vinci

Introduction

Water scarcity in South Asia is increasing, and given its size India invariably suffers from irregularity in availability of the freshwater resource in terms of both sufficient quality and quantity. The world is facing water scarcity and so is India, however, some parts of India are susceptible to extreme flooding and droughts, and climate change further exacerbates water variability.[1] The manner water is managed and regulated in a given jurisdiction affects most aspects of human life and plays a major role in the existence and the development of the state. It is nonetheless finite as a natural resource, and its depleting quality and the rising demand for it makes the management of the resource a daunting but essential task for the 21st century.[2] The terms water and freshwater are used in this thesis interchangeably. Both terms relate to fresh water as distinct from sea or saline water. This thesis deals only with the regulation of the water/freshwater resource mainly in terms of law, while partly touching the policy dimension.

Given the nature of crisis, the sustainable management and the strict regulatory regime for the resource is the best hope for dealing with the freshwater crisis at a time of changing climatic conditions. It aims to strengthen this objective in the context of India, a vast nation with significant water needs and which faces equally significant challenges in freshwater usage over the coming years. Therefore, this thesis emphasises on the importance of the regulation of water resource by strengthening the extant anomalies in law and by examining the utility of the legal, constitutional and institutional apparatus to further the cause. This provides a firm basis for recommendations and proposals to improve and reform the regulation of freshwater resource.

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[1] J Bird, S Roy, T Shah and Others, 'Adapting to Climate Variability and Change in India', in A Biswas, C Tortajada (eds) *Water Security, Climate Change and Sustainable Development* (Water Resources Development and Management. Springer, Singapore, 2016); See also: Vladimir Smakhtin, 'Brief for GSDR 2015: Managing water variability, from floods to droughts' (International Water Management Institute [IWMI] With contributions from Paul Pavelic, Giriraj Amarnath and Matthew McCartney [IWMI], 2015). Available at <https://sustain abledevelopment.un.org/content/documents/629976-Smakhtin-Managing%20water%20variability,%20f rom% 20floods%20to%20droughts.pdf>.

[2] Intergovernmental Panel for Climate Change, 'Climate Change Threatens Irreversible and Dangerous Impacts, but Options Exist to Limit Its Effects' (UN, 2 November 2014) available at <http://ww w.un.org/climatechange/blog/2014/11/climate-change-threatens-irreversible-dangerous-impacts-options-exist-limit-effects/> accessed 20 Nov 2018.

The means for water regulation simultaneously touches upon many key issues, including food security; national and international security; the realisation of the rights-based aspects associated with water; conservation of the resource; the social, economic and cultural development of the individual and the state, and others. Given this reach, the importance and utility of the resource are undeniable, therefore, the research questions are articulated below to further substantiate this study.

1. Questions that Arise

Water is vital for life on earth. The smart management and preservation of water is at the heart of sustainable development and efforts to combat problems arising due to changes in climatic conditions.[3] The issue of water security is high on the agenda of the United Nations and for nation states globally. It is a growing concern for the state of India given its size, climate, and population. The question that arises is whether India possesses the capacity to regulate and manage the resource in a way it can address the water crisis sustainably? This question can be answered by addressing several sub-questions:

- What are the major impediments in terms of law and policy for the regulation of the freshwater resource in India?
- How can these impediments be removed, given the applicability of the conflicting legal rights, doctrines, principles, and understanding of the freshwater resource in the country?
- What is the best course of action in harmonisation of the extant and evolving laws and policies governing the freshwater resource in India? Can it be achieved without distorting the constitutional fabric or causing a constitutional or political deadlock?
- What are the shortcomings of the courts and tribunals in safeguarding the *rights to water* for all and in promoting consistent and coherent practices for the regulation of the resource? How can they be removed? What more does rights-based discourse have to offer to enhance regulatory framework?

[3] United Nations, Water < http://www.un.org/en/sections/issues-depth/water/> accessed 15 may 2018; See also: UN, Water Security and the Global Water Agenda: A UN-Water Analytical Brief (20 Nov 2018).

To answer these questions and to ensure smart and sustainable regulation of the resource, it is crucial to guard the sanctity of the *right to water* in India. To achieve this objective this thesis seeks answers to the questions articulated above. This research undertakes the responsibility to answer these questions and in doing so it is hoped it will contribute towards the better means for the regulation of freshwater resource in India.

2. The Scope of the Study

This thesis provides an analysis of the existing norms and the laws regulating the freshwater resource in India. Freshwater for the purposes of this thesis comprises of water in liquid form mainly encompassing surface and ground water and the nature of resource is understood in terms of hydrological cycle. This investigation is conducted from a legal viewpoint, the aim being to investigate problems in existing theories, doctrines, statutes and the policies involved in the regulation of water. This careful analysis provides the basis for a set of proposals for the means and mechanisms to review or renew, the existing rules to better regulate the resource. Regulation of water in this thesis relates to the legal paradigm by strengthening the legal apparatus from within the constitution in a manner it supports the laws and policies to regulate the resource in an efficient, fair and sustainable manner.

Water as a natural resource is best managed locally, in line with the unique requirements of the locality. No set of uniform rules holds for different jurisdictions. Therefore, it is important to keep the preferential and differential needs of the states in mind, especially concerning the social, cultural and environmental requisites of the country.[4] This understanding is intact and reflected in the Constitution of India from the provision which divides the power for regulation of water between the union and the state;[5] the federal states hold primary responsibility and authority to regulate the resource.[6]

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[4] JRA Butler, RM Wise and TD Skewes and others, 'Integrating Top-Down and Bottom-Up Adaptation Planning to Build Adaptive Capacity: A Structured Learning Approach', (2015) 43 (4) Coastal Management 346.

[5] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Schedule Seven.

[6] Ibid Schedule Seven, State List – Entry 17.

However, the system currently lacks any set of legal principles or standards which can harmonise the practices of the federal units of the state; or regulate the manner they interact with each other concerning the means for the regulation of water within their respective territories. It lacks a set of legal principles which dictates what sort of cooperation must exist among the states (federal units); is there a duty to share information and what must be the nature of information about the shared resource, or the shared impact of the activities planned in the territory of the state; the responsibility to discuss and plan the joint management of the resource; or the ability to limit or design the manner of water regulation while considering the harm it might cause to the neighbouring states; etc. All in all, a legal mechanism which dictates the lawful means to limit the authority of the state to regulate water resource within their territory, while promoting a coherent and harmonising practice in water regulation among the states within the country.

This inclination in favour of a set of legal principles which can align concerning state practices of the federal units of a state for water regulation must not be construed as the plea for centralisation or implementation of a top-down approach in the regulation of water resource. On the contrary, the point this thesis is trying to make is that a framework law of mandatory nature is required in Indian jurisdiction which proposes the principles to be followed and the considerations to be taken care of, while federal units execute their authority by making law and designing policies to regulate water resource within their territory. This is to ensure that inter-state water regulation in India is done equitably and harmoniously. To do this, the thesis proposes to seek inspiration from legal principles emerging from the international domain of watercourse law,[7] policy and best practice, and those acceptable within the national domain.

This thesis refers to the International watercourse law mainly for two reasons: firstly, watercourse law provides a set of legal principles to be followed by the states (country), and accordingly the states are expected to regulate or manage their water resource; secondly, the set of principles propose litigious limits or well-reasoned restriction on the

[7] UN, Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 (adopted by the General Assembly of the United Nations on 21 May 1997, entered into force on 17 August 2014; See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49), as of July 2018 it has 16 Signatories and 36 Parties).

ability of state and shapes the manner for the regulation of the resource in an equitable and reasonable fashion.[8] The recommendations are based on sound legal and scientific bases, supported by customary international practices for the realisation of the holistic and sustainable regulation of the resource.[9] This is what is expected form a framework law in this thesis.

The framework law proposed is intended to regulate the behaviour and attitude of the federal units of the state towards each other, and towards the manner, they regulate the resource. Presumably, this will reduce the chances of politicisation over the shared resource. Nevertheless, it does not interfere with the authority of the state to regulate the water resource within its territory, and the federal units are free to create the law and policies given the requirement of the locality. Thus, rooting for the bottom-up approach coming from the federal units of state, but at the same time flourishing within the Chapeau of the framework law. This proposal for the creation of framework law differs from the Model Bill's proposed for freshwater and groundwater regulation in India in 2016.[10] The Model bills are recommendatory - they are a model statute for the regulation of water, for the federal units of the state to prepare or modify existing water regulatory regime. Whereas, the framework law proposed in this thesis mainly intents to regulate and channelise the inter-state behaviour towards water regulation using legal mechanism; and is proposed to be mandatory.

Regulation of freshwater is subject of investigation in this thesis in line with the progressive realisation of the rights associated with water resource in India. Additionally, the thesis aims to investigate the legal significance of the *right to water* in the context of India, in comparison with other available and competing rights over the resource. This thesis endeavours to connect the dots between established environmental laws and the overarching principles of law, and their cumulative impact on the regulation of the water resource in India. Based on the hypothesis that there is a limited chance of achieving the

[8] Ibid Article 5 and 7.
[9] ibid.
[10] Government of India*, Draft National Water Framework Model Bill, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 16 May 2016); Government of India*, Model Bill for the Conservation, Protection, Regulation and Management of Groundwater, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 17 May 2016).

sustainable management of the freshwater resource, if this is planned and understood in isolation from other social, economic and ecological considerations, and neglects the realm of the environmental law in toto. At present, however, this appears to be exactly what is happening. The legislature has taken this approach in the past and is also reflected in its current work.

Regulation of water to an extent depends on the available means to resolve the disputes arising from the water sector. However, the concerns arising from water disputes are multidimensional, and they raise broader concerns such as equity, equitable distribution, evaluation of competing for legal rights and principles concerning water regulation and many more. Given the nature of water disputes, the body empowered to adjudicate these issues must have enormous competence and wider jurisdiction to tackle all these competing claims. The only body competent to address the issue is the Indian judiciary. Although, it is beyond the capacity of this thesis to discuss all the concerning aspect of the judiciary. Instead, two of the tribunals are chosen as a subject of investigation in this thesis and their competence will be evaluated against the existing court system and in consideration of the shortcoming faced by the court system while dealing with the environmental issues. They are the National Green Tribunal[11] and the Inter-State Water Dispute Tribunal.[12] NGT is chosen because judiciary constantly felt that they are not equipped to deal with the interdisciplinary aspects related with the environmental disputes and therefore require a specialised institution. Inter-State Water Dispute Tribunal is chosen because it again deals with the manner two or more states share water resource, and to investigate the impact of the constitutional distribution of power and viability of its understanding about the resource at present.[13]

This thesis argues in favour of learning from the development of international watercourse law and applying that understanding to swiftly regulate the inter-state practices for the regulation of water resource in a federal country. Additionally, it emphasises that the constitutional provisions and the philosophy, along with the institution's invested in water regulation, must be updated in such a way that they

[11] Government of India, *National Green Tribunal Act, 2010* (Act No. 19 of 2010).
[12] Government of India, *Inter-state Water Dispute Tribunal Act, 1956* (Act No. 33 of 1956).
[13] Article 256.

become receptive to the needs of changing climatic conditions while also being competent to ensure water security. The following section provides the research background and the rationale for the study.

3. Research Background and Rational

The research background is to give a context to the study by comparison of the situation in the domestic context as well as internationally. Regulation of freshwater resource in terms of law and policy grapple with various issues in any given jurisdiction, this thesis intend to outline and address those within the limited mandate of this research. The international community is also trying to address this crisis using the human rights perspective.[14] The efforts of the United Nations (UN) and other international and regional organisations over the past two decades has driven home the importance of the issue, and this is only expected to increase in the future, with the very real threat that if it is not resolved, it will at some point go beyond the human capacity to address it.[15]

The international legal status of the *right to water* is believed to flow from international human rights treaties. These include the International Covenant on Civil and Political Rights (1979);[16] the International Covenant on Economic, Social and Cultural Rights (1979);[17] the Convention on Rights of Children (1993);[18] the Convention on the Elimination of All Forms of Discrimination against Women (1979),[19] and the International Convention

[14] United Nations, Human Rights Council, Resolution on Human Rights and Access to Safe Drinking Water and Sanitation, A/HRC/15/L.1 (24 September 2010).

[15] United Nations, Office of the High Commissioner of Human *Rights, General Comment No. 15: Right to Water (Article 11 and 12 of the Covenant) Adopted at the Twenty-ninth Session of the Committee on Economic, Social and Cultural Rights,* on 20 January 2003 (Contained in Document E/C.12/2002/11).

[16] United Nations*, International Covenant on Civil and Political Rights, 1966* (entered into force on 23rd March 1976, in accordance with article 49, for all provisions except those of article 41; 28 March 1979 for the provisions of article 41 (Human Rights Committee), in accordance with paragraph 2 of the said article 41.) UNTS Vol. 999, p. 171, as of July 2018 it has -74 Signatories and 171 Parties. Article 6.

[17] United Nations*, International Covenant on Economic, Social and Cultural Rights, 1966* (adopted by the General Assembly of the United Nations on 16 December 1966, entered into force on 3 January 1976, in accordance with article 27) UNTS Vol. 993, p. 3, as of July 2018 it has - 71 Signatories and 168 Parties. Article 11 and 12.

[18] United Nations, *Convention on the Rights of the Child, 1989* (entered into force on 2 September 1990, in accordance with article 49(1).) UNTC Vol. 1577, p. 3, as of now it has - 140 Signatories and 196 Parties. Article 24.

[19] United Nations, *Convention on the Elimination of All Forms of Discrimination against Women, 1979* (entered into force on 3rd September 1981, in accordance with article 27(1).) UNTS Vol. 1249, p. 13, as of July 2018 it has – 99 Signatories and 189 Parties. Article 14 (h).

on the Elimination of All Forms of Racial Discrimination (1969).[20] The UN Special Rapporteur, in her thematic mandate on the *right to water and sanitation,* has confirmed this view and determined the *right to water* as a basic human right requiring progressive realisation. As a result, the *human right to water and sanitation* was later recognised by resolution 64/292 of the United Nations.[21] Consequently, In India, the higher judiciary has interpreted the *right to water* as an integral component of Article-21 'Right to life'.[22] Notwithstanding the aforementioned developments, the Indian Constitution has not explicitly recognised the *right to water* as a fundamental right, nor is it recognised as a legal right in any of the statutes with nationwide implementation.

The status of freshwater - Freshwater is a natural resource in all its form (solid, liquid and gas) and throughout its hydrological cycle.[23] Due to its vital nature and importance for life on earth it is the subject of significant and contested regulatory regime. The most favoured legal theories or doctrine dealing with freshwater either recognise it as a natural resource in all its forms or consider it as a natural resource for the 'common heritage' of humanity.[24] The time has come to recognise the freshwater resource as a *common concern of humankind* and holistically address the issue to ensure water security for all.[25]

For the purpose of this thesis, the status concerning water limits itself to the status guaranteed by law based on categorisation of the component of water resource in a given jurisdiction or in a given form, for the regulation of the resource. In India for instance, surface water and groundwater are categorised and treated differently. This type of status associated with water is subject to the regulatory regime as part of the governance mechanism. By granting legal right to the water resource, or to its component, or by granting a kind of access to the resource or its component, an alternative form of legal

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[20] United Nations*, International Convention on the Elimination of All Forms of Racial Discrimination, 1966* (entered into force on 4th January 1969, in accordance with article 19.) UNTS Vol. 660, p. 195, as of now it has – 88 Signatories and 179 Parties.

[21] United Nations, *The Human Right to Water and Sanitation, 2010* (Resolution adopted by the General Assembly on 28 July 2010, A/RES/64/292).

[22] Supreme Court of India, *MC Mehta vs Kamal Nath* (1997) 1 SCC 388.

[23] Definition of hydrologic cycle: the sequence of conditions through which water passes from vapor in the atmosphere through precipitation upon land or water surfaces and ultimately back into the atmosphere as a result of evaporation and transpiration. (Merriam-Webster Dictionary)

[24] RM Nagle, 'Fossil Aquifers: A Common Heritage to Mankind' (Winter 2011) Journal of Energy and Environmental Law 39.

[25] Edith Brown Weiss, 'The Coming Water Crisis: A Common Concern of Humankind', (2012) 1 (1) Transnational Environmental Law 153.

status is created over the resource. This thesis wishes to address both within the limited mandate.

Major policy considerations - Various governmental departments have a fragmented regulatory authority over the water resource. This is because of water's overarching importance and multiple municipal and commercial uses, including the provision of drinking water and domestic water, and the use of water in irrigation, power generation and mining, to name a few. Despite its importance, there is at present no sound legal background that encompasses all these concerns and acts as a foundational set of legal principles for the regulation of water.[26] Therefore, efforts made by policy-makers become important at both the level of federal units of state and at the national level. They often try to bridge the lacunas created or not dealt with by the legislature to provide water for domestic and irrigational needs.[27] India as a state has failed since its independence to provide for a comprehensive legal framework for water governance. The reasons for this are investigated in detail in this thesis.

Legal provisions - One of the major impediments to the regulation of the freshwater resource is that it is divided into two components: surface water and groundwater, each of which is treated differently. Surface water is considered the property of the state based on its territorial jurisdiction, and is governed by the doctrine of public trust,[28] whereas groundwater is regarded as the property of the person owning the land. Water being regarded as the vital component of environment is argued to be subjected to and regulated using the group of laws and principles concerning environment. Therefore, the applicability and impact of the group of land laws over the component of freshwater resource – the groundwater is subject to investigation in this thesis. The statutes concerning the property right to groundwater are the Indian Easement Act, 1882;[29] the

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[26] P Cullet (ed), *Water Governance in Motion: Towards Socially and Environmentally Sustainable Laws* (CUP 2010).

[27] Ministry of Rural development Government of India, *Bharat Nirman through Rural Development.* 2007-08 (annual l report). See also, P Cullet, 'New Policy Framework for Rural Drinking Water Supply Swajaldhara Guidelines' (2009) 44 (50) Economic and Political Weekly 47.

[28] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018), Part XI- Relations between the union and the States: Distribution of Legislative Powers, Art 245-55.

[28] ibid.

[29] Government of India, *the Easement Act, 1882* (Act No. 5 Of 1882).

Transfer of Property Act,[30] 1882 and the Land Acquisition, Act of 2013.[31] Based on the common law system, groundwater in India is regulated as part-and-parcel of the land. Therefore, ownership and other legal rights arising from land ownership make the regulation of groundwater onerous and not consistent with the current practices.[32] Other form of rights guaranteed over the resource within the jurisdiction will also be investigate to further the cause and establish clear hierarchy of rights in India.

Constitutional provisions - The Indian constitution provides for the separation of powers between the union and the states.[33] Water is primarily listed as belonging to the jurisdiction of the provincial state; this empowers each state to promulgate laws and policies for the management of the resources within the territory. The practices and the means to regulate the resource at times vary within the state due to vast size of the state and different requirement of the locality.[34] This freedom for the regulation of water enjoyed by the states is crucial, however, it results in incoherent and unsustainable practices which has transboundary consequences.

The positioning of water in the Constitution of India also plays a crucial role in determining the ability of the institutions involved in the regulation of the resource and the nature of powers they are entrusted with to fulfil the task. The distribution of power between union and the state concerning the water resource were agreed upon in context at the time and with the information available. However, since then, and despite more information on the matter, there has been no substantial change to this approach. Therefore, it is necessary to analyse the premise of such a distribution of power in the light of scientific advancements in understanding of the nature of the resource and the developments in legal practices advancing the regulation of the resource.

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[30] Government of India, *Transfer of Property Act, 1882* (Act No. 4 of 1882).

[31] Government of India, *The Right to Fair Compensation and Transparency in land Acquisition, Rehabilitation and Resettlement Act, 2013* (Act No. 30 of 2013).

[32] P Cullet and J Gupta, 'Evolution of Water Law and Policy in India' in J W Dellapenna and J Gupta (eds), *The Evolution of the Law and Politics of Water* (Springer Academic Publishers 2009).

[33] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018].

[34] Government of India, *Maharashtra Groundwater (Regulation for Drinking Water Purposes), 1993* See also. P Cullet, 'Groundwater Regulation in Uttar Pradesh: Beyond the Bill, 2010' (2012) Policy Paper, International Environmental Law Research Centre.

The other half of the problem is due to the ideology behind such a division. The introduction of new principles in the form of law by the British Empire during its rule gradually challenged the principles used for the regulation of the resource in an ancient civilisation. The latter were based on the assumption that economic development is grounded in the availability of environmental resources in nature's bounty.[35] Conversely, the British pushed the idea that environmental concerns are subservient to economic objectives, thus emphasising the accumulation of wealth and ownership of the resource.[36] This caused a gradual shift from people's 'Customary Usufructuary Rights'[37] over the water resource to the ownership rights of people attached to the ownership right on land and driven by a capitalistic mindset.[38]

Transboundary impacts of the freshwater crisis - It has been predicted by scholars, politicians and the UN Secretary-General that the future will inevitably involve 'water wars'.[39] Asia is pictured as the principal battleground for the global water-food-energy crisis of the 21st century.[40] However, with this early warning, freshwater could yet be used as a means to jointly address the crisis by promoting and implementing environmental and humanitarian concerns above and beyond economic and political aspirations.

Regulation of water is a multidisciplinary issue. It invariably touches upon most if not all branches of governance. It touches upon various sectors and involves the authorities working at different hierarchical level. It is in this context that the transboundary impact of regulation of water is explored in this thesis. It needs to be holistic and we can no longer design the tools to regulate water by confining ourselves within the realm of the water sector.[41] This exploration forms the foundational ground upon which the architecture of policy-making and laws for the regulation of the resource shall rest. The interdisciplinary nature makes it critical to investigate concerning legal and

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[35] W Doniger, *The Law of Manu* (Penguin Classics, New Delhi 2000)
[36] J Fullerton, *Regenerative Capitalism: How Universal Principles and Patterns will Shape Our New Economy* (Capital Institute the Future of Finance 2015).
[37] Merriam-Webster Dictionary: One having the usufruct of property; one having the right to use or enjoy something.
[38] Government of India, *The Easement Act of India, 1882* (No. V of 1882).
[39] AT Wolf, '"Water Wars" and Water Reality: Conflict and Cooperation along International Waterways' (1999) 65 Environmental Change, Adaptation, and Security NATO ASI Series 251.
[40] Global Water Partnership, *Technical Focus Paper: Water and Food Security- Experiences in India and China,* 2013.
[41] J Gray, C Holley, R Rayfuse (eds), *Trans-jurisdictional Water Law and Governance* (Routledge 2016) 26.

legislative apparatus involved in the task for the regulation of water resource. So far, the main weakness observed in water governance is the inability of the water sector to look beyond its own boundaries and interact with other possible concerns and branches that might influence water governance.[42] This thesis intends to highlight these concerns and address the issues in a holistic way. The following sections explain the originality of the work carried out in this research, followed by the methodology used to further the objectives. Finally, the organisational structure of this thesis is described.

4. Originality of the Research

The originality of this research lies in the fact that it concerns itself with the holistic regulation of freshwater resource in India. This research is designed to critically analyse the applicable laws and policies involved in regulation of water resource and to identify and offer solutions to the various anomalies and impediments that hinder water regulation in one way or the other.

In pursuit of the objective stated above, this thesis identifies grey areas in the existing laws and policies and suggests the mechanism to improve them using the available legal apparatus or by exploring new ones as well as ensuring that these fit within the constitutional framework of India. An effort will also be made to understand how best to make the constitutional framework receptive to such change. This investigation is not fixated on the outcome or the implications of the available legal instruments in regulation of water resource. Rather, the thesis sets out to investigate the root causes of the failure in regulation of the resource to adequately deal with the water crisis in a given jurisdiction; the manner water resource is understood and how that understanding dominates the means for the regulation of the resource; and to examine how that obstructs or facilitates the holistic regulation of water. This thesis intends to investigate and design the mechanism for, or to remove the obstacles to ensure regulation of the resource holistically. It provides a detailed analysis of the pattern of the constitutional distribution of power between the centre and the provincial governments of the federal

[42] F Schneider, M Bonriposi, O Graefe and others, 'Assessing the Sustainability of Water Governance Systems: the Sustainability Wheel', (2015) 58 (9) Journal of Environmental Planning and Management 1577; See also: R Maia and LS Pereira, 'Water Resources Management in an Interdisciplinary and Changing Context', (2015) 29 (2) Water Resource Management 21.

state in India. The constitutional arrangements, and the ideologies governing those provisions are directly or indirectly concerned with the water regulation or from which the state derive power and authority for water regulation are subjected to scrutiny. The aim of this is to clarify their contemporary utility.

What makes the task of harmonisation even more challenging in the Indian jurisdiction is the sheer diversity, in terms of social, ecological, cultural and other topographical considerations. Two means are suggested to achieve the harmonisation in terms of law and policy of federal states, as well as to harmonise the state practice for water regulation *vis a vis* adjoining federal units.

1. The existing debate proposes the formation of a framework statute or the model bill for the states to follow and update the means for water regulation accordingly, to harmonise the laws and policies for the regulation of the resource. Despite the shortcomings of the proposal, academic discussions have completely ignored other possibilities arising from within the constitutional set-up and have chosen to deal with the issue of regulation of freshwater in isolation, by segregating it from other environmental components. This thesis undertakes the responsibility of bridging this gap in the legal literature. Additionally, the issue of freshwater regulation in this thesis is neither understood nor discussed, in isolation of the other environmental components. Rather it is understood in its entirety due to its transboundary implications, inter-disciplinary nature and ecological cycle. A comprehensive mechanism is suggested for the harmonisation of the laws and policies of the federal states dealing with the environment in the form of environmental procedural code.
2. A framework statute inspired from the watercourse convention of mandatory nature is suggested to regulate the behaviour of states in terms of water regulation while executing their authority to regulate the resource in their territory. To ensure the objective of the thesis, the author hypothetically projects the federal states of India as an individual country, considering the size of the country and the variety of geographical and topographical locations it possesses. It is to regulate the behaviour of states towards the means and manner of regulation of water within their territory, as well as their behaviour with adjoining

states sharing the resource, or sharing the transboundary impact of the activities of the states. It is suggested to explore and apply the suitable outcomes from the international watercourse convention in this regard. This will be of the utmost importance because water is the subject matter of the provincial states and they have primary authority to regulate the resource within their territory.

In addition to strengthening the foundational aspects concerning the regulation of freshwater resource, the rights-based discourse which recognises the *right to water*, and the institutions which are capable of imparting access to environmental justice, are investigated. This analysis investigates whether the judicial recognition of the *right to water* as the fundamental right is sufficient for its realisation. Moreover, other legal, customary or constitutional rights applicable to the water resource are analysed and compared against the *human/fundamental right to water*. This investigation is required to establish a clear hierarchy of those rights that deal with the water resource within the domestic jurisdiction of India. This makes the case in favour of the chronological hierarchy of the rights, given their legal status and importance in a domestic legal jurisdiction, it also refutes the status of some of the conflicting legal rights in the present context, based on legal grounds. Furthermore, to ensure *access to environmental justice* and to ensure effective adjudication of Inter-State Water Sharing Disputes, the competence of the National Green Tribunal and the Inter-State Water Dispute Tribunal respectively are investigated in this thesis.

Another innovative technique adopted in this thesis is that it assumes the regulation of the freshwater resource as the responsibility of the state. The role of the state is scrutinised, mainly with respect to the execution of its duties and obligations arising from the rights-based discourse, which compels the state towards the fulfilment and progressive realisation of the *right to water* for all. It is a moral, ethical and legal responsibility of the state arising from the status of sovereign statehood, with due attention given to the changing concept of statehood and the responsibility of the state in the contemporary world. The following section discusses the methodology chosen to achieve the objectives of this research.

5. Methodology

Three research methods are the chosen mode of the research methodology: doctrinal research, comparative research, and a contextual case study approach. These were selected to address the research questions articulated above. This thesis will consider international law and other relevant laws and theories influencing the freshwater regulation. It is a case study of India, thus keeping in mind the application, relevance and, suitability of such methods to fit within the socio-economic, political, cultural and legal environment of India. The three methods are considered in turn below.

5.1. Doctrinal Research

Doctrinal research is research that provides a systematic exposition of the rules governing a legal issue. It analyses the relationship between the rules, explains areas of difficulty, and perhaps predicts future developments. In this tradition, this thesis will critically evaluate the existing rules and recommend necessary changes. The conceptual aspect of research fosters a more comprehensive understanding of the conceptual basis of legal principles and their combined impact on the range of rules and procedures that touch on an area of concern. Finally, there is fundamental research designed to secure a deeper understanding of law as a social phenomenon, including research on the historical, philosophical, linguistic, economic, social or political implications of the law.

This thesis will primarily use doctrinal research to conduct its study and reach conclusions. This research methodology will be used to analyse all the overarching laws which directly or indirectly influence the regulation of the freshwater resource within the territory of India. The study critically analyses and highlights specific rules or principles which are contradictory to one another or act as an impediment to the sustainable use and management of the resource in general. Consequently, the property rights, legal rights and constitutional rights arising from the existing statutes related to the regulation of the resource will be considered, to determine their hierarchy and validity, based on the evidence and reasoning available.

Building on the findings of this research, the thesis will outline the lacunas in the existing legal setup and make appropriate suggestions to overcome them. To do so, the existing concepts will be challenged to assess whether they could accommodate the

needs of the present time, or if there is scope for improvement either by abolishing, amending or reforming the existing legal framework. Theoretical research aims to secure a deeper understanding of law and policy and to emphasise its impact on society at large. Therefore, the historical, social and cultural aspects of these laws and policies will be considered, to analyse further their utility for the management of the freshwater resource, based on the uniform principles of the law, and to take into account the need of the localities.

5.2. Comparative Research

The purpose of conducting a comparative study is to evaluate two or more legal systems with the intention to develop a wider understanding of their workings and to learn from the experiences of different legal systems and international laws in the field of concern. Law can travel because different political communities face similar problems. It is inefficient and burdensome to create new legal forms when existing forms are capable of providing a solution. In this legal research, the principles applied domestically to the regulation of the resource will be compared with developments in another jurisdiction. Furthermore, to regulate the state behaviour of federal units concerning water regulation within their territorial limits and with adjoining states sharing the resource, the situation in India will be equated with the development of watercourse law and comparatively learned from. Along with this, internationally recognised best practices from around the globe would be used to compare the situation India is facing or might face shortly. This is how this thesis aims to apply the comparative method of research for practical application in this research.

Part One of this thesis will lay down the foundation, or clarify the foundational aspect, on which the regulation of the freshwater resource in Indian jurisdiction can survive and flourish. This foundation rests on the clarification of the interdisciplinary concerns and the transboundary impact on the resource, the means, mechanism and the importance of integration of all such concerns for the regulation of the resource will be explored in this thesis. The utility of the laws and policies working at the national level will be subjected to the investigation because the legal system relating to the management of the resource has been allowed to develop in a fragmented and piecemeal fashion without a sound legal basis on which to lay the foundation of such laws.

The laws and policies related to the freshwater resource in different paradigms will be evaluated and compared with other jurisdiction and developing international law. The impact of policies and their importance in the progressive realisation of the *right to water* in the water sector in India is analysed. The situation in an international forum is referred to because the right based discourse offers different possibilities to regulate water resource, to determine the content of the right, and to suggest the parameters and the techniques for the progressive realisation of the right. For this purpose, the national and international documents concerning the rights-based discourse will be referred. The fundamental right in a domestic context and the *human right to water* in a global context are compared, to identify what significance the legal recognition of the right in a given jurisdiction has, and the extent to which this charts the way for the progressive realisation of the *right to water.*

Additionally, the provision related to investment and project finance in the water sector is investigated. In the process of this investigation, the power imbalance between the global north and south and the effect of this on the negotiation of the terms of investment is discussed with reference to a policy in India. It is crucial to scrutinise the role of the state government in negotiating the terms of investment. This is even more so when investments are made in the social sector with the aims of the fulfilment of the social, economic and cultural rights of the individual. These invariably affect human rights in, and the environment of, the host country. The state is the primary duty bearer for the protection of these concerns and has a moral, legal and ethical responsibility to protect them in the best manner possible. Relevant developments in international law are examined, and emulated, where they are deemed a suitable fix for the problems faced in the domestic context.

5.3. Case Study Research

Several cases will be analysed in this thesis. These cases are taken from both the Indian and the international jurisdictions. The selected cases are of importance in explaining and developing effective legal rules and principles for the governance of the water resource. At the international level, the laws guiding the use of freshwater are in a developmental stage. As a result, case law plays an important role in moulding and developing the legal practice of the state. Case laws are inspired by the practical

implementation of legal principles or existing legal provisions in a local jurisdiction. These deal with the conflicting or changing needs of the people, culture or the territory to which they are applied. Therefore, they facilitate or accommodate change and provide legal stability to a situation, or at times act as the driving force for legislative change in a country. This has certainly been the case in India. Case laws are of grave importance in accepting or rejecting certain legal or cultural notions or practices governing the resource in a given jurisdiction. They deal with specific issues and concerns, which is why they should not be considered for uniform application, as they are *justice in personam* and not *in rem*. Nevertheless, legal precedents and the opinions of judges are the source of law and inspiration for academic research, to elaborate and enhance the clarity of the content and validity of judicial decisions. This study will analyse the judicial decisions with great caution, keeping the developing phase of freshwater laws and the socio-political sensibility attached to the vital resource in mind.

6. Structure

This thesis is in four parts. Part One consists of a single chapter. It is a sincere effort by the author to bridge the gap between science and policy and to provide the necessary basis for the formulation of the laws and policies for the governance of the freshwater resource in India. This foundation forms the basis of the governance of the freshwater resource and provides strength and legitimacy to the laws and policies designed for the governance of the resource. This investigation marks the beginning of the central objective of this thesis, which is to address major impediments in terms of existing law and policy in the governance of the resource in India. In doing this it sets the ground for the parts that follow.

Part Two of this thesis comprises two chapters. Both chapters in some way signify the importance of harmonisation of the state practice in regulation of water resource. Chapter two, addresses the harmonisation of state practice as to the manner they regulate the water resource within their territory and how they interact with adjoining states for the same cause. The technique for the harmonisation in this chapter is devised using the legislative and institutional means available in the Constitution of India but learned from the development of international watercourse law and practices. The

autonomous federal units are equated with the states in international law and the understanding of international law is learned from and deduced to accommodate the concern in the domestic jurisdiction. The suggested means ensures the harmonisation of states practices in a federal set-up concerning the regulation of water resource.

Chapter Three deals with the harmonisation of the legislative practices and implementation of the policy in the states. It further provides an analysis of the existing legal or constitutional rights and theories dealing with the governance of the water resource in the Indian jurisdiction. Additionally, the validity and utility of these rights and theories in contemporary times are investigated, in the light of the developing environmental law and practices in the country. Following this analysis, to overcome any anomalies and contradictions observed in the application of the legal principles and theories, the other tools available within the constitutional ambit are examined. This will provide a basis for the formulation of effective remedies to the observed flaws.

Part Three of this thesis comprises two chapters. Chapter Four deals with the groundwater rights associated with the group of land laws. The legal sanctity of these rights is comparatively examined against the developing international watercourse law and customary principles of international law. In light of this analysis, a challenge is made to the continuing practice of treating one constituent of the freshwater resource, the groundwater, with a different set of principles of law. The underlying discussion in this chapter provides the legal grounds for discrediting the practices existing in the territorial and jurisdictional domain within the country.

Chapter Five provides an analysis of the judicial recognition of the *right to water* in India and the means for its progressive realisation. The *human right to water* in India is interpreted by the judiciary to fall within the purview of a fundamental right. This chapter provides analysis of the extent to which realisation of this right in practice depends on its legal recognition as a human right, and the role that efficient governance could play in the accomplishment of this goal. Part Two and Three constantly look for possibilities arising from the rights-based discourse and the one state could exploit for improving the water governance.

Part Four is dedicated to analysing the competence of the tribunals created for ensuring easy *access to environmental justice for all* and for ensuring the good governance of the water resource, respectively. It consists of two chapters. Chapter Six investigates the role of the National Green Tribunal of India in creating consistent environmental jurisprudence in the country. Moreover, its impact in enhancing environmental law-making is examined, as is its contribution towards the development of coherent laws and policies. The investigation aims to analyse the competence of the tribunal as a specialised institution of competence, given the objective and purpose of its creation, in the face of changing climatic conditions. The tribunal is analysed with sincerity, as it is responsible, to an extent, for the adjudication of environmental justice in India and the preservation of the associated rights. However, this authority does not belong to the tribunal alone but is distributed between the courts and the tribunal. This is a matter of grave concern from the author's point of view and this is discussed.

Chapter Seven deals with Inter-State Water Disputes in India. In this chapter, the author provides analysis of the constitutional provision that distributes the power to govern the water resource among different units of the state. The manner of this separation of powers is investigated to determine its utility in the present scenario. The sharing of river water between the territory of two or more states and the conflicts that arise over this matter are the main concerns of this chapter. The Constitution of India makes specific provisions to deal with the sharing of river water between the states, and of course, created tribunals to adjudicate disputes arising from the sharing of river water. This chapter analyses the existing mechanisms and extends its investigation to the sharing of the freshwater resource in general, providing a holistic picture of the current situation. It is argued here that the existing institutions, constitutional provisions and the manner of distribution of power among the units of governance are not on a par with the modern understanding of the resource, or its means of governance. Therefore, this needs to be revised accordingly. Additionally, this chapter argues in favour of a strong legal foundation, and for clarity of principles dealing with the regulation of the freshwater resource as a means by which it can reduce the politicisation of Inter-State Water Disputes.

At the end of Part Four, the author will conclude the findings by summarising the discussions and the observations that have been made in this thesis. The conclusion provides practical solutions that can be applied to improve and enhance the efficiency of the laws and policies working for the governance of the freshwater resource in India.

Part I

Chapter 1: Foundation of Freshwater Regulation: towards an Inclusive Regulatory Regime in India

1. Introduction

Water scarcity at the present time is raising security concerns across the globe, which makes the effective management and regulation of the resource more critical than ever. The scarcity of the vital resource could be the source of potential conflict among the communities.[1] The health and the well-being of every life form on earth along with the humans are at risk.[2] The quantum of the resource on our planet is static, and there is no known substitute for freshwater. Therefore, the regulation of the freshwater resource is believed to be the best hope for the survival of humanity and the well-being of our planet. It is with this realisation this thesis is inspired.

The central aim of this thesis is to address major impediments in terms of existing laws and policies concerning water regulation in India. This chapter sets the foundation prior to the detailed investigation of the individual aspects of water regulation in terms of law and policy in India in the chapters that follow. It is designed with the sincere hope to bridge the gap between the science and policy, to aid policymakers in working towards the common aim of overcoming the water scarcity, sustainable and holistic regulation of the resource, and to minimise the potential for water-based conflict. The inclusive, holistic or sustainable water regulation mentioned in this thesis - is defined as the regulatory regime of water which encompasses and address most of the interdisciplinary concerns in terms of law and policy contained within the mandate of research object stated in this thesis. A regulatory legal regime which can regulate water in a manner it is holistic and could sustain sustainable management of the resource. By removing the obstacles created due to the prevailing legal norms and practices of contradictory or obsolete nature. It provides the foundational basis and outline the key components to be contemplated for the regulation of the freshwater resource, that might lie outside the strict domain of law and policy.

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[1] UNEP, *Renewable Resources and Conflict: Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict* (United Nations Interagency Framework Team for Preventive Action, 2012).

[2] Rivers in Crisis: Mapping Dual Threat to Water Security for Biodiversity and Humans, 'Global Threats to Human Water Security and River Biodiversity' <http://www.riverthreat.net/> accessed 20 Nov 2018.

Section Two studies the human-nature interface; humans and nature have evolved side-by-side through generations and so has evolved the relation between them. Humans considered it as their birth right to extract the fruits of nature to satisfy their needs for different purposes. Meanwhile, with the growth in human population and their advancing capabilities to continue such extraction, it has brought tragedy to the natures' commons. Hardin postulated that the human-nature interface could be unsustainable and exploitative of natural wealth in his theory of *tragedy of commons*.[3] This interface is studied to understand the ideological factors that underlie the manner in which the resource is treated, utilized, regulated and governed at a given time in a given jurisdiction by the humans.

The doctrine of common concern of humankind progressed with the similar concern for the global commons in a global scale and due to advancing capacities of the states to access, extract and exploit the resources beyond states jurisdiction. More so because the natural course of these resource is such that they cannot be contained within the political, administrative or legislative boundaries, and their regulation causes transboundary impact. All the states have common interest and responsibilities towards them and no state can claim these as their property. Often it is required by the states to act in cooperation while regulating, dealing with, preserving or conserving these resources. Thus, raising common concern for the humankind.

Subsequently, the manner human interacts with nature again becomes the decisive factor and the focal point to determine the course of regulation and management of the resource. For the sake of this study, freshwater in a liquid state is considered as the global commons. Candidature of freshwater to be classified as global commons is supported mainly because it travels freely from one political territory to another and its conservation in isolation is not possible due to the transboundary impacts. To study this interface and the occurring change in this human-nature interface from legal viewpoint in the light of developing international environmental and freshwater course law; it is required to categorise the resource, as categorisation helps the legal discipline to determine the set of principles, doctrines and the legal framework to be applied for the

[3] T Dietz, E Ostrom and PC Stern, 'The Struggle to Govern the Commons' (2003) 302 Science, Special Section 1907.

regulation of the resource. It quintessentially serves two functions; firstly, it outlines the universal behavioural norm acceptable for the regulation and management of the resource; and secondly, limits the state's authority or restricts certain behaviours within the territory for the regulation of the resource. This categorisation becomes important especially when it raises the question of equity:[4] *inter-generational* and *intra-generational* both,[5] making it an exciting prospect for analysis and to determine its candidature as the global commons.

Section Three invests itself in bridging the gap between science and policy by analysing certain basic and foundational attributes on which the success of any law or policy for the regulation of the freshwater resource depends. The freshwater does not restrict itself with traditional branches of social sciences and law, for its regulation; rather, it depends on scientific understanding and an inter-disciplinary approach. Scientific advancement in the field has brought into light some important facts which are responsible for the transitional shift in the manner of regulation of the freshwater resource in this century based on an understanding of the 'Hydrological cycle'[6] and the notion of 'transboundary impacts'. Consequently, this chapter attempts to map the components and the scale of issues to be considered for holistic regulation of the resource.[7] The principle of transboundary harm or the transboundary impact of the environmental issues has been the turning point in the history of environmental law,[8] it changed the manner of how we approach and deal with the issue. This principle is at the core of the freshwater regulation as well, but due to the uniqueness of the resource, the transboundary impacts are understood differently and explained in detail in the sub-sections that follow. Later in this chapter means to ensure freshwater security by using the technique of integration are highlighted. The approach of 'Integrated Water Resource

[4] M Owen, 'Utilization of Shared International Freshwater Resources – the Meaning and Role of 'Equity' in International Water Law' (2013) 38 (2) Water International 112, 29.
[5] EB Weiss, 'Intergenerational Fairness and Water Resources' in Sustaining Our Water Resources' [1993] Water Science and Technology Board, National Research Council 3.
[6] GM Hornberger, 'Hydrologic Science: Keeping Pace with Changing Values and Perceptions' in *Sustaining Our Water Resources (1993)* Water Science and Technology Board, National Research Council, 43.
[7] G Aguilar and A Iza, *Governance of Shared Waters: Legal and Institutional Issues* (Switzerland IUCN, 2011).
[8] International Arbitral Award *Trail Smelter Arbitration (United States v. Canada)* Arbitral Tribunal, 3 UN Rep Int'l Arb Awards 1905 (1941).

Management', is analysed in the subsequent part of Section Three and is both narrative and analytical.

Section Two and Three in this chapter provides a discussion of the global scenario. Whereas, Section Four analysis the situation of the freshwater resource in India. This chapter aims to understand the freshwater resource, the technique to regulate the resource and the historical evolution of practices to deal with the global commons in a general sense. However, Section Four of this chapter moves towards the evaluation of the situation of the regulation of freshwater resource in India in comparison to the advanced understanding and the means of regulation of the resource discussed above. Finally, Section Five discusses and concludes the findings.

2. The Tragedy of Global Commons

The theory of *tragedy of commons* proposed by Hardin had an insight on the human-nature relationship and their interaction which later influenced the manner – nature or natural resource is regulated. He narrated the *natural resources* as *commons,* which are freely accessible to all the individuals but also raised the concern of over-exploitation by such continued use of the resources. In these ideas, he drew attention towards two factors influenced by human activities, the first being increase in demand for the resources with an increase in population; and the second being the pattern by which humans organise their activities to extract the resources from the environment.[9] He believed the manner humans organise their activities to extract the commons is exploitative and will ultimately bring *tragedy to the commons*.[10]

The story postulated by Hardin indicates that, with increasing numbers of herds grazing in the same field while exercising the *right to free and common access*, it will ultimately lead to the exhaustion of the resource. Therefore, the only way to avert this tragedy is to restrict open access. The solution put forward by him as a response to this observation was mainly to introduce the property right to the commons.[11] Either by guaranteeing exclusive property rights to the individual in the form of private enterprise

[9] G Hardin, 'The Tragedy of Commons' (1968) 162 (3859) Science, New Series 1243-48.
[10] ABM Z Rehman, 'A Critique of 'The Tragedy of the Commons' (2003) 7 (1) Journal of International Affairs 50.
[11] ibid.

or in a socialist way, i.e. by ascertaining government control and declaring it public property.[12] This proposition was based on the belief that by the assertion of exclusive rights in the form of the *right to entry* and the *right to use,* the commons could be preserved.[13] Therefore, by assigning a portion of the resource to a user, that portion of the resource will be subtracted to be freely accessed by every other user thus, limiting its use.[14] Because the resources or the commons are finite and their use by one will reduce the overall quantity for the other user,[15] this perhaps makes subs-tractability a concern.[16]

The property rights were conferred to the commons in the west as an effort to exclude the resource from the reach of all. This attitude had persisted for a long time and remained unchallenged and supported by the theory of *tragedy of commons*, but this interpretation looks coloured by the economic aspect of human behaviour.[17] That is why it is often considered as the mono-dimensional culture struck model as in part belonging to the ideology of free enterprise capitalism. Moreover, the proposed technique of exclusion seems preposterous and might have only worked in an ideal situation, where the holder of such rights would have possessed the ability to use the resource wisely and have never exploited them. It might have worked for the fields, land or other static, immovable resource, but its implication for the migratory species such as fish, wildlife etc., is tricky.[18] Perhaps, due to this kind of over-simplification and linear expansion of the theory of *tragedy of commons,* it is criticised by scholars worldwide.[19]

An alternative means to deal with the commons is by recognising them as common property resource or a shared property of a community. This approach to natural

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[12] G Hardin, 'Political Requirements for Preserving our Common Heritage' in HP Brokaw (ed) *Wildlife and America* (Council on Environmental Quality 1978) 310-17.
[13] G Hardin and J Baden (eds), *Managing the Commons* (Freeman 1977).
[14] D Feeny, F Berkes, and others, 'The Tragedy of the Commons: Twenty-Two Years Later' (1990) 18 (1) Human Ecology 1.
[15] D Downes, 'Global Trade, Local Economies, and the Biodiversity Convention' in W Snape J III (ed), *Biodiversity and Law* (Island Press 1996) 202-16.
[16] SJ Buck, *The Global Commons: An Introduction* (Earthscan Publications 1998) 5.
[17] J Vogler, *The Global Commons: Environmental and Technical Governance* (2nd edn. John Willey and Sons 2000) 12.
[18] R-Al-Fattal, 'The Tragedy of Commons: Institutions and Fisheries Management at the Local and EU Level' (2009) 21 (4) Review of Political Economic 537.
[19] S Sharma, 'Managing Environment: A Critique of the 'Tragedy of Commons' (2001) 12 (1) Journal of Human Ecology 1.

resources was believed to be predominant in most of the societies of the world.[20] Culturally practised model of management of the *common pool resource* or the collective provisions of the public good were prevalent in most of the communities of South Asia.[21] The era of control and ownership of the natural resource had resulted in a drive away from the usufructuary nature of rights over the resource arising from the recognition of the resource as the communal good or property; which was the custom in most of the South-Asia before colonisation began and imposed a capitalistic mindset.[22] This analysis suggests the linkage between the impact of categorisation of the resource and determination of the law and policy for its regulation, at a given time and context. Therefore, an investigation as to how this theory has changed with time in the light of new understanding and more profound knowledge of the human activities and their impact on the *global commons* is essential, along with the study of factors responsible for such change.

Human-nature interface and its impact on the means for the regulation of the resource at any juncture is undeniable. Likewise, in this century the human nature interface is studied in the context of global commons on a global scale involving states[23] as opposed to the domestic context. The global commons such as air, water, ocean, high-seas, etc., are subjected to investigation due to their highly complex and inter-dependent life cycles. By virtue of these global resources being outside the territorial boundaries of the states, an international legal regime is created to regulate the manner states interact with these resources because the activities of a state will cause concern for others.[24] Therefore, instead of dividing the rights to access the resource the set of rules were

[20] S Sharma, 'Managing Environment: A Critique of the 'Tragedy of Commons' (2001) 12 (1) Journal of Human Ecology 5-9.

[21] J Vogler, *The Global Commons: Environmental and Technical Governance* (2nd edn. John Willey and Sons 2000) 13.

[22] R Prasad, 'Social Justice, Retribution and Revenge: A Normative Analysis of the Contemporary Social Scene' in P Bilimoria, J Prabhu, R Sharma (eds), *Indian Ethics: Classical Traditions and Contemporary Challenges* (Vol. 1 Routledge 2017).

[23] Global Commons are *"geographical areas that are outside the jurisdiction of any nation, and include the oceans outside territorial limits and Antarctica."*

[24] UN System Task Team on the Post-2015 UNM Development Agenda, 'Global Governance and Governance of the Global Commons in the Global Partnership for Development Beyond 2015, (Thematic Think Piece OHCHR, OHRLLS, UNDESA, UNEP, UNFPA)

formulated to regulate, monitor or guide the behaviour of the state while interacting with such resources. Thus, recognised as the doctrine of common concern of humankind.

Another category of natural resources exists - a portion of which might physically reside within the territorial jurisdiction of the state, these resources are dynamic in nature, and they travel through space and time due to the natural life cycle. Thus, causing difficulty in management or regulation within a territory. The transboundary impacts caused by their regulation in a given jurisdiction are unavoidable, sensitive and grave; therefore, they cannot be managed in isolation and in the absence of cooperation with adjoining states sharing the resource.[25]

One such resource is freshwater - as a resource, it travels across political boundaries and is always in constant cyclic motion due to its natural hydrological cycle in different forms (solid, liquid and gas; see Figure 1.1). In the light of the advanced knowledge about the freshwater resource, it is not considered suitable for technical solutions:[26] 'comprising of a technique of exclusion and subs-tractability'. Regulation of freshwater triggers transboundary impacts; it is of migratory and highly volatile nature moreover, regulation of this resource in a given jurisdiction in isolation often results in unsustainable results. Therefore, the law of nature dictates that the resources of this kind need to be addressed via cooperation among the stakeholders and considered as the common concern of humankind. Arguably, the natural resource of this category is pleaded to be recognised as the global commons and dealt with accordingly. The following section examines the impact of the categorisation of the resource on a global scale and the change it brought in the regulation and management of the resource in the contemporary world.

2.1 Global Commons in 21st Century

Global commons are the common pool of a resource for all but regulated with certain defined principles of law given the nature, use, and availability of the resource, which could be stretched to preservation or conservation of the resource.[27] The concern for the resource is derived from its inherent value and not just because of its utility to

[25] G Hardin, 'Extensions of 'Tragedy of Commons' (1998) 280 (5364) Science, New Series 682.
[26] M Reder, V Risse, K Hirschbrunn and others (eds), *Global common Good: Intellectual Perspectives on a Just and Ecological Transformation* (Campus Verlag 2015) 97.
[27] E Ostrom, R Gardner and J Walker, *Rules, Games and Common-Pool Resources* (University of Michigan Press 1994) 369.

humankind.[28] The proponents of the *common pool resource/global commons principle* exert pressure for the collective regulation of the resource because they in principle believe that the *global commons* must not be concerned with the territorial jurisdiction of the states.[29] The common concern arose for the *common pool of resource* because they are the common sink. This understanding had resulted in establishing the parameters to build a global system to fight the environmental degradation resulting in the creation of new world order, in the form of the doctrine of *common concern of humankind*.

2.1.1. The Doctrine of Common Concern of Humankind

The nature-human interface in this age has entered a phase which is called the age of Anthropocene by the scientific community. This understanding is the result of the dawning realisation that the human activities of the present can cause the change to our planet to an extent comparable to the major geological events of the ancient past, and it is alarming to note that these changes are permanent on the geological timescale.[30] This significance of human behaviour on the environment has ushered in a new geological epoch,[31] which causes extreme consequences for *global commons* such as climate, air, water, biodiversity etc. It also is the pressing challenge in the form of management and protection of *global commons* for the humankind in this century. All of humanity shares the risk due to threatening conditions of the commons, thus to address the rising challenge within the legal parameters, the implication of the doctrine of the c*ommon concern of humankind* is explored in a manner that has never before been done.

International environmental law coined the principle of *common and shared responsibility* on the assumption that burden sharing is required by the international community to address global issues such as climate change;[32] biodiversity loss; depletion

[28] SC Rockefeller, 'Principles of Environmental Conservation and Sustainable Development: Summary and Survey: A Study in the Field of International Law and Related International Reports' (1996) Prepared for the Earth Charter Project 21.

[29] J Brunnee, 'Common Areas, Common Heritage, and Common Concern', in D Bodansky, J Brunnee and E Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2007) 553.

[30] J Zalasiewicz, M Williams, W Steffen and others, *'The New World of the Anthropocene'* (2010) 44 (7) Environmental Science and Technology, 2228-31.

[31] F Soltau, 'Common Concern of Humankind' in P Cinnamon, Carlarne, KR Gray, and others (eds), *The Oxford Handbook of International Climate Change* (OUP 2016) 203.

[32] United Nations, United Nations Framework Convention on Climate Change, 1992 (UNTS Vol. No. 1771, p. 107, entered into force on 21 March 1994, as of July 2018 it has 165 Signatories and 197 Parties), Article 3 (1).

of the ozone layer and others. These are shared concerns, and no state can deal with them in isolation. Additionally, it is rooted in the concept of obligations or duties originating due to the acts of the state committed in the past which are responsible for the deterioration of the *global commons*.[33] However, the burden to undo the consequences falls on the present generation and all the states, equally. While realising such obligations and shared responsibility towards the *global commons*, it is viable to channelise their combined efforts using the doctrine of *common concern of humankind* for the protection of the global commons from the anthropogenic activities in the Anthropocene epoch.

The United Nations Framework Convention on Climate Change 1992 (UNFCCC);[34] and Convention on Biological Diversity 1992 (CBD)[35] endorse this understanding that humankind must proportionally bare the common concern for the commons. It is expressed in the UNFCCC and the CBD, clarifying that it is not the Earth's climate itself but the change in the Earth's climate and its adverse effects that are of *common concern*.[36] Likewise, the conservation of biological diversity is of *common concern*, not the biodiversity itself.[37] This relates to the need for collective action for the protection of the resource, which can be channelised by conferring the status of *common concern* to the resource.[38] The concern for biological diversity could be argued to be of local, regional or geographical concern, which is subject to nationalistic jurisdiction. However, the impact on the overall environment with the reduction or extension of biological diversity affects humankind equally along with the other life forms on our planet. Freshwater is of similar

[33] P Sands, J Peel, A Fabra and others (eds), *Principles of International Environmental Law* (3rd edn, CUP 2012) 233

[34] United Nations, United Nations Framework Convention on Climate Change, 1992 (UNTS Vol. No. 1771, p. 107, entered into force on 21 March 1994, as of July 2018 it has 165 Signatories and 197 Parties).

[35] United Nations, Convention on Biological Diversity, 1992 (UNTS Vol No. 1760: entered into force on 29 December 1993, as of July 2018 it has 168 Signatures and 196 Parties), Preamble.

[36] United Nations, United Nations Framework Convention on Climate Change, 1992 (UNTS Vol. No. 1771, p. 107, entered into force on 21 March 1994, as of July 2018 it has 165 Signatories and 197 Parties), Opening Statement of the Convention: The Parties to this Convention Acknowledging that the Change in the Earth's Climate and its Adverse Effects are a Common Concern of Humankind.

[37] United Nations, Convention on Biological Diversity, 1992 (UNTS Vol No. 1760: entered into force on 29 December 1993, as of July 2018 it has 168 Signatures and 196 Parties), Preamble.

[38] J Brunnee, 'Common Areas, Common Heritage, and Common Concern', in D Bodansky, J Brunnee and E Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2007) 550-73.

concern, and therefore it must be classified as a global commons and regulated in accordance with the doctrine of *common concern of humankind*.[39]

The freshwater resource is shared among the countries or states within the country itself and has no limits as to boundaries whether political, geographical or territorial.[40] It is often untenable to protect this resource from transboundary pollution in isolation unless other states are sharing the common resource cooperate.[41] All the states gain a *de facto* benefit from the preservation and conservation of the *global commons*, irrespective of whether the resource lies within their territory or not.[42] Therefore, constructive cooperation by all the parties sharing the resource is essential.

The international community has time and again recognised freshwater crisis through resolutions passed by the general assembly of the United Nations; the declaration of the *right to water* or *right to water and sanitation* for all;[43] and by recognising the importance of clean water in the sustainable development goals of 2030.[44] All these developments in the last 3-4 decades are evident of the fact that the international community is aware of, as well as concerned about, the growing freshwater crisis of this century.[45] Although freshwater is not considered or classified as a *common concern* using international convention or treaty, this thesis argues in favour of this classification. A distinct categorisation of the resource in a local, national or international jurisdiction will help chart the law and policies for its regulation.

The doctrine of *common concern of humankind* is unique in the application the *common concern* is about the protection, preservation and conservation of the commons.[46] The notion of this theory is rooted in the concept of reasonableness arising

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[39] EB Weiss, 'Nature and the Law: The Global Commons and the Common Concern of Humankind' (2014) Extra Series 41 Sustainable Humanity, Sustainable Nature: Our Responsibility, Political Academy of Sciences 2.

[40] SC McCaffrey, 'Introduction: Politics and Sovereignty over Transboundary Groundwater' (2008) 102 American Society of International Law 353.

[41] J Carwford, *Brownlie's Principles of Public International Law* (8th edn, OUP 2008) 337.

[42] D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (3rd edn, Foundation Press 2007) 489.

[43] UNGA, *The Human Right to Water and Sanitation* (A/Res/64/292, 2010, adopted on 28 July 2010).

[44] UN's, *Sustainable Development Goals: 17 Goals to Transform the World* (GA/Res/70/1: Transforming Our World: the 2030 Agenda for Sustainable Development) Goal 6.

[45] UN, *Water for a Sustainable World, 2015* (UN World Water Development Report, UNESCO 2015).

[46] F Biermann, 'Common Concern of Humankind', The Emergence of the New Concept of Environmental Law' (1996) 34 (4) Archiv des Volkerrechts 430.

out of necessity and is guided by the spirit of cooperation.[47] The theory of *common concern* results in an ideological shift in the global community by assigning duties for the preservation and management of the global commons to the states. Because of this, the authority over the commons is not restrictive to some, and the exclusion of others is not arbitrary. Instead, the regime is designed for equitable sharing of burdens of the commons in their commitment to solving the growing problem of the regulation of commons. Although the emergence of the concept of *common concern* in Environmental Law is not new to humanity,[48] the concerns which are recognised as of common interest to the international community form the basis of the development of the different aspects of international law with a broader aim to maintain and establish the world order. It is the driving force for the development of branches of international laws such as the Human Rights; the Humanitarian Law; the International Labour Relations and others. Thus, the obligation originating from the concept applies to all the states and the international community, equally as *egra omnes*.[49]

The kind of ideological shift proposed by Hardin to avert the *tragedy of commons* is seen to have materialised in the form of *common concern of humankind*, which has principally considered a change in human values and morality. As evident by the development of international environmental law and the arguments behind such developments.[50] These developments might look like a move from an anthropogenic approach to an eco-centric one. Although they are being driven by anthropogenic mindset as well, the underlying intention makes all the difference. It is not driven by the zeal to exploit the available commons; rather it is driven by the understanding that the preservation and conservation of global commons are central to anthropogenic well-being.[51] This altered the legal paradigm and the manner we deal with environmental

[47] K Baslar, *The Concept of the Common Heritage of Mankind in International Law* (Kluwer Law International and Martinus Nijhoff Publishers 1998) 117-55.

[48] IUCN Environmental Law Programme, Draft International Covenant on Environment and Development (Prepared in cooperation with the International Council of Environmental Law, Gland, Switzerland: IUCN 2010) XXXII, 206, Article 3, 3-39.

[49] D Hunter, J Salzman and D Zaelke (eds), *International Environmental Law and Policy* (3rd edn, Foundation Press 2007) 490.

[50] C Redgwell, 'Climate Change and International Environmental Law' in R Rayfuse and SV Scott (eds) *International Law in the Era of Climate Change* (Edward Elgar Publishing 2012) 118.

[51] UNGA, *Report of the Special Rapporteur on the issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment,* A/HRC/34/49 (Agenda Item 3. Promoting

issues.[52] Thus, the doctrine of *common concern of humankind* is apt for dealing with global commons and takes over as the legal doctrine which categorises the global commons and determines the component for its regulation. The second important concern this chapter address is the gap between science and policy because certain issues might not necessarily fall within the domain of law and policymaking. However, they form the foundational requirement for the success of any law or policy designed for the holistic regulation of the resource.

3. Freshwater – Bridging Science and Policy

The science-policy interface is quintessentially important and acts as a foundational requirement for the regulation of freshwater resource. It is required that the policy-makers have a basic understanding of these issues and the transboundary impacts which might arise during the regulation or management of the resource. Additionally, to be equipped to deal with the transboundary issues the integration of the arising concerns is unavoidable, which may or may not belong strictly within the legal discipline or in the general jurisdictional ambit of policymaking. Therefore, this section intends to clarify both these aspects, as the success of every law and policy for the regulation of freshwater depends on it. Primarily, it attempts to explain the scientific nature of the freshwater cycle and then it moves along towards the explanation of the transboundary impacts. Together this understanding will substantiate the importance of the integration of the concerns

and Protection of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, including the Right to Development 27 Feb- 24 March 2017).

[52] LB de Chazournes, C Leb and M Tignino, *International Law and Freshwater: The Multiple Challenges* (Edward Elgar Publishing 2013) 1.

from within and outside the water sector for the holistic regulation of the freshwater resource.

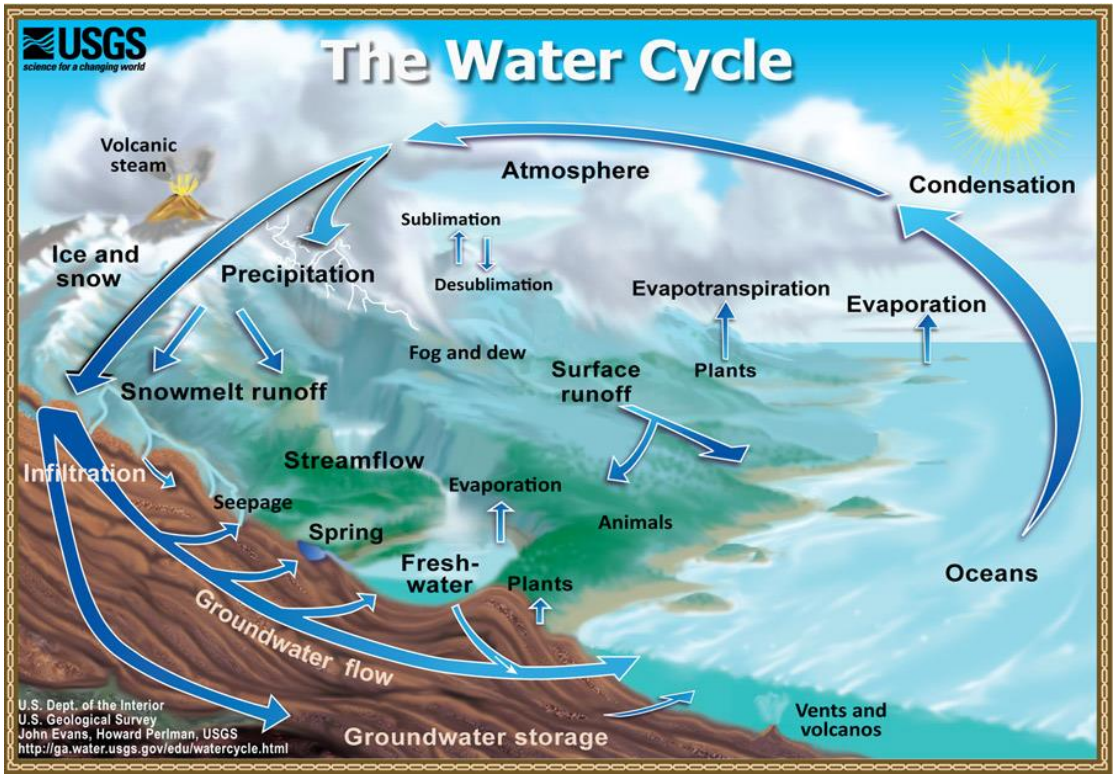

Fig 1.1. The Freshwater Cycle or Hydrological Cycle.[53]

As depicted in the figure below, the freshwater cycle touches on various aspects of life during its journey from beneath the surface of the land to the time it reaches the Earth's atmosphere, making its regulation in isolation not a preferred choice. This is why consideration of the two most prominent aspect of the regulation of the resource is essential, namely, the transboundary impacts and the integrated approach while designing the regulatory regime for water.

[53] United States Geological Survey, Source: USGS: Science for a Changing World, 'The Water Cycle - USGS Water Science School' <https://water.usgs.gov/edu/watercycle-screen.html> (for the water cycle); <https://w ater.usgs.gov/edu /watercyclefreshstorage.html> (for the explanation) accessed 20 Nov 2018.

3.1. The Transboundary Impacts

The understanding of the transboundary impacts of environmental problems has changed our perception and enhanced our ability to tackle the issue.[54] Mainly, this is because the freshwater resource in all its components forms the part of the same hydrological cycle.[55] This is why the freshwater resource must be regulated with the utmost care and sincerity at all possible times, at all the levels.[56] The impacts of these on the freshwater resource are multifaceted.

*3.1.1. Transboundary Impacts Caused **by** the Regulation/Governance of the Resource*

The intrusive interdisciplinary effects of the regulation, management or governance of the freshwater resource in a territory not only affects the resource in that territory and the adjoining territories but affects other disciplines as well.[57] This includes the overall environment including other biotic and abiotic life cycles; the health of people and the environment; overall economy; the agricultural produce and various other basic and luxuries amenities, among others. Water is the critical ingredients for most of the economic activities [58] and is central to most aspects of life, or at least indirectly touches them in some way. Thus, it can be said with certainty that the transboundary concern when it comes to the regulation of freshwater is not restricted to the resource or the physical territorial boundaries as such.[59] Alternatively, it is understood as the branch which influences other branches and gets influenced by them in turn. Therefore, integrating the concerns from all these branches is essential for the governance of the resource.[60] It is one of the most significant challenges for the regulation of freshwater

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[54] G Handl, 'Transboundary Impacts' in D Bodansky, J Brunnee and E Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2007) 531.

[55] Sanchez, J Carlos and R Joshua (eds), 'Transboundary Water Governance: Adaptation to Climate Change' (Gland, Switzerland, IUCN 2014) 3-8.

[56] Rogers, Peter, and AW Hall, *Effective Water Governance* (Vol. 7, Global Water Partnership 2003).

[57] AK Gerlak, RG Varady, O Petie and Others, 'Hydrosolidarity and Beyond: Can Ethics and Equity find a Place in Todays Water Resource Management?' (2011) 36 (3) Water International 251.

[58] *Making Water A Part of Economic Development: The Economic Benefits of Improved Water Management and Services*, (a Report Commissioned by the Government of Norway and Sweden as input to the Commission on Sustainable Development (CSD) and its 2004-05 Focus on Water, Sanitation and Related Issues) 1-48.

[59] ZU Ahmad, Forgetting Political Boundaries in Identifying Water Development Potentials in the Basin-Wide Approach: the Ganga-Bhahmaputra Meghna Issues' in CM Figueres, C Tortajada and J Rockstrom, *Rethinking Water Management: Innovative Approaches to Contemporary Issues* (Earthscan Publishing 2002) 180.

[60] C Folke, 'Freshwater for Resilience: A Shift in Thinking' (2003) 358 (1440) Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences, 2027.

which will be discussed in detail later in this chapter, and the preferred approach for integration of the multi-faceted concern this chapter deals with is the Integrated Water Resource Management approach (IWRM).

The regulation of the resource cannot be restricted to statutory boundaries because several departments deal with water in different ways and not all of them concern themselves with the regulation of the resource.[61] This includes irrigation, mining, hydro-electric power plant, manufacturing industries, forest and many more. Similarly, the means to tackle this resource seems to be in contradiction to the practice of creating strict compartments and dealing with them in isolation. Therefore, instead of creating a strict statutory boundary, the set of principles are preferred to regulate the resource, and co-relative policies must be designed based on the set of principles of law as per the requirement of the smallest localised unit for holistic and sustainable regulation.[62] This is another type of jurisdictional transboundary concern to be considered while planning the means for the regulation of the resource as this is specifically important to the resource. The intersection here is in between the branch of law and policy with different disciplines and departments of governance.

*3.1.2. The Transboundary Impact Caused **on** the Regulation/Governance of the Resource*

The policy for the regulation of the resource demands reliable data regarding quality and quantity.[63] This might not be sufficient however, because of several other factors, which directly and indirectly possess the capability to alter the composition of the freshwater available for human use. All these factors need to be considered, such as the overall impact of the ecology, use of the resource, type of agriculture produce; use of chemicals and fertilisers and the impact of their residue on the soil. Eventually all these factors effect natural freshwater cycle and shall be potentially deleterious for the

[61] AK Biswas, 'Integrated Water Resource Management: Is It Working?' (2008) 24 (1) Integrated Resource of Water Resources Development 5, 10.
[62] M Giordano and T Shah, 'From IWRM back to Integrated Water Resources Management' (2014) 30 (3) International Journal of Water Resources Development 364, 74.
[63] B Stewart, 'Measuring What We Manage – The Importance of Hydrological Data to Water Resources Management' (2015) 366 Hydrological Sciences and Water Security: Past, Present and Future (Proceedings of the 11th Kovacs Colloquium, Paris, France, June 2014, IAHS Publications 2015) 80.

groundwater cycle.[64] Therefore, it is difficult to imagine the sustainable management of the resource in the absence of the consideration of these factors.

Groundwater is an important source of water, and 97% of freshwater is available in this form. It is the most reliable form of freshwater available and is utilised by human-kind for domestic and agricultural needs. The majority of people in India depend on it, as it is available at the point of source and is much more reliable regarding quality and surety of the availability of the resource, in comparison to the municipal water supply or supply by private tankers etc.[65] Additionally, it is cost effective and saves long and tedious hours spent on the collection of the resource, time which can be put to better use.[66] It is the most important source of water for the realisation of the *right to water for all*.[67] On the geographical front, when the groundwater table is depleted beyond natures' capacity to recharge itself in a short duration of time, it represents the possibility of an overall ecological change in a given area.[68] It might take thousands of years to replenish or cause a permanent change in ecology. Moreover, the groundwater depletion and contamination are serious problems and irreversible, thus requiring a cautious approach.[69]

[64] KD Balke and Y Zhu, 'Natural Water Purification and Water Management by Artificial Groundwater Recharge' (2008) 9 (3) Journal of Zhejiang University, Science B 221.
[65] The World Bank, *Deep Wells and Prudence: Towards Pragmatic Action for Addressing Groundwater Overexploitation in India* (The International Bank for Reconstruction and Development/The World Bank 2010) 1-120, 1.
[66] *The Human Rights to Water and Sanitation in Courts Worldwide: A Selection of National, Regional and International Case Law*, (WaterLex and WASH United, 2014) 20-24.
[67] M Gavouneli, 'A human Right to Groundwater?' (2011) 13 International Community Law Journal 305.
[68] Virdi and Makhan, 'Time Scale of Groundwater Recharge: A Generalized Modelling Technique' (2013) (Graduate Theses and Dissertations, University of South Florida, Scholars Commons 2013) 1-98 <http://scholarcommons.usf.edu/etd/4786> accessed 20 Nov 2018.
[69] S Foster and M Ait-Kadi, 'Integrated Water Resources Management (IWRM): How Does Groundwater Fit In?' (2012) 20 Hydrogeology Journal 415, 16.

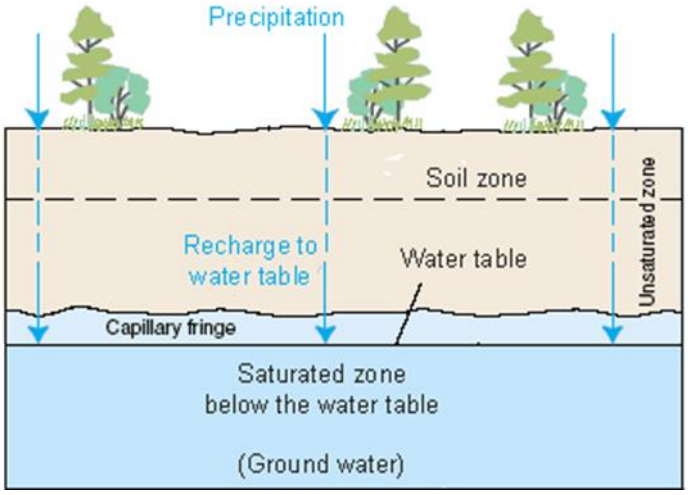

Fig 1.2. Groundwater Storage: The Water Cycle (during the recharge process the water gets distilled).[70]

To facilitate the natural water cycle, the quantum of pollutants, their chemical composition, etc., needs to be known to devise the mechanism to overcome their harmful effects. Groundwater recharge is a natural purification mechanism, where water as it passes through the different layers of soil, purifies itself. The rate of this process can be accelerated by artificial means only if the quantum and the quality of the pollutants are known.[71] Otherwise, they can neither be removed by external processes nor could be disintegrated into smaller components naturally, because of their complex and toxic nature.[72] Tracking their presence and monitoring their movement at the surface level could protect the resource from contamination and is also relatively easy and cheap, in comparison to the level of difficulty and the monetary cost involved in cleaning the groundwater. Likewise, the available information about the kind and quantity of waste to be disposed at the surface of the earth will assist in planning the well-being of the resource sustainably.[73] The monitoring of surface water and its contamination levels is comparatively easier than groundwater. However, an understanding of the

[70] USGS, 'Source: USGS, 'The Water Cycle - USGS Water Science School' <https://water.usgs.gov/edu/waterrcyclegwstorage.html> accessed 20 Nov 2018.
[71] KD Balke and Y Zhu, 'Natural Water Purification and Water Management by Artificial Groundwater Recharge' (2008) 9 (3) Journal of Zhejiang University, Science B 221.
[72] Böhlke, J Karl, 'Groundwater Recharge and Agricultural Contamination' (2002) 10 (1) Hydrogeology Journal 153, 79.
[73] W Struckmeier, 'Transboundary Groundwater: A Challenge for Integrated Water Resource Management' in Value of Water - Different Approaches in Transboundary Water Management (International Workshop Koblenz, Germany 10-11 March 2005) 71.

transboundary issues and their relative impacts on the resource is essential for the regulation, management, and governance of the resource and is quintessentially salient to water security and holistic management of the resource.[74]

It can be said that all the concerns mentioned above operate in the same jurisdiction but governed by different rules, statutes or principles of law. Therefore, a broader understanding of this intersection needs to be embedded in the planning of every discipline working simultaneously. The planning needs to be holistic, and the different governing bodies and departments need to be more tolerant and accommodating of these overlapping intersections.[75] Otherwise, the strategy opted by one of the involved disciplines might become a hindrance to another. The system of governance by segregation of tasks was introduced to ease the process, but ultimately its aim was to serve the society.[76] Economics, the sciences, and humanities are all different disciplines but they surely transverse paths and influence each other. That being said, they could still be dissociated for the sake of study, but environmental concerns can no longer be separated, instead, they need to be dealt with holistically.[77] Thus, the pressing need for integration of the concerns in freshwater regulation.

Why Integrate? The multifaceted trans-boundary impact on the resource, the geogenic (resulting from the geological or geographic process), as well as human activities, act as the inter-related and inter-dependent ingredients to the problems, thus must be addressed holistically.[78] Moreover, the impact of climate change, water governance and overall environmental governance must be considered and driven simultaneously for better outcomes.[79] Integration is undeniable, but the means and manner for such integration in policy making for a targeted area are open for discussion (crafted as per the

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[74] P Cullet, L Bhullar and S Koonan, 'Regulating the Interactions between Climate Change and Groundwater: Lessons from India' (2017) 42 (6) Water International 646.

[75] T Berry, 'Beyond Sustainability: The Road to Regenerative Capitalism' (The Future of Financial Blog, Capital Institute, 8 July 2013) <http://capitalinstitute.org/blog/beyond-sustainability-road-regenerative-capitalism/> accessed 20 Nov 2018.

[76] J Fullerton, 'Regenerative Capitalism: How Universal Principles and Patterns Will Shape Our New Economy' (Capital Institute: The Future of Finance 2015) 1, 28.

[77] ibid 30.

[78] BP Hooper and GJ Lloyd, 'Report on IWRM in Transboundary Basins' (UNEP-DHI Centre for Water and Environment 2011) 13.

[79] P Cullet, 'Water Law in a Globalised World: the Need for a New Conceptual Framework' (2011) 23 (2) Journal of Environmental Law 233.

need and capability of the governing bodies). Based on the understanding of the natural water cycle IWRM proposes integration on a triangular basis as discussed below. However, before we move towards the detailed discussion of these characteristics, it is essential to understand the importance, evolution and prospects of the IWRM.

3.2. Introduction to the Integrated Water Resource Management Approach

The IWRM is a mechanism originated out of necessity and the realisation of the multi-faceted transboundary impacts on the resource. It was first realised by individuals working with water in different strands, such as the geologists, civil engineers, scientists and so on. This concept was present in parts for quite some time now, but it did not make its presence visible until the 1980 and 1990s. The origin of the concept in modern times can be traced back to 1977 and the first 'Global Water Conference' in Mar del Plata, in Argentina.[80] After that, Agenda 21 and the World Summit on Sustainable development in 1992,[81] carried forward the discussion about the 'integrated management of the water resource' and ever since it has grown significantly.[82] Later, with growing interest and the involvement of various international, regional and other institutions, the concept was defined, and different models were proposed for its materialisation,[83] opening the gates for an era of crystallisation and scrutiny of the concept.[84]

'Sustainable development' became the motto of the planners of the water resource to deal with and satisfy the increasing demand for the finite resource available on the planet.[85] The elaborate study of this motto later clarified the interference of different axis in planning for the regulation of the resource, which gradually developed as the IWRM. The well-determined formula does not bind the integrated management of the resource; rather it advocates the incorporation of all the relevant factors or concerns

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[80] United Nations, United Nations Conference on Water (Mar del Plata 1977); See also, KW Lathem, 'the World Water Conference at Mar del Plata' (1997) 2 (2) Canadian Water Resources Journal 74.

[81] United Nations, 'Implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development' (Res adopted by General Assembly A/RES/64/236, 31st March 2010).

[82] UN's World Water Assessment Programme-Dialogue Paper, 'Integrated Water Resources Management in Action' (WWAP, DHI Water Policy, UNEP-DHI Centre for Water and Environment, UNESCO 2009) 1-22.

[83] AK Biswas, 'Integrated Water Resource Management: A Reassessment' (2004) 29 (2) International Water Resources Association 248.

[84] ibid.

[85] HE Cardwell, RA Cole, LA Cartwright and others, 'Integrated Water Resources Management: Definitions and Conceptual Musings' (2006) 135 Journal of Contemporary Water Research and Education, Universities Council on Water Resources 8.

which can create a difference in the management of the resource. The IWRM approach promotes the coordinated development of the water, land and other relative components, with intent to maximise the social and economic welfare without compromising the vital needs of the ecosystems, equitably through the regulation of the resource.[86]

With the growing unpredictability of the world's environment, the task to manage the freshwater resource and establish water security has become even more difficult. Therefore, the IWRM is advocated as an adaptive mechanism to help restore and enhance the resilience of the natural water cycle (by acting on it through the Precautionary Principle).[87] This is designed to craft the means to regulate the resource while working in harmony with the natural water cycle, keeping account of the type of transboundary issues or interdisciplinary aspects discussed above. The IWRM approach addressed in this chapter simply aims to point out the need for integration for the holistic regulation of water resource, for the reasons discussed above.

The IWRM as a concept has been criticised, mainly because of the vastness of the idea, which can include all possible avenues of governance and possibly more. It requires an enormous investment to plan and implement the integrated management of the freshwater resource to ensure holistic and sustainable water regulation and to ensure water security for all. For that reason, its comparison with the principle of sustainable development is plausible, which has been considered as the underlying philosophy of the international environmental law, but is difficult to concisely interpret and apply within the confined parameters of the statute or policy.[88] Similarly, the task of integration seems challenging to limit within confined boundaries; furthermore, it is subject to interpretation relative to the needs of the locality (where it is applied). Therefore, this raises concerns about its implementation on the ground - as to what will it integrate and

[86] MM Rehman and O Varis, 'Integrated Water Resources Management: Evolution, Prospects and Future Challenges' (2005) 1 (1) Sustainability: Science, Practice and Policy 15.
[87] S Foster and M Ait-Kadi, 'Integrated Water Resources Management (IWRM): How Does Groundwater Fit In?' (2012) 20 Hydrogeology Journal 415.
[88] DB Magraw and LD Hawke, 'Sustainable Development', in D Bodansky, J Brunnee and E Hey (eds) *The Oxford Handbook of International Environmental Law* (OUP 2007) 614.

exclude, respectively, and what reasons will determine such choices.[89] Despite these concerns, the IWRM is shaping up to be the underlying philosophy holistic management and regulation of water and the concerns about the flexible nature of the concept is also put to good use, i.e. to accommodate the diversity in climatic, social, cultural or economic situations of the concerned area.[90] Furthermore, with the growing climate uncertainty and advanced technical knowledge and understanding about the transboundary impacts on the resource, the basic rules that exist at present for regulation of water will be flushed out and filled in with advanced and adaptive mechanisms of the future.

The cost and expertise required for the implementation of the IWRM further add to the concern. Although the financial cost of a project designed to provide water security for the state or the region is an excellent and profitable investment.[91] We understand that the economic benefits of these services have potential impacts which might outrun and outweigh the cost considerably.[92] The economic analysis suggests that a cost of 15-30 billion USD invested in improving the water resource management in developing countries will bring considerable an economic gain of approximately 60 billion USD. Every dollar spent on watershed protection can save from between 7.5 and 200 USD in cost for new water treatment and filtration facilities.[93] Besides, savings will be construed in other ways, in terms of health benefits; savings in time spent fetching the resource, which is otherwise available for other productive works; and reduced absenteeism from work and educational institutions are few of the other direct benefits which can be translated into economic terms.[94] While the task of integration demands a concentration of individuals, branches of governance, economic wealth and all other types of resources, the task is

[89] STRIVER Conference Book, 'Integrated Water Resources Management in Theory and Practice' (STRIVER: Strategy and Methodology for Improved IWRM: An Integrated Interdisciplinary Assessment in Four Twinni ng River Basins, 28-29 May 2009, Brussels, Belgium) 13 <http://kvina.niva.no/str iver/Portals/0/documents/striver conference book updated.pdf> accessed 20 Nov 2018.

[90] RA Mcdonnell, 'Challenges for Integrated Water Resources Management: How Do We Provide the Knowledge to Support Truly Integrated Thinking?' (2008) 24 (1) Water Resources Development 131.

[91] World Water Council, 'Integrated Water Resource Management: A New Way Forward' (A Discussion Paper of the World Water Council Task Force on IWRM, 2015) 1-24.

[92] Technical Committee (TEC), 'Investing in infrastructure: The Value of an IWRM Approach' (Policy Brief No. 7, Global Water Partnership) <http://www.gwp.org/globalassets/global/gwp-cacenafiles/en/pdf/policy brief7 e n.pdf> accessed 20 Nov 2018.

[93] SIWI Water Institute, 'Making Water a Part of Economic Development: The Economic Benefits of Improved Water Management and Services' (SIWI and WHO 2004-05) 31.

[94] ibid, 1-47.

essential to ensure water security for the present, as well as future generations.[95] The IWRM implies crucial concepts of international environmental law including integration, equity and duty to cooperate, precaution, good governance, prior informed concern for local community, data accumulation, sharing and so on. Therefore, after careful analysis, a triangular approach to IWRM is suggested and is demonstrated below by further dividing it into three major components.

3.2.1. Importance of Integration in Integrated Water Resource Management

The IWRM promotes sustainable management by considering all the social, economic and environmental concerns.[96] IWRM prefers the hydrological cycle as a preferred unit for the management of the resource. It encompasses all the communities living in that basin inclusive of all the administrative or political territories, as they all are highly inter-dependent due to the inter-connected nature of water passing through the basin. This understanding gets translated into the IWRM practices pushing them to integrate the issues to be addressed together, which might result in averting the problems such as conflicts, economic slowdown, social unrest, agricultural and ecological degradation.[97] The IWRM is not a new technique but a mere realisation of the fact that the water resource runs its natural course. Thus, all the activities must be designed accordingly. The kind of integration required by the IWRM is more straightforward to agree with and applied in the nationalistic domain in comparison to that in an international or regional realm. Perhaps it can be said that the application of IWRM in the nationalistic area employing polycentric governance complements the approach.[98]

The drafting of IWRM policy and ensuring its sustainable implementation on the ground requires integration of concerns on a wider spectrum, which is inclusive of horizontal and vertical hierarchy.[99] Vertical being involved with the hierarchy of authority

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[95] M Bonell, 'How Do We Move from Ideas to Action? The Role of the HELP Programme' (2004) 20 (3) Water Resources Development 283.

[96] C Giupponi, AJ Jakeman, D Karssenberg and others (eds), *Sustainable Management of Water Resources: An Integrated Approach* (Edward Elgar Publishing 2006) 3.

[97] Al Radif, Adil, 'Integrated Water Resources Management (IWRM): An Approach to Face the Challenges of the Next Century and to Avert Future Crises' (1999) 124 (1-3) Desalination 145-53.

[98] C Folke, 'Freshwater for Resilience: A Shift in Thinking' (2003) 358 (1440) Philosophical Transactions of the Royal Society of London. Series B: Biological Sciences, 2027, 2033.

[99] Global Water Partnership, 'A Handbook for Integrated Water Resources Management in Basins' (Published by Global Water Partnership and the International Network of Basin Organisation, 2009) 26.

working at every possible level and horizontal being involved with different water users and affected group within the basin.[100] The bodies which might not directly relate to water use need to be involved, such as forest, agriculture, mining, industry, environment etc. Different ministries and government departments are usually responsible for these within the states, which increases the difficulties of integration. However, it is an unavoidable necessity because they are ecologically inter-dependent and inter-related. Integration here results in making all the activities that affect the resource to bare social and environmental responsibilities towards them. This creates awareness of and knowledge about how these activities can affect the resource. Moreover, this empowers them with knowledge and dialogue to rather revive the resource and enhance the optimum utilisation capacity of the freshwater resource for human use, without compromising the ecological need. Instead of implying uniform practices among a wide spectrum of stakeholders, it is more of an effort to harmonise the use of the resource in a manner which makes the efforts put forward by various stakeholders in different capacities coherent and sustainable with one another. To cause such integration on a wider scale, the IUCN suggested the management framework to channelise the task at national, international or regional level.

Water Management Framework: To execute the approach described above, it is essential to establish a water management framework. The three-dimensional framework is suggested for the national level.[101]

Enabling Environment	**Institutions**	**Management**
Creation of framework laws and policies.	Decentralised institutions: Governmental, Non-governmental, Civil Societies and Private Sectors.	Equipped with information and communication set-up; Data collection and analysis facilities.

[100] ibid.
[101] ibid, 30 (3.3).

Dialogues between vertical and horizontal groups.	Co-ordinated planning.	Increased awareness; develop organisational capacity; research and development facilities to keep the policy up-to-date.
Co-operation among stakeholders.	Finance.	Conflict and dispute resolution facilities.
Budgets and Finance to run the project.		Accountability and co-ordination through-out the process.

3.2.2. Importance of Information System in Planning, Monitoring and Regulation of Water Resource

Accurate and reliable data is required to plan the policies for the management and regulation of the resource. The data comes from different sectors and various sources. Thus, it needs to be analysed before making policy decisions.[102] The information system is the basic and the most important requirement on which the success of the IWRM approach or overall regulation of freshwater depends. It is crucial for designing the plan and then to monitor and regulate its progress. The information about the status of water resource and ecosystems, trends on water-use and the pollution, all are relevant factors to be considered in accumulation and analysis of the data.

Let us take India as an example regarding the availability of data and the manner it is being processed. The Hydrological data is available in India,[103] although it is not as advanced as we would wish it to be. Moreover, the data about river water is available in the public domain and is quite extensive in that regard, but unfortunately, this cannot be

[102] ibid, 83.
[103] Government of India, 'General Information for release of Hydrological Data', Central Water Commission: Water Quality Status of Rivers of India' <http://www.cwc.gov.in/_main/webpages/gir_hyd-data.htm> accessed 20 Nov 2018.

said for the groundwater.[104] Data availability and accumulation for the groundwater resource is difficult, as well as expensive, but the government-run scientific agencies are working on it.[105] The data for the groundwater is of significant use because it is the major source of freshwater available for human consumption.[106] However, to design substantial policy for water regulation, the refined data required is multi-disciplinary, complex, inter-dependent and partially available above and beneath the surface of the land.[107] The extent of sophisticated, refined and reliable data is an essential requirement: the kind which simultaneously considers the data from the hydrological cycle, river basin and groundwater monitoring techniques and other multidisciplinary aspects as discussed in previous sections. It demands incisive data-analysis and other analytical skills to inclusively analyse the available hydrological data with the data of other components capable of altering the composition and texture of the freshwater.

The subtle information acquired after applying the data analysis techniques will undoubtedly assist in determining the requirement for the policy and later designing them to ensure water security and to achieve holistic management of water. Moreover, this information will satisfy all the four attributes of information as suggested by the IWRM approach, namely, that it is appropriate, affordable, accessible and equitable. The infrastructural and institutional set-ups need to be properly embedded to gather this highly reliable information.[108] This investment, once made by the government, will result in the sustainable management of the resource. The elaborate information network and the trained individuals for utilising and disseminating the information and making decisions ensuring easy and reliable access to the information are required in the day-to-day regulation and monitoring of the resource. It is paramount to monitor the working of policies and to upgrade them on a regular basis to mitigate or adapt to any physical or

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[104] Government of India, 'Integrated Hydrological Data Book (Non-Classified River Basins)' (Hydrological Data Directorate Information Systems Organisation Water Planning and Projects Wing, Central Water Commission, Ministry of Water Resources, River Development & Ganga Rejuvenation, 2015).

[105] Government of India, 'Earth Resources and System Studies: Water Resource Department' Indian Institute of Remote Sensing (ISRO) <http://www.iirs.gov.in/waterresources> accessed 20 Nov 2018.

[106] M Moench, 'Groundwater: The Challenge of Monitoring and Management' in PH Gleick, *The World's Water (2004-05): The Biennial Report for Freshwater Resources* (Island Press 2004) 79, 81

[107] ibid, 90-7.

[108] Felicity Chancellor, 'Crafting Water Institutions for People and their Businesses: Exploring the Possibilities in Limpopo' in S Perret, S Farolfi and R Hassan, *Water Governance for Sustainable Development* (Earthscan 2006) 127.

geographical changes that might have occurred due to human-made, climatic or geo-genic reasons.[109] Additionally, whilst this is a dire necessity it will also result in the overall development of the country and will help achieve most of the sustainable development goals set for 2030 by the UN. We move now on to the role the framework law can play in a domestic jurisdiction to align all these concerns by providing them legitimacy and strength from the mechanism of the state.

3.2.3. Framework Law

The national legal framework for water regulation is required to protect and enhance the IWRM approach so that it can flourish in the nationalistic set-up. It will not only ease and smoothen the task of integration but will also lay out the uniform rules for equitable distribution of responsibility among the stakeholders. It will channelise the orientation and integration of different departments and bodies involved in a streamlined fashion, resulting in harmonising their behaviours and adjusting their practices following the legal rules or principles set forth by the designed Framework Statute.[110] It is known as the Framework Statute because it prescribes the set of legal principles, and they act as the parameters against which different bodies, department or branches of governance can judge their activities.[111] This flexibility is crucial for the bodies involved as a *one size fits all* policy does not stand true for the regulation of the freshwater resource (and the cultural, geographical and economic factors further add to the concern). It is the peculiar feature of the Framework Statute where on the one hand, it harmonises the activities of the bodies within its jurisdiction and on the other, sets them free to adjust their behavioural norms as per the requirement.[112] Therefore, it plays the cardinal role in the integration and success of the IWRM approach on the ground.

Before we conclude the findings, it is safe to say that the categorisation of the resource, the clear understanding regarding the science-policy interface, its

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[109] UN's, '*Annex II: Freshwater Ecosystems and Water Quality: From Report of the Expert Group Meeting on Strategic Approaches to Freshwater Management*' (Harare, Zimbabwe, January 1998, UN Documents: Gathering a Body of Global Agreements).

[110] W Patricia, 'The Relevance and Role of Water Law in the Sustainable Development of Freshwater: from 'Hydrosovereignty' to 'Hydrosolidarity' (2000) 25 (2) Water International 202, 207.

[111] E Karar (ed), *Freshwater Governance for the 21st Century* (Vol 6 in Global Issues in Water Policy Series, Springer International Publishing 2017) 1-14.

[112] M Kaika, 'The Water Framework Directive: A New Directive for a Changing Social, Political and Economic European Framework' (2003) 11 (3) Journal of European Planning Studies 299.

transboundary impact, and the recognition and need to understand and integrate this concern are the three important pillars for the regulation of freshwater. It stands true for every possible jurisdiction and therefore has a global implication. Besides analysing the general attributes responsible for the regulation of the freshwater resource, the next section investigates water regulation in India.

4. Freshwater Governance: The Situation in India

The ancient civilisation of India and the impact of their water management techniques are analysed in this section to understand their importance in establishing water security and the relevance of the underlying philosophy that guides as well as restricts the ambit of management of the resource. The integrated and holistic management of the resource in ancient and in contemporary times are analysed to assess how far these practices ensure sustainable management of the resource. Moreover, the status of the freshwater resource in India is assessed, which raises alarming concerns for the present and future generations in term of both quality and quantity. This therefore, demands the adaptation of the three-pillar approach discussed above at the domestic level.

4.1. Regulation of Freshwater in Ancient Times in India

India as a country is vast at present and was even more prominent in ancient times. She was the cradle of many civilisations in the ancient world and at the heart of these civilisations, was the technique to master the management of water resource. 'Mohenjodaro' and 'Harappa' are the oldest yet most developed cities of the ancient times in India. The success of these cities was based on their stone-built drainage systems, water storage systems and wells, which were ahead of their time.[113] The ancient people understood that the freshwater is the lifeblood of the civilisation and they could flourish alongside the natural water resource only if managed efficiently. There are archaeological proofs of the wisdom of the past in the form of water harvesting mechanisms such as

[113] The Desk, 'Fascinating India: The Fascinating Art of Water Management in Ancient India' (GBridges.com: An Exclusive Global Community of Indian Professionals, 08 September 2009). <http://6bridges.com/Content.asp?c hk=1 &DataID=2159 &ShowAll=1> accessed 20 Nov 2018.

water tanks, canals and bunds used 5000 years ago in the Sindhu-Saraswati basin (modern-day Gujarat).[114]

There is further evidence in support of this – the Harappan city of Lothal in Gujarat had built water transport and terra-aquaculture system, which resembles modern-day integrated practices of land and water management.[115] Moreover, this system was common to most of the traditional societies. They also had an intricate drainage system and sophisticated brick cisterns for purifying water. The consideration of the availability of water resource before planning the commercial activities in the past shows the art of integrated planning of the resources available. Another fascinating example is the city of Dholavira in Gujarat, which represents the very first water conservation system of channels and reservoirs in the world. The city of Rajasthan possesses early formats of rainwater harvesting systems employing roof-top water harvesting techniques in the form of stepwells which is considered as the ancient heritage of water management.[116] Traditional water harvesting practices in the cities of Hyderabad, Delhi, Bangalore etc. were incorporated with irrigation and water supply two ago.[117] The prominent water conservation in the form of bunds and the conservation tanks can be traced back to the water tanks built by the 'Chandelas' in 'Bundelkhand' between (900-1200 A.D.).[118] The water management, recycling and purification of existing water bodies were also advanced in that period, as can be seen in the traditional water management in Mizoram,[119] and purification of a lake in Delhi respectively.[120]

The purpose of this analysis of the efficient management of the water resource in ancient times is to reflect on the fact that the entities of that time were cautious and active in managing the resources for their subjects by performing the positive obligations

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[114] GD Feo, G Antoniou, HF Fardin and others, 'The Historical Development of Sewers Worldwide', (2014) 6 Sustainability 3936, 3940.
[115] UNESCO, 'Archaeological remains of a Harappa Port-Town, Lothal' (2014) Submitted by the Permanent Delegation of Turkey to UNESCO (State, Province or Region: Gujarat, Dist Ahmedabad, Dholka Taluk, Coordinates: N22 31 17 E72 14 58) < http://whc.unesco.org/en/tentativelists/5918/> accessed 20 Nov 2018.
[116] SK Misra, 'Splendours of Water Architecture: The Stepwells of Rajasthan' (2009) 4 Power of Creativity for Sustainable Development: Special Issue Heritage of Water Management, UNESCO 18.
[117] ibid, SS Kumar, 'Harvesting: Practices in India as Part of Integrated Watershed Management for Irrigation and Water Supply' 28.
[118] ibid, 'Nitya Jacob, Bundelkhand: The Chandela Water Tanks' 35.
[119] ibid, Rochamliana and L Chhakchhuak, 'Traditional Water Management in Mizoram: An Impression' 40.
[120] ibid, M Bhatnagar, 'Revival of Hauz Khaz Lake Delhi' 42.

of a state. All the means of management and the governance of the natural resource indicates their existence as a primary responsibility of the state towards the present and future generations, and, to the environment. Another lesson to be learned is that the cultural practices, as well as the culture itself, was designed to exist in harmony with nature. A reflection of this understanding can be found in the non-theistic traditions of Asia and South Asia, including India. For instance, Hinduism traditionally respected nature and promoted living in harmony with nature, while acting as stewards of the earth.[121] Similarly, in Islamic tradition, the belief was that the natural resources are inherited by the present generation along with certain obligations to god while using them.[122] Islamic culture is mentioned because the Mughals ruled different parts of the Indian sub-continent at different times and they formed an integral part of Indian society. These underlying philosophies or theories helped them to categorise the resource and govern them accordingly, which evidently proves the power of ideology behind the success of policy at a given time and space.[123]

These traditional practices represent the principle of stewardship towards nature on the one hand, and on the other, they reflect the tendency of ensuring inter-generational equity which remained intact with the ancient philosophies. Perhaps, this reflects the fact that the modern understanding and principles of international environmental law are the replication of the norms and practices prevalent in the ancient civilisation of India. This is reflected by the principle of inter and intra-generational equity, along with the principle of stewardship of the modern international environmental law. This states that all generations past, present and future have an equal stake in the c*ommons* and the commons are available to all the life-forms equally, to which we as humans, act as trustees being the intrinsic part of the system. Thus, human behaviour and their perception towards the natural resources had always influenced the manner of their governance. The human behaviour and the ideology governing their behaviour have induced different techniques for the governance of the resource at different times which have left a more profound impact on the resource. And these changes are in continuum

[121] EB Weiss, 'Nature and the Law: The Global Commons and the Common Concern of Humankind' (2014) Extra Series 41 Sustainable Humanity, Sustainable Nature: Our Responsibility, Political Academy of Sciences.
[122] ibid.
[123] KV Raju, S Manasi (eds), *Water and Scriptures: Ancient Roots for Sustainable Development* (Springer 2017) 9.

throughout the time.[124] If we look back in time, we can say that the nature and its interaction with humans have evolved simultaneously over time. This clarification also supports Hardin's view, suggesting that mere technical solutions are not sufficient to manage the *global commons* in a given time, so is the vision that only change in ideology could alternatively deal with such situation.[125] His assumption that the overexploitation of the resource because of human intervention will cause *tragedy to the commons* also stands true. Therefore, it requires the transitional ideological shift to deal with *global commons* of this century. Some of these transitional practices are discussed below.

4.2. Freshwater Regulation in Present Times

The freshwater regulation in India is fragmented and do not concur an advanced understanding of the hydrological cycle. Instead, the regulation of the resource is still under the colonial influence, which used to separate the groundwater from the surface water.[126] Freshwater disputes within the country or with the neighbouring nations mainly revolve around the engineering-based solutions or they are dominated by and fixated on the grey infrastructure mechanism mainly concerning with the volume and the manner of the resource to be shared.[127] Unfortunately, they do not have conservation or restoration of the resource or the ecology which host the resource at its heart, often they have been ignorant or reluctant in marrying the green infrastructure with the grey infrastructure to address the crisis.[128] Therefore, they are driven by the supply-oriented approach. A clear ideological shift is evident from the practices of freshwater regulation from the ancient times to the colonial times. Most of the ongoing practices could be traced to the colonial times, however, with the advancement of the international environmental law and raising awareness of the emerging environmental crisis, there is a need for change in the manner of water regulation. The existence of the parallel and contradictory regime dealing with freshwater is not the subject of analysis in this chapter, however, Chapters Two and Three

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[124] E Ostrom, 'Coping with Tragedies of The Commons' (1999) 2 Annual Review of Political Science 493-535.
[125] D Brook, 'The Ongoing Tragedy of Commons' (2001) 38 The Social Science Journal 611-16.
[126] F Biermann, P Pattberg, V Asselt and others, 'The Fragmentation of Global Governance Architectures: A Framework for Analysis' (2009) 9 (4) Global Environmental Politics 14.
[127] IWA, 'Integrating 'Green' and 'Grey' Solutions to Protect and Secure Water Resources' (20 Mar 2018, International Water Association) < http://www.iwa-network.org/integrating-green-and-grey-solutions-to-protect-and-secure-water-resources/>.
[128] S Bajpai, N Alam and V Saini, 'Water Challenges in India and their Technological Solutions' in S Ahuja, JB de Andrade, DD Dionysiou and others, *Water Challenges and Solutions on a Global Scale* (Volume 1206, American Chemical Society 2015) 161.

deal with them in great length. In this chapter we will analyse the ongoing efforts which promote integrated management and holistic understanding of the resource.

Some of the remarkably integrated policies working in India with the object of conservation have infused the ancient wisdom with that of the knowledge of environmental law available in context. They are community run or NGO led initiatives. Therefore, they work in an area at a micro level and not at the level of state or nation. However, they represent a bottom-up approach with full participation and complete involvement of the third-tier of the Indian democratic system *the Gram Panchayat.* Two of the most prominent examples working for water conservation are, 'Tarun Bharat Sangh' run under the guidance of 'Rajendra Singh' known as 'the Water Man of India' (Alwar, Rajasthan);[129] and an initiative by 'Amla Ruia' known as 'Water Mother' in Rajasthan and funded by the 'Aakar Charitable Trust'.[130] A fascinating aspect of these two initiatives is that they address the problem at the grass root level by embracing the advanced understanding of the natural cycle and by designing the regulation using age-old traditional techniques which are cost-effective, easily adaptable by the locals and eco-friendly. However, there is potential for conflict between the working doctrine of the state over the water resource and these initiatives led by the community, because these initiatives are not designed as per the applicable law of the land and sometimes create friction.[131] Situations like these primarily require ideological clarity and categorisation of the resource in a given jurisdiction. The examples mentioned are just to give the flavour of the kind of activities community is involving itself with to ensure water conservation using the integration approach. The following section provides a statistical analysis of the current state of the resource in India.

4.3. Statistical Situation of Freshwater in India

The factual reality of the available freshwater resource in the country is an alarming concern for both present and future generations, and is equally worrisome for the overall development of the country. Surface water over the years has experienced the extreme change in river flow and the change in the composition of the resource, which is

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[129] Tarun Bharat Sangh <http://tarunbharatsangh.in/> accessed 20 Nov 2018.
[130] Aakar Charitable Trust <http://aakarcharitabletrust.weebly.com/about-the-trust.html> accessed 20 Nov 2018.
[131] RR Iyer, 'Governance of Water; The Legal Questions' (2010) 17 (1) South Asian Survey 147, 150.

further at-risk due to climate change. The deterioration of the quality of the resource is due to the disposal of untreated waste from households, industries and other pollutants in the surrounding areas.[132] By contrast the groundwater extraction is associated with the land and property rights, therefore it is appropriated at an unprecedented rate which has alarmed the nation.[133] This type of uncharted extraction had resulted in the categorisation of the resource as over-exploited or critical, based on the probability of groundwater recharge by natural as well as artificial recharge techniques. Due to this reason, India is seldom charted as a 'water-stress country' by the international organisations, and the

[132] Government of India, 'Pollution Assessment Ganga River' (Central Pollution Control Board, Ministry of Environment and Forests 2013) 9.

[133] NASA, 'NASA Satellites Unlock Secret to Northern India's Vanishing Water' (NASA's Gravity Recovery and Climate Experiment: GRACE 2015) <https://www.nasa.gov/topics/ear th/features/india water .html> accessed 20 Nov 2018.

view is often supported by scientific projections.[134]

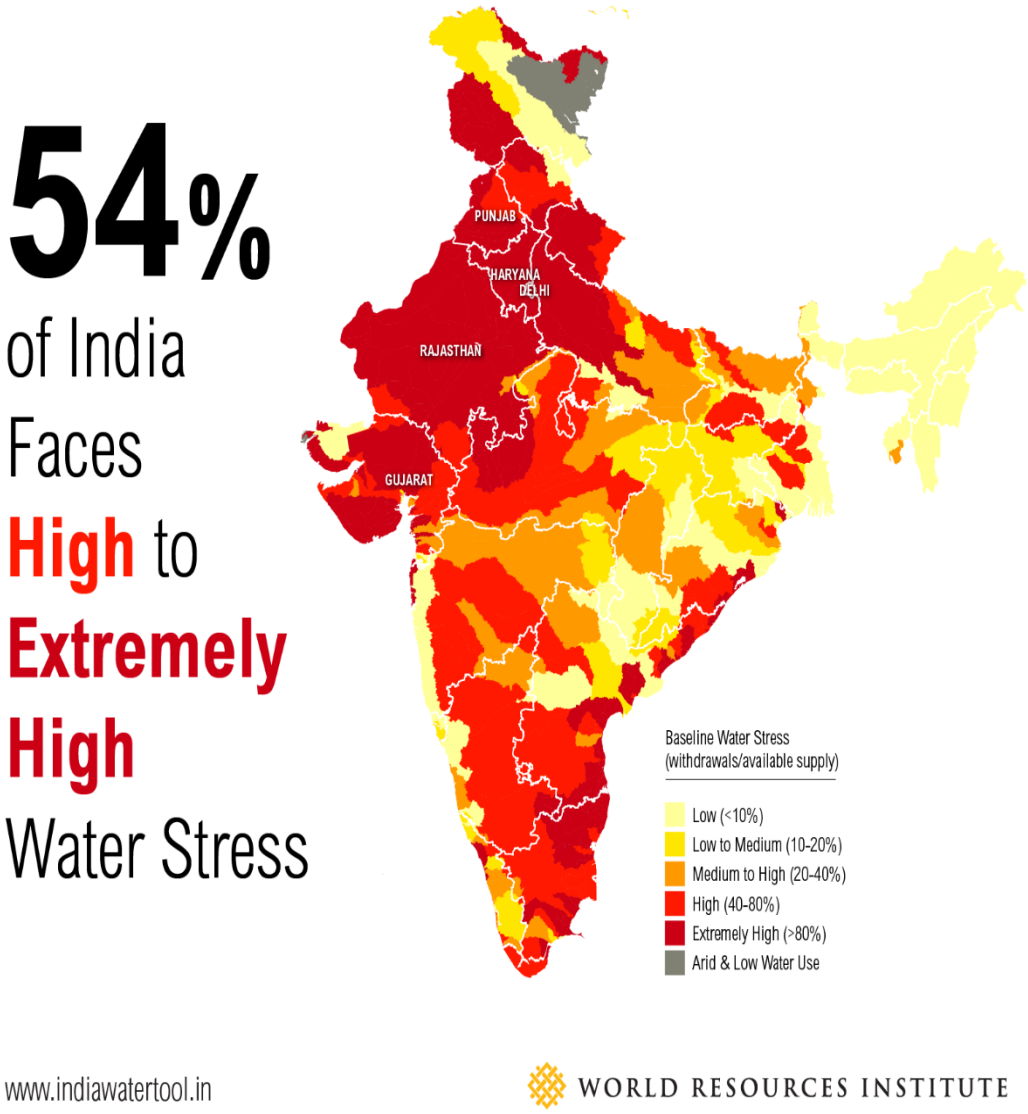

Figure 1.3. Freshwater Availability in India (2015).[135]

[134] UN Water, *The United Nations World Water Development Report: Water for a Sustainable World* (UNESCO 2015) 74-76.

[135] T Shiao, A Maddocks, C Carson and others, '3 Map's Explain India's Water Crisis' World Resources Institute: Freshwater Availability in India' (Water Resources Institute 26 February 2015) <http://www.wri.org/blog/2015/02/3-maps-explain-india%E2%80%99s-growing-water-risks> accessed 20 Nov 2018.

Figure 1.3 above represents the situation in 2015; the situation is worse since. As per the given figure, 54% of India's land area is facing high to extremely high water-stress, almost 600 million people or more are at a higher risk of surface-water supply disruptions. The most extreme high-stress area is blanketing the Northwest of India which is India's 'breadbasket' and thus threatens food security along with water scarcity.

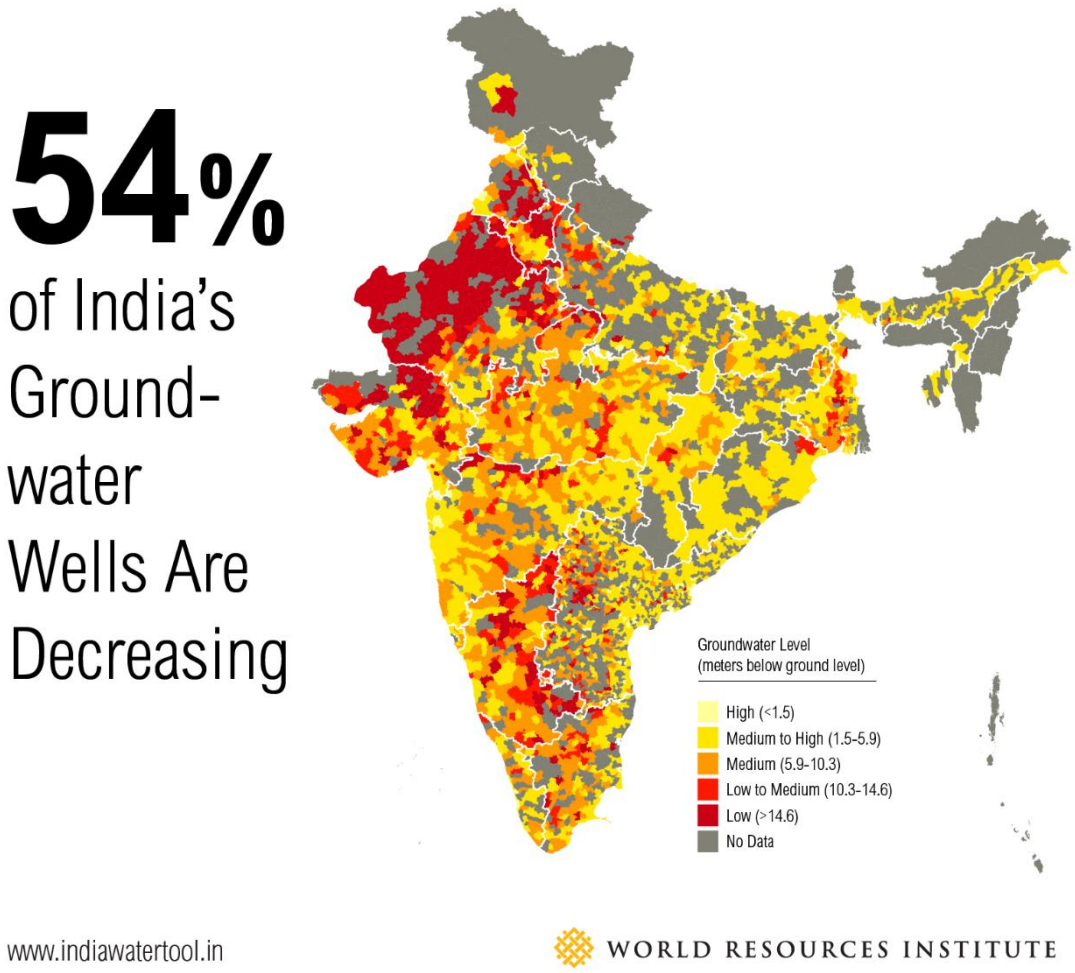

Figure 1.4. Groundwater availability in India 2015.[136]

The groundwater levels are continuously declining across India. Farmers in arid areas, or areas with irregular rainfall depend heavily on groundwater for irrigation. The Indian government used to subsidise farmers' electric pumps and places no limits on the volumes of groundwater they can extract, creating a widespread pattern of excessive water use and strained electrical grids. The threatening levels of underground water have

[136] ibid.

caused certain restrictions on the extraction of the resource, but these responses are an instant fix and not the result of strategic planning designed for the conservation of the resource. The North-western region of India again stands out as highly vulnerable.[137] These figures are an alarming indication in a water-scarce world and the one driven by climate change uncertainty. It fundamentally has the potential to affects millions of livelihoods depending on food and water security such as agriculture, farming, fishing and other nature dependent activities. Furthermore, it endangers the tribal and aboriginal communities. The concerns analysed in this section provide sufficient reason as to why the state at the national and local levels must switch to more efficient means for the regulation of the freshwater resource holistically. The following section will conclude the findings.

5. Conclusion

Human-nature interface has been the defining feature as to how we interact with the resource or nature, and that determines the manner for the regulation of the resource at a given place and time. To deal with the rising freshwater crisis, the state needs to undergo transformational change in ideology from the supply driven engineering-based or grey infrastructure solutions to the eco-friendly, sustainable and holistic solutions.[138] This change must not only run parallel to nature's cycle but must also enhance and strengthen its resilience, thus promoting the combination of the grey-green infrastructure together.[139]

On that transformational journey, the state needs to embed an understanding of the hydrological cycle through various campaigns and awareness programmes at all levels of governance and make the system receptive for a modern understanding of the resource and towards the need for integration of the concerns for holistic water regulation. In accordance with this understanding, the constitutional provisions as well as the legislative and institutional units concerning with the regulation of the resource must

[137] ibid.

[138] G Eckstein, 'Water Scarcity, Conflict, and Security in a Climate Change World: Challenges and Opportunities for International Law and Policy' (2009) 27 Wisconsin Int'l Law Journal 409.

[139] IWA, 'Integrating 'Green' and 'Grey' Solutions to Protect and Secure Water Resources' (20 Mar 2018, International Water Association) < http://www.iwa-network.org/integrating-green-and-grey-solutions-to-protect-and-secure-water-resources/>.

be reconfigured. That will require amendment, revision or repeal of the existing legal provisions, or the re-structuring of the foundation on which the provisions, theories or doctrines are built upon.[140] The federal democratic constitution of India also provides for a legitimate space for the creation of a national framework statute for the harmonisation of the water regulation (the means for which are discussed in detail in chapter 2 and elsewhere in this thesis). This will benefit from removing the obstacles and reorienting the means and mechanisms for water regulation.

Environmental crisis is the major climactic issue of this century and freshwater is one of the critical issues from that catalogue, but so is the opportunity to tackle with it. It is probably the final century to make that choice and to make the difference to the environment. The ecological systems are not yet so vulnerable that they cannot be regenerated. However, robust and immediate attention is required to save the ecology from undergoing permanent transformation. Climate change severely affects the freshwater resource and to address the crisis or even to plan the means for its regulation in a holistic manner vast amount of integrated data is required. Therefore, it is important to integrate this aspect as the key component for the holistic regulation of the resource, at every possible level.

The sustainable management of the resource with the integration of all the concerns using polycentric governance is preferred and suggested means for the regulation of the resource, which will flourish exceptionally well in the democratic set-up of the country.[141] According to the country's federal distribution of power, the constitution has assigned the ability to govern or regulate the water resource to the states and to the sub-divisions created within the provincial states, to manage it as locally as possible.[142] This arrangement is of great advantage for the application of polycentric governance using bottom-up approach.[143] This approach could work effectively and is

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[140] P Cullet, 'Water Law in a Globalised World: the Need for a New Conceptual Framework' (2011) 23 (2) Journal of Environmental Law 233, 236.

[141] Tushaar Shah and Barbara van Koppen, 'Is India Ripe for Integrated Water Resources Management? Fitting Water Policy to National Development Context', (Aug 2006) 41 (31) Economic and Political Weekly 3413.

[142] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018) Schedule 7, List II, Entry 17.

[143] AT McDonald and G Mitchell, 'Water Demand Planning and Management' in J Holden (eds), *Water Resources: An Integrated Approach* (Routledge 2014) 205.

essential to regulate the vital resource, not just because it is internationally accepted and proven to have phenomenal results, but, because this is the approach which understands and subsumes the inherent nature of the resource, and later designs the technique for its management using that understanding.

For the holistic regulation of freshwater its categorisation and legal status is of prime importance. In the new Anthropocene epoch, if we were to designate freshwater as the 'global commons', the legal doctrine of *common concern of humankind* would serve as the legal basis for developing new means and principles for the regulation of the resource, at the universal level. This categorisation will serve two purposes internationally and domestically; internationally, the laws made by the state to regulate freshwater will be in line with the international laws and principles prescribed for the regulation of the resource. Thus, they will be sustainable and coherent with the laws and policies of neighbouring states. And domestically, this understanding could dominate the domestic environment to classify the freshwater resource as the common goods where it is to be implemented, considering its geographic, social, cultural and other variable requirements by being able to design the bottom-up approach as per the local needs. By so doing, the states will primarily be able to materialise their primary obligation towards their subjects by ensuring freshwater security and the progressive realisation of the *right to water* in the domestic context, and secondary duties towards the global community by sustainably managing the global commons.

Thus, pressing the need to classify the Freshwater resource as the *common concern of humankind*. As contemplated by Professor Weiss in the context of the new 'Kaleidoscopic world' – the effective governance of the global commons requires a set of common values.[144] Moreover, these values must be based on the normative values of sustainability and other important values such as equity. Likewise, in the domestic environment the common values and shared commitments must flourish simultaneously in the federal set-up in the form of top-down and bottom-up approaches for holistic management of the resource.[145] In this sense, it can be argued in favour of the framework

[144] EB Weiss, *International Law for a Water-Scarce World* (The Hague Academy of International Law, Martinus Nijhoff Publishers 2013.
[145] ibid.

law for the regulation of freshwater as the top-down means and the governance of the resource using the domestic laws and policies of the state within the framework of the agreed laws/principles as a reflection of a bottom-up approach.

The categorisation of the resource is the first and foremost step for aligning the holistic regulation of the resource using law and policy by the state. In this context, their lies an important step in between categorisation and designing the legal tool to implement the means for water regulation, that being the availability of data based on scientific and other concerned factors. Both these requirement forms the strong foundation for efficient governance of the resource and therefore considered to be a legal requirement to base any law and policy governing the resource. Arguably, this is suggested to be the good starting point for the state to undertake its responsibility and work towards its commitment for ensuring holistic and sustainable regulation of the resource.

Part II

Chapter 2: Harmonisation of State Practice and the Federal Constitution

1. Introduction

Part two of this thesis addresses the issue of harmonisation of the laws and policies for the regulation of the resource. The issue of harmonisation is discussed in two ways in this part of the thesis, this chapter investigates the possibility for harmonising the states behaviour regarding the manner they deal with and regulate the water resource within their territory, and the manner they interact with adjoining and riparian states for the matter concerned. This is because the water as a subject matter comes under the jurisdiction of federal state in India, thus empowering the federal units of the state an autonomy to legislate, design policy and implement those. As far as the state autonomy or the control is concerned it is not regulated through a set of legal principles. Although, the resource is shared, and the manner adapted for the regulation of the resource affects all the states and various branches of government irrespective of the state boundaries. This attitude of states in water regulation creates tension among the states in a federal set-up and obstruct the sustainable development of the resource. This is the reason for exploration of the mechanism which can lawfully regulate the inter-state practices thus ensuring the holistic, sustainable and coherent regulation of water resource in India.

Given that the states function within the umbrella of Indian Constitution and are bound by it, but there is not much to guide the states in terms of how they must regulate the natural resource within their territory. Although, the need for such a mechanism is desired and believed to have a significant impact in coherent and sustainable regulation of the resource throughout the Indian Territory. The rationale behind is to learn from the development of international law and apply these principles applicable between two states (countries) to the states in a federal country such as India. To devise such a mechanism, the principles of international watercourses law is studied.[1] Mainly because these principles regulate the behaviour of two or more states (countries) and the manner

[1] UN, Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 (adopted by the General Assembly of the United Nations on 21 May 1997, entered into force on 17 August 2014; See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49), as of July 2018 it has 16 Signatories and 36 Parties).

they conduct themselves to regulate the resource, given the consideration of the neighbouring states. Furthermore, by realising the hydrological cycle, the transboundary impact and the interdisciplinary nature of the resource they promote sustainable management of the resource beyond the territorial boundaries of a state. For the said purpose, the states in India (29 states and 7 union territories) are compared to the countries in the European Union, given the size, variation in geography, and the autonomy of the federal states to legislate and regulate the resource within their territory. And the development in international watercourse law is proposed to learn from in devising a legislative mechanism to regulate the behaviour of federal states for the concerned matter however, complementing the constitutional mechanism.

This section introduces the theme of this chapter, the nature, practice and requirement of harmonisation in state practice concerning water regulation, and outlines the subsequent arguments to support this hypothesis that follows as discussion progresses. Whereas, the next chapter (chapter 3) deals with harmonisation in terms of law and policy working within the state and among the federal states. Mostly concerning with the legislative uniformity or the uniform application of the legal principles and the understanding of the resource by the state authorised to regulate the resource. Thus, ensuring some common features or the parameters for the holistic regulation of the resource.

Section two explores the advancement from the development of international watercourse law and learn to replicate this in domestic context for harmonising the states practices in water regulation. In the next section the situation in India is investigated and different constitutional and legislative possibilities to achieve the outcome is explored. After carefully analysing these arguments in domestic jurisdiction the last section concludes the findings.

2. International law

International law was designed to regulate the behaviour of states, individually and collectively, and so the state is the prime subject of such laws.[2] The environment and

[2] J Brunnee, 'Common Areas, Common Heritage, and Common Concern' in D Bodansky, J Brunnee and E Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007) 551.

its components interact with each other following the laws of nature and without any consideration to the human-made boundaries or the territorial segregation of political units of states. The foundational principles, their understanding and interaction with other components of ecological, social and political aspect of life, and the overall dynamics of environmental law deviate from the usual functioning of public international law and the concept of state sovereignty, mainly because of inevitable transboundary impacts. This realisation argues for the holistic regulation of the resource with no recognition for the political boundaries. International law had progressed to accommodate this understanding and thus proposed set of legal principles for the regulation of states behaviour concerning the regulation of fresh watercourses for the non-navigational uses.[3]

The issue of ecological predominance and integrated and holistic management of the resource is admirable and advocated against the fragmented approach of piecemeal legislation and management of the resource as it is prevalent in India.[4] Which is why, to harmonise the states behaviour in India concerning the regulation of the water resource international water law is consulted. And following are the most influential international hard laws and soft law instruments available for the regulation of the freshwater resource.

2.1. The UN Watercourse Convention, 1997

The watercourse convention was the result of 20 years of codification of laws based on best practices internationally, and the *Opinio Juris* from all over the world. The intent was to codify the set of uniform principles of law for the regulation of international watercourses for non-navigational uses.[5] The International Law Commission (ILC) was commissioned by the UN to codify the international law for the regulation of fresh watercourses.[6] This process of codification of law in itself is evidence for legitimacy and a

[3] SC McCaffrey, 'Convention on the Law of Non-Navigational Uses of International Watercourses', (Un Audio-visual Library of International Law) available at: < http://legal.un.org/avl/pdf/ha/clnuiw/clnuiw_e.pdf>.
[4] MN Shaw, *International Law* (6th edn, CUP 2008) 883.
[5] UN, Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 (adopted by the General Assembly of the United Nations on 21 May 1997, entered into force on 17 August 2014; See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49), as of July 2018 it has 16 Signatories and 36 Parties).
[6] UN Charter, 1948, Article 13, 1 (a).

credible source of law.[7] Additionally, the UN Watercourse Convention aims to synchronise the efforts of the international community using international law to ensure the regulation of the resource and to address the problems arising from the sharing of freshwaters among the states on a global scale.[8]

The Convention came into force on 17th August 2014, after 17 years of its acceptance and is considered as the compilation of the reflective principles of customary international water law.[9] The convention aims to tackle the growing freshwater crisis of this century. It is driven by the realisation of inevitable transboundary impacts on the vital resource due to the hydrological cycle. Transboundary environmental impacts are the driving force for the environmental treaties such as the Ramsar Convention; the Convention for Biological Diversity; the Convention for International Trade in Endangered Species; the UN Framework for Climate Change Convention, and others. Cooperation is promoted as the cardinal principle and a solution to tackle the adverse impacts of transboundary harm suffered by the countries sharing the common resources.[10] Likewise, it is also reflected as the underlying theme of the 1997 Watercourse Convention.

Likewise, the *Trial Smelter case* is the landmark judgement that redefined the idea of transboundary impacts on the environment and the manner in which they must be understood and dealt with in law.[11] The dissenting opinion of Judge Weeramantry in the *Gabcikovo-Nagymaros* case sheds some light on the understanding of the transboundary harm in the dispute arising due to sharing of international watercourses.[12] In this case, certain issues were observed, as follows:[13] (a) The importance of the principle of

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[7] The Centre for Energy, Petroleum and Mineral Law and Policy (CEPMLP) Research Gateway, 'The ICJ and the Case Concerning *Gabchikovo-Nagymaros Project:* the Implications for International Watercourses Law and International Environmental Law' <http://www.dundee.ac.uk/cepmlp /gateway/index.php? mode=print&news =27951> accessed 20 Nov 2018.

[8] SC McCaffrey, *The Law of International Watercourses Non- Navigational Uses* (OUP 2001) 74-5.

[9] UN, Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 (adopted by the General Assembly of the United Nations on 21 May 1997, entered into force on 17 August 2014; See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49), as of July 2018 it has 16 Signatories and 36 Parties).

[10] E Benvenisti, 'Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law' (1996) 90 (3) The American Journal of International Law 384.

[11] International Arbitral Award, *Trial Smelter Arbitration United States v Canada* 3 RIAA 1905 (1941); For a commentary, see P Sands and J Peel, *Principles of International Environmental Law* (3rd edn, CUP 2012) 96.

[12] International Court of Justice, *GabCikovo-Nagymaros Project (Hungary/Slovakia)* Judgment on 25 September 1997, ICJ Reports 1997, p 7.

[13] ibid Separate Opinion of Vice-President Weeramantry.

sustainable development is paramount in deciding cases, and ensuring balance between environmental concerns and those related to the economic development of the country.[14] *(b)* Judge Weeramantry encouraged and welcomed the development of new laws and principles which were inspired by the ancient texts from disciplines such as religion, culture, history, philosophy, etc., and not just the law.[15] *(c)* He further stated that in cases where the interest of humanity is concerned they should and must be interpreted in a broader context, and the interpretation of the other treaties or texts should be welcomed.[16] Moreover, such interpretation must be made based on the current standards of law available to accommodate the needs of the present times.[17]

The statement made by Judge Tanaka from South West Africa takes a similar tone to those made by Judge Weeramantry. –Judge Tanaka:

> *'…observed that a new customary law could be applied to the interpretation of an instrument entered into more than 40 years ago. The ethical and human right related aspect of environmental law brings it within the category of law so essential to human welfare that we cannot apply to today's problems in this field the standards of yesterday.18*

Later, Judge Weeramantry supported this view and said that:

> *'the general support of the international community does not, of course, mean that each and every member of the community of nations has given its specific and express support to the principle nor is this a requirement for the establishment of a principle of customary international law.[19]*

The International Watercourse Convention has clarified the status of freshwater as a natural resource. Correspondingly, the *rule of equitable utilisation* and *no harm rule*

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[14] ibid para 92.

[15] ibid para 97; See also, 'International Lawyers and the Progressive Development of International Law' in J Makarczyk (ed), *Theory of International Law at the Threshold of 21st Century* (Brill Nijhoff Publishers 1996) 423.

[16] International, Court of Justice, Security Council Resolution 276 (1970), Advisory Opinion of ICJ Reports 1971, 31, para 53 (Legal Consequences for States of the Continued Presence of South Africa in Namibia/South-West Africa).

[17] European Court of Human Rights*, Tyrer Case v. United Kingdom* Judgement 5856/72 25 April 1978, para. 31; See also, R Higgins, 'Some Observations on the Inter-Temporal Rule in International Law' in J Makarczyk, *Theory of International Law at the Threshold of the 2lst Century* (Brill Nijhoff 1996) 173.

[18] ibid para 293-294.

[19] International Court of Justice, *GabCikovo-Nagymaros Project (Hungary/Slovakia)* Judgment on 25 September 1997, ICJ Reports 1997, p 7. Para 95.

came into foreplay with the codification of the watercourse convention.[20] These qualify as the customary principles of international environmental law and are of specific importance to the watercourse convention. The convention declares that *Article 5-7* be employed as a set of principles, which complement each other, whilst neither supplementing nor superseding one another in deciding on disputes arising between the nations sharing international watercourses.[21] By contrast, the author is of the view that the *rule of no harm* and *principle of cooperation* are embedded in the principle of *equitable utilisation,* and the polarisation of the upper and the lower riparian states towards either of the principle is the result of misinterpretation of these principles or merely a political stand.[22] This is important because the principle of *equitable utilisation* is rooted in the principle of reasonableness and equity, and it is futile to establish equity when either of the party unduly harms the interest of the other.[23]

It is evident that the freshwater cannot be managed in isolation and shall be driven by the spirit of cooperation and in a holistic manner. Rather than strictly adhering to the principle of territorial sovereignty of the state, or confined to a territory based only on ownership, or control over the resource, or any other legal right associated with the resource.[24] The reluctance of individual states to recognise the principle of watercourse convention which is regarded as the customary principles of international law to upgrade the governance and management of the resource within their territory is a major set-back.[25] Therefore, the universal enforcement, implementation and adaptability of these customary principles of watercourse law must be emphasised in a manner that can aspire the nation-states to abide by them in their domestic jurisdiction. Section below examines the much more recent but the softer rules for the regulation of water resources.

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[20] SC McCaffrey, 'International Watercourses', UN Audio-visual Library of International Law <http://legal.un.org/avl/ls/McCaffrey_IW_video_1.html> accessed 20 Nov 2018.

[21] G Eckstein, 'Commentary on the UN International Law Commission's Draft Articles on the Law of Transboundary Aquifers' (2007) 18 (3) Colorado Journal of International Environmental Law and Policy 537.

[22] Salman MA Salman, 'The United Nations Watercourses Convention Ten Years Later: Why Has its Entry into Force Proven Difficult?' (2007) 32 Water International 1.

[23] AT Wolf, 'Criteria for Equitable Allocations: The Heart of International Water Conflict' (1999) 23 (1) Water Resource Forum 3.

[24] A Yannis, 'The Concept of Suspended Sovereignty in International Law and Its Implications in International Politics' (2002) 1 (5) Environmental Journal of International Law 1037.

[25] SC McCaffery, 'The Entry into Force of the 1997 Watercourses Convention' International Water Law Project Blog <http://www.internationalwaterlaw.org/blog/2014/05/25/dr-stephen-mccaffrey-the-entry-into-force-of-the-1997-watercourses-convention/> accessed 20 Nov 2018.

2.2. The Berlin Rules 2004

To keep up with the exponential increase in demand for the water resource in the 21st century, the Water Resource Committee of the ILA was asked to revise and rewrite the rules of international law for the regulation of the freshwater resource.[26] In furtherance of the cooperative management of the resource among the states sharing it, or, the states facing similar adverse transboundary impacts arising directly or indirectly from the act or omission caused by the activity of the state. The object of the rules is to promote the peaceful environment and to facilitate peaceful means for the resolution of disputes, in case they arise among states sharing the freshwater resource. This is the set of non-binding principles of soft law designed to regulate the international freshwaters.[27]

These soft law principles represent the process of codification of customary international law applicable to the international freshwaters within the state and otherwise, given the profound change in the earth's environment in general and of freshwater in particular.[28] Additionally, it is an attempt to codify a comprehensive set of robust rules for the stringent management of the resource by the leading scholars of the world and to compile the developments of the last five decades in the watercourse law. These rules are progressive in the sense that they intend to address or mitigate the issue of water scarcity that the world is about to face. The author would further like to point out that such rules were written in 2004 when the *UN Watercourse Convention* was not enforced, which further supports the importance of codification of customary international law for the management of international waters.

The ILA once more has clarified the meaning and scope of the rules applied to the freshwater resource in general and groundwater in particular in Chapter VIII of the Berlin Rules.[29] The scope of the Berlin Rules clarifies that these set of rules are the consolidation of the customary principles of international law applicable for the regulation of the resource. Moreover, wherever possible, these rules represent the progressive development of the customary international law, to accommodate the needs of changing

[26] JW Dellapenna, 'The Berlin Rules on Water Resources: The New Paradigm for International Water Law' (2006) World Environmental and Water Resource Congress 1.
[27] SMA Salman, 'The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law' (2007) 23 (4) Water Resource Development 625.
[28] International Law Association, 'Berlin Conference: Water Resources Law' 2004, Preface, para 3.
[29] ibid Chap VIII: Groundwater.

times.[30] The Berlin Rules explicitly mentions that such rules apply to waters in general, i.e. to the waters within the state and transboundary waters both.[31] The chapter for groundwater aquifers consists of six articles. Whereas, *Article 36* recognises the special status of groundwater aquifers mainly for two reasons; firstly, due to slow movement and recharge of the resource; and secondly, due to the realisation of the fact that once the deterioration of the resource happens its purification is slow, costly and difficult altogether.[32] *Article 37* talks about the management of the resource in an integrated and conjunctive manner,[33] and the remaining articles of the group clarify the objective set out in the first two articles, *36* and *37.* Therefore, Chapter VIII of the Berlin Rules comprehensively analyses the issue of groundwater in all its forms and is of the view that the freshwater resource must be addressed in an integrated fashion.

Given the nature of groundwater as discussed above, and due to the evident transboundary impacts, little of any certainty is known about the resource. It therefore seems plausible to manage and regulate the resource with a precautionary approach.[34] However, to do so, the states require specific information about the resource, along with the details of all factors that can cause a change in the composition of water, regarding either quantity or quality, or both. Therefore, the duty to share the information, with specific indicators, is listed in the *Article 39* of the rules – where it requires the state to fulfil its obligation to sustainably manage the resource in a manner best possible cogitating the impact on biological diversity. This is accompanied by additional obligations to protect the aquifers from pollution and to maintain hydraulic integrity.[35] Furthermore, *Article 42* clarifies that such a resource has to be managed in a way that gives full effect to the principles of *equitable and reasonable utilisation; no harm rule*; and the *principle of cooperation*.[36] This resembles the set of principles mentioned in articles 5, 6 and 7 of the

[30] ibid Article 1: Commentary (scope).
[31] Ibid.
[32] ibid Article 36 and Commentary.
[33] ibid Article 37 and Commentary.
[34] J Tickner, C Raffensperger and N Myers (eds), '*The Precautionary Principle in Action: A Handbook*' (1st edn, Science and Environmental Health Network 1999) 1.
[35] International Law Association, 'Berlin Conference: Water Resources Law' 2004, Article 41(1).
[36] ibid Article 42.

1997 Watercourse Convention, which is considered as one of the foundational principles of customary international law.[37]

The Berlin Rules represent a comprehensive set of rules for the management of groundwater aquifers within the state and otherwise. They are reflective principles of customary international law and international environmental law, and therefore, possess enormous capacity for legal sanction.[38] These norms have attained stronger legal relevance due to the enforcement of the 1997 Watercourse Convention. The surface water, groundwater and aquifers all together constitute as internationally acclaimed freshwater and therefore they must be addressed together as one resource using similar set of legal principles.[39]

3. State Autonomy and Federalism in Water Regulation

The Indian Constitution represents a three-tier system of decentralisation. The first tier deals with the Central or the Union government having the jurisdiction all through the Indian Territory; the second tier functions at the level of the provincial states; and the third tier functions at the grass-roots level.[40] The Seventh Schedule of the Constitution of India has distributed powers between the centre and states for the management and regulation of various functions.[41] The authority to regulate the water resource lies strictly with the state and the legislative power for the said purpose is also confined to the second-tier, thus it broadly represents the two-tier decentralisation mechanism.

The autonomy given to the states for the regulation of water is important for the governance of the resource within the territory and to respond to the local needs and requirements of people. Because water regulation requires tailor-made regulatory regime

[37] SC McCaffrey, 'Convention on the Law of the Non-Navigational Uses of International Watercourses' New York, 21 May 1997 Audio-visual library of International Law, UN <http://legal.un.org/avl/ha/clnuiw/clnuiw.html> accessed 20 Nov 2018.
[38] JW Dellapenna, 'Climate Disruption, the Washington Consensus and Water Law Reform' (2008) 81 Temple Law Review 383.
[39] O McIntyre, 'The Role of Customary Rules and Principles of International Environmental Law in the Protection of Shared International Freshwater Resources' (2006) 46 Natural Resources Journal 158.
[40] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Schedule Seven.
[41] ibid.

for the smallest possible area due to variable needs.[42] Although the manner such powers are distributed to the federal units is important, but it is not sufficient. Because the water as discussed in the previous chapter does not confine its impacts to the physical or political territory of a state.[43] Therefore, in absence of a legally binding mechanism which can regulate or harmonise the manner these states use their autonomy to legislate and regulate the resource within their territory, it becomes difficult to holistically regulate the resource.

As per the Indian Constitution, the federal units or the state possess autonomy to legislate and regulate for the subject-matters within their territory.[44] This can be described as the internal power sharing to preserve the cultural and ethnic variety and to facilitate and ease day-to-day governance of the state. In federal context, it represents permanent delegation of power from centre to the states for the concerned subject-matters thus, creating the possibility of self-governance.

> *As per Ghai, "Autonomy is a device to allow ethnic or other groups that claim a distinct identity to exercise direct control over affairs of special concern to them while allowing the larger entity to exercise those powers that cover common interest".*[45]

As per the definition, the states in India possess this autonomy for the regulation of water resource within their territory.[46] Perhaps, for the purpose of harmonisation of state practices concerning the regulation of water resource with the neighbouring states the larger entity is authorised to exercise those powers that cover common interest. This larger entity in this case will be the Centre/Union working under the Constitutional framework. The Centre or the Parliament is authorised to devise a mechanism using

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[42] JL Smith, 'A Critical Appreciation of the "Bottom-Up" Approach to Sustainable Water Management: Embracing Complexity rather than Desirability' 13 (4) 2008 Local Environment 353.

[43] S Dinar and A Dinar, *International Water Scarcity and Variability: Managing Resource Use Across Political Boundaries* (University of California Press, 2017) 32.

[44] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018) Schedule Seven, List II.

[45] Y Ghai, C Arup and M Chanock, *Autonomy and Ethnicity: Negotiating Competing claims in Multi-ethnic States*, (CUP 2000) 484; See also: J Heintze defines territorial autonomy as follows: "In international law autonomy means that a part or territorial unit of a state is authorised to govern itself in certain matters by enacting laws and statutes, but without constituting a State of their own."; furthermore: H.J. Heintze, "On the legal understanding of autonomy" in Markku Suksi (ed), Autonomy: Implications and Applications (Kluwer Law International, 1998) 7.

[46] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018) Schedule Seven, List II: Entry 17.

legislative means and to develop the institutional units for the cause which cover common interest for all or most of the states. Therefore, making the task for the regulation of the states' behaviour and harmonisation of state practices for the cause a real possibility.

This autonomy is equated and compared with the sovereign authority of the states in international law. And the international law development is learned from to harmonise the state practices in domestic context. However, if we learn and duplicate the development of international law and practices for the regulation of inter-state practices for the regulation of the water resource it could prove revolutionary. One of the key contributions of international watercourse law is to limit or regulate the states behaviour concerning the manner they exercise the authority over the resource belonging within their territory. This was done by reasonably limiting the principle of territorial sovereignty exerted by the state and balancing this right with reasonable duties in the form of no-harm rule embedded in equity and the realisation of inevitable transboundary impact.[47] This has resulted in the adoption of the principle of equitable and reasonable utilisation.[48] All other procedural and substantive principles were crafted to realise true potential of this very principle. The possibility of such a statute is explored below.

3.1. Legislative Development

Explicit mention of this understanding in a federal set-up is essential for the harmonisation of state practice and the manner they regulate water within their territory. Although, the manner and extant of territorial integrity in a federal state is foundationally different then its implication in international law. But clear and explicit understanding of the principle in context of the autonomy exercised by the states in a federal set-up is important and so is the imposition of correlative duties or the imposition of principles which can ensure balance in the manner states conduct themselves.[49] To evaluate such

[47] On the absolute sovereignty and territorial integrity theories, see Berber, Rivers in International Law, (London 1959) 11; For a survey of the disputes involving States riparian of international watercourses - Bruhacs, *The Law of Non-Navigational Uses of International Watercourses*, (Dordrecht 1993) 41-48.; S McCAFFREY, 'Water, Politics and International Law', in Gleick (ed.), *Water in Crisis - A Guide to the World's Fresh Water Resources* (OUP 1993) 92.

[48] UN, Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 (adopted by the General Assembly of the United Nations on 21 May 1997, entered into force on 17 August 2014; See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49), as of July 2018 it has 16 Signatories and 36 Parties) Article 5.

[49] JA Gardner, 'The Myth of State Autonomy: Federalism, Political Parties, and the National Colonization of State Politics' (2013) 29 (1) Journal of Law and Politics 1.

concern the principle of equitable realisation and no harm rule embedded in the understanding of the transboundary harm and inter-disciplinary nature of the resource are of great significance in establishing equity among the states.[50] To further the cause a set of principle such as cooperation, exchange of information, joint management plan, accumulation and sharing of data and priority of use are some of the examples articulated in the watercourse convention.

Strict adherence to these principles in an international atmosphere is desirable but challenging however, in a federal set-up to harmonise inter-state practices in regulation of water resource it is most likely achievable and effective.[51] The states can be legally bound by a legislative intervention and appropriate institutions can be created for the precise implementation of the requirements proposed by the legislation such as, to enhance cooperation, data gathering and sharing, and exchange of information and joint implementation of the plan for the holistic and sustainable management of the water resource.

The parliament is authorised to create such a statute for whole or part of the territory using Article 245 of the Constitution of India.[52] By using this provision it is accepted to draft a comprehensive statute regulating inter-state behaviour for the protection, conservation and holistic management of freshwater in India. It is accepted to define what constitutes as water and reason the imposition of limitations on the states autonomy in exerting its control over the resource or deciding the means to regulate the resource within their territory. The issue of segregating the components of water into surface water and groundwater and treating them with different principles of law and with different legislative regimes without recognising their linkage and natural life-cycle has long been a problem. Therefore, it is proposed that the legislature must define water or freshwater as a resource and what it constitutes - surface water, groundwater and

[50] O McIntyre, Utilization of Shared International Freshwater Resources – the Meaning and Role of "Equity" in International Water Law' 38 (2) 2013 Journal of Water International 112.
[51] P Wouters, 'National and International Water Law Achieving Equitable and Sustainable Use of Water Resources' (2000) 25 (4) Journal of Water International 499.

[52] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018) Article 245.

aquifers all together as one resource based on the hydrological cycle.[53] A legislative clarity as to the definition of water will resolve most of the problems discussed in this thesis.

The object for the creation of statute is to guide and regulate the state behaviour for the regulation of water resource, and not to make laws on behalf of states for water to regulate and facilitate day-to-day governance issues. Thus, it does not contradict with other constitutional provisions concerning water. Furthermore, proposed set of legal principles are legally binding on the state with respect to the adjoining states, and they also take into account the impact of states activity on other state while deciding the means and manner to regulate the water resource within their territory, thus ensuring harmony.

It is believed that the statute will be well received in Indian jurisdiction because most of the proposed features of the international law are found in judicial interpretation in various case laws or present in Indian jurisprudence, thus creating a safe atmosphere for internalisation of those concepts.[54] However, they are segregated and exist in different capacities and context, whereas, the comprehensive legal draft of mandatory nature which is bound by the explicit object of holistic and sustainable water regulation, and is intended to harmonise the inter-state water regulation practices is desirable.

In addition to the legislative developments and to ensure good implementation of the objects of the statute, their lies a possibility for the creation of an institution from within the Constitutional set-up in India. Together these prepositions could transform the water regulation in a federal set-up. The feasibility for such an institution is discussed below.

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[53] GE Eckstein, 'Hydrologic Reality: International Water Law and Transboundary Ground-Water Resources' (Based on the lecture presented at the conference: "Water: Dispute Prevention and Development" American University Center for the Global South, Washington, D.C. October 12 - 13, 1998) available at: < https://www.internationalwaterlaw.org/bibliography/articles/gl obalsouth.html>.

[54] Supreme Court of India, Civil Appellate Jurisdiction – Civil Appeal No. 2453 OF 2007, The State of Karnataka by its Chief Secretary vs State of Tamil Nadu by its Chief Secretary & Ors.; Civil Appeal No. 2454 of 2007 State of Kerala through the Chief Secretary vs State of Tamil Nadu through the Chief Secretary to Government and others; Civil Appeal No. 2456 OF 2007 State of Tamil Nadu through the Secretary Public Works Department vs State of Karnataka by its Chief Secretary, Government of Karnataka & Ors. (Judgement on 16 Feb 2018).

3.2. Institutional Development

The legislative development discussed above for the harmonisation of inter-state practices concerning water regulation possess with itself great possibilities. Although, international legal developments are consulted but the legislative development domestically will be much more advanced, comprehensive and practically implementable. The provisions or the recommendations proposed by the international law and practices could be elaborated and used to their full potential by making the requirements mandatory for the states, and by complementing the cause by building an institution to ensure the implementation of such a statute. Replicating the international developments in the field for domestic advancement could possibly have fascinating implications some of them are discussed below;

Given the object for the creation of the statute which is determined to harmonise the states practice for the regulation of the water resource, an institute which can facilitate the inter-state relations for the said cause is a great step forward. Additionally, the possibility for the creation of such an institute exist in the domestic set-up and its implications for holistic and sustainable regulation of the water resource is discussed.

Article 263:[55] *Provisions with respect to an inter-State Council —If at any time it appears to the President that the public interests would be served by the establishment of a Council charged with the duty of—*

(a) inquiring into and advising upon disputes which may have arisen between States;

(b) investigating and discussing subjects in which some or all of the States, or the Union and one or more of the States, have a common interest;

(c) making recommendations upon any such subject and, in particular, recommendations for the better co-ordination of policy and action with respect to that subject, it shall be lawful for the President by order to establish such a Council, and to define the nature of the duties to be performed by it and its organisation and procedure.

[55] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018) Article 263.

Creation of an inter-state council using this provision is possible and satisfies legal criteria as well. As per Article 263 (b) - holistic regulation of water is a subject matter of common interest for the states and their overall development depends on it in so many ways, thus satisfies the legal requirement.[56] Moreover, Article 263 (c) authorises the President of India to create an institution to better coordinate the policy among the state.[57] Therefore, the possibility is real, and it could be revolutionary mainly in two aspects of achieving holistic regulation of the resource. Firstly, by making this institution an official platform for interdisciplinary policy making for the holistic regulation of the resource, and by dedicating a part of it for the accumulation of data and exchange of information among different stakeholders at different levels of governance (the kind and nature of data is explained in the previous chapter). Secondly, by bringing the resources of the state together to raise awareness about the cause and by creating wide knowledge exchange platform accumulating traditional wisdom concerning sustainable regulation of the resource. The proposal indicates that the creation of such an institute possess the potential to harmonise the state practice and also to conserve, protect and holistically regulate the resource.

This initiative could use the opportunity and draft detailed provisions as to how and in what specification the data is required to be collected, processed or shared. This can also be done by joint management plan or collaborative development of an institution working for the said cause. This kind of legislative and institutional development will immensely benefit the cause of harmonisation of inter-state practices. Additionally, creation of such an institution will not affect or contradict the theory of separation of power dictated by the Constitution of India.

At present in India no mechanism exist which promotes holistic regulation of the resource, therefore, this institution could use this opportunity to conserve the resource using ecological approach by cooperative mechanism devised through the inter-state council. It can also serve as the platform for the internalisation of the integrated water

[56] ibid Article 263 (b).
[57] ibid Article 263 (c).

resource management at every possible level of governance and policymaking. The following section concludes the findings.

4. Conclusion

To sum up, it can be deduced from the above discussion that the possibility for harmonising the state practice in regulation of water resource in a federal set-up is possible. And the legislative and institutional developments to further the cause as suggested could go a long way in harmonising the inter-state practices for water regulation, as well as to enhance the holistic regulation of the resource by protecting and conserving the resource using ecological approach. In addition, the development of international law in this regard acts as a foundation but the legislation so created in the domestic set-up will revolutionise the water regulation in India. The clear definition of the resource and the lawful limitation imposed on the states autonomy will guide the state practice and create a long-lasting change in attitude of the states, and the manner they interact with the resource. Materialisation of these suggestions together could result in harmonising state practices and reduce the possibility of dispute between the states sharing the resource or the transboundary impact of the state activity on the resource.

Chapter 3: Enhancing Water Governance through Legal Apparatus in India

1. Introduction

Regulation of freshwater is a multidisciplinary concern by its nature, thus it inevitably involves the terminology from different branches. It is understood in terms of law and policy for the regulation or management of the resource in this thesis, and so the terminology from different branches is understood and implied in this context.[1] The central aim of this thesis is to address major impediments in terms of existing law and policy involved in the regulation of the resource in India. This chapter analyses the different concepts of right and theories applicable to the water resource and exerted by authorities working in the capacity of state or otherwise in India. It further analyses the implications of these existing regimes on the resource by examining their significance and utility in the contemporary scenario. Fundamentally, it examines the role of law and highlights the flaws observed in water regulation.

This chapter describes the legal scenario and the limitations experienced by the water sector in India. In the first section, it introduces the object of the chapter and provides the layout to be followed to fulfil that objective. In the second section, the author briefly introduces the constitutional arrangement for the regulation of water, nature of control exerted by the state or the individual on the resource in the present scenario and also provides the historical context of those rights.[2] These rights are discussed briefly. However, the manner in which these rights conflict and contradict those in others jurisdiction while dealing with the overall regulation of the resource is the focus of the investigation. The second part of this section deals with the public trust doctrine and invests itself in investigating its importance, legal status, and relevance in the regulation of the resource. Case studies are used to understand these developments in this context.

[1] LB Andonova, MM Betsill and H Bulkeley, 'Transnational Climate Governance' (2009) 9 (2) Global Environmental Politics 52.

[2] C Sampford, 'Water Rights and Water Governance: A Cautionary Tale and the Case for Interdisciplinary Governance' in MR Llamas, L Martinez-Cortina and A Mukherji (eds.) Water Ethics (Taylor and Francis Group 2009) 45.

The third section will provide for the analysis of the legislative developments in the matter. This distinction is made in order to assess the authority and the limitations faced by the units of government involved in water governance. Further, the author provides the analysis of the legislative development of the water resource and emphasises the role of the policy in the regulation of water in section four. The policy-making and the local administrative or executive efforts to govern the resource are of great importance in the water sector in India.[3] This section highlights the impact of policy-making and local administrative and executive decisions for the holistic regulation of the resource.[4] As it plays an important role for the realisation of the *right to water*; additionally, it acts as a buffer to bridge the lacunas created by or not sufficiently addressed by, the legislature. In this manner the policy sector attempts to harmonise the practices among the federal units towards the common objective. The lack of harmonisation in laws and policies working within the federal-state is found to be one of the biggest hindrances in water regulation, which is articulated in this chapter referring mainly to the legislative and the constitutional units of the federal-state.

Section five is dedicated to the task of harmonisation of the laws and the legal practices throughout the federal-state by the Indian Parliament (commonly known as a union or central government). In addition to the analysis of the possibilities arising from the existing arguments in this context, an alternative means is also suggested to get the desired task done. Following this, section six concludes the chapter and proposes appropriate institutional and legislative reforms.

2. Water Regulation in India

The ability to manage and regulate the freshwater resource is what constitutes as control for the purpose of regulation. Various government departments, stakeholders and state machinery at different level is involved in regulation of water in different capacities. In accordance with the constitutional theory of separation of power, the authority to regulate and legislate for the water resource is divided among the union and the states at

[3] RM Saletha and A Dinar, 'Institutional Changes in Global Water Sector: Trends, Patterns, and Implications', (July 2000) 2 (3) Water Policy 175.
[4] DK Marothia, 'Enhancing Sustainable Management of Water Resource in Agriculture Sector: The Role of Institutions', (Jul-Sep 2003) 58 (3) Indian Journal of Agricultural Economics 406.

the central and the state/federal level, respectively.[5] In a legal context, it concerns with the legally recognised right of an individual, or a legal person, or the state within a given jurisdiction over the resource to use or regulate the resource. Commonly categorised as a legal right; constitutional right; judicially recognised right; rights of the state over the natural resource, or the historical or customary rights of the state. The classification of the legal right to the water resource in India is complex and overarching. Therefore, it seems apt to briefly outline the variety of rights existing over the water resource and their legal and contextual significance.

2.1. Decentralisation and the Indian Constitution

The Indian Constitution represents a three-tier system of decentralisation. The first tier categorises the Central or the Union government having the jurisdiction all through the Indian Territory; the second tier functions at the level of the federal/provincial states; and the third tier functions at the grass-roots level.[6] The Seventh Schedule of the Constitution of India has distributed legislative powers between the centre and states for the management and regulation of various functions and water constitutes as one among many.[7] It broadly represents the two-tier decentralisation mechanism. Water being primarily the subject of the state.[8] However, the third tier of decentralisation is of particular interest for localised regulation of water. The 73rd and 74th Amendment Act of the Indian Constitution had introduced the third tier of decentralisation at the level of villages and districts.[9] As a result, Part IX and IX-A were introduced in the constitution which defines the panchayats and the municipalities. Additionally, a list of subject matters was introduced by the Eleventh and Twelfth Schedule which defined the jurisdiction of these newly formed units of governance – the panchayats and the municipalities, respectively. To empower and facilitate the third tier of decentralisation and to clarify their jurisdiction in terms of territory and the subject

[5] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Schedule Seven.
[6] Ibid.
[7] ibid.
[8] Ibid. Schedule Seven, List II, Entry-17.
[9] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), 73rd and 74th Amendment Act.

matter concerned.[10] Article 243G and 243W clarifies the scope of concerning schedules',[11] the panchayat and the municipality have the jurisdiction and the authority to make the plans and implement them concerning the subject matter of the schedule. The power to legislate or regulate has not been assigned to the third tier of constitution, but merely the administrative powers to govern the resource at the local level is granted, that too is subject to the powers delegated by the state.[12] Therefore, the third tier broadly functions under the supervision of the provincial states being the smallest unit of governance in the provincial state. Although the decentralisation is constitutional, the third tier is not fully functional within the states, partially, because the state and the bureaucrats do not want to lose their control, and partially because the system is comparatively new, and the executive lacks the political will and institutional capacity.[13]

India is a country with vast territory and varying geographical conditions throughout its territory. It makes the regulation of water at the smallest unit, or at the very source of the origin or physical availability of the resource, sensible from the environmental, administrative and economical viewpoint altogether. Additionally, whilst the monsoon season in India differs widely from state to state or, at times within the state, most of the rainfall occurs within the period of June-September and the rest of the year is mostly dry.[14] Therefore, integrated water resource management is a preferable means to conserve water, which is also internationally acclaimed and backed up with scientific evidence.[15] Given these considerations, the management of the resource at the smallest level of decentralisation gains confidence. Schedule Eleven comprises 26 entries for which the village panchayat is empowered to make plans, take decisions and implement them.[16]

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[10] ibid, Eleventh and the Twelfth Schedule.

[11] Ibid, Article 243G and W; See also: DD Basu, 'Commentary on the Constitution of India: A Comparative Treatise on the Universal Principles of Justice and Constitutional Government with Special Reference to the Original Instrument in India' (LexixNexis Butterworth Wadhawan Nagpur, 2012) 8582, 8604.

[12] MS Vani, 'Groundwater Law in India: A New Approach' in RR Iyer (ed), *Water and the Laws in India* (2nd edn, Sage Publications 2012) 464.

[13] Human Resource Development Centre, 'Discussions Series I: Decentralisation in India, Challenges & Opportunities' (UNDP) <http://www.in.undp.org/content/dam/india/docs/decentralisation_india_challenges_opportunities.pdf> accessed 20 Nov 2018.

[14] M Lal, 'Climatic Change — Implications for India's Water Resources' (2001) Journal of Social and Economic Development.

[15] Ak Biswas, 'Integrated Water Resources Management: Is It Working?' (2008) 24 (1) Water Resources Development 5.

[16] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018).

The panchayats are the politically elected unit of self-governance. They are an important constituent of the democratic set-up working at the grass-roots level.[17]

The entries enumerated in the Eleventh Schedule are directly and indirectly related to the management of the freshwater resource such as minor-irrigation, water management, watershed development, forestry, power, small-scale industry, social welfare etc.[18] For the sake of the jurisdiction of the PRI's the constitution defines a village as the individual village or the group of villages or hamlets together as a village.[19] This understanding is beneficial for the integrated management of the resource, as it will not restrict the development plans assigned to a village panchayat based only on its physical territory, but it could extend its scope to cover adjoining territories outside the village where people are living in similar conditions and facing similar environmental and climatic challenges. It ensures sustainability. Therefore, it is much more competent to address the issue in an integrated fashion and to promote conservation and sustainable management of the resource, by bringing all the concerns under the mandate of the regulation of the water resource.[20]

The PRI's are constituted in a way they could be financially self-sufficient or can get financial assistance from the respective government of the provincial state. The primary source for the financial self-sufficiency depends on the collection of revenue by the levy of tax, a collection of toll and fees by the due process of law.[21] Due to the government's ability to generate revenue the state need not levy identical costs for the users of different classes with economic disparity among them. The PRI's being the constitutional body, it can exercise its authority of increasing block tariff as a means of progressive tariff taxation, which allows charging different users differently. Thus, it could easily accommodate changing needs of the society by prioritising different aspects of

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[17] Arthepedia, Indian Economic Services, 'Structure and Major Functions of Panchayati Raj Institutions (PRIs) in India', <http://www.arthapedia.in/index.php?title=Structurea ndMajorFunctions ofPanchayatiRajInstitutions(PRIs)inIndia> accessed 20 Nov 2018.

[18] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Schedule Eleven; See also: Supreme Court of India, *Bondu Ramaswamy v. Bangalore Development Authority* (2010) 7 SCC 129.

[19] ibid.

[20] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Article 243G.

[21] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Article 243H (a).

demand.[22] Additionally, they could urge the state government to improvise, utilise and redirect the Water Cess Tax based on the local need and design the policy accordingly.[23] This is how constitution distributes the authority to regulate the resource among its units, the following section will discuss the nature of control exerted by the state over the resource and the rationale supporting such move.

2.1.1. State Control

The federal and the provincial states of India both tend to exercise control over the water resource available within their territorial jurisdiction.[24] The states enjoy the ownership right over the surface water in the form of rivers, lakes, streams etc., and broadly over the groundwater resource as well, unless law restricts. However, the control of the state over the resource is more in the form of sovereign control, rather than that of property right or ownership over the resource.[25] This sovereign power of the federal or provincial states over the resource is sometimes referred to using the theory of *eminent domain* or *permanent sovereignty over the natural resource*.[26] However, the position exerted on the water resource by the state have developed two contradictory tendencies.[27] One of which supports the authority of the sovereign to control the resource and the other supports the view that the water as a resource cannot be owned due to the vital nature of the resource.[28] In between these contradictory preposition, the customary practice of assigning usufructuary nature of right over the resource flourished and later gain significance from the development of the public trust doctrine.

The legislative development of the late nineteenth century primarily seeks to establish control over the resource by extension of their sovereign rights within their jurisdiction. At the same time, they also regulated the resource in a manner which authorises them to grant usufructuary rights to the individuals or other users by virtue of

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[22] P Roger, R de Silva and R Bhatia, 'Water is an Economic Good: How to use Prices to Promote Equity, Efficiency, and Sustainability' (2002) 4 Water Policy 7.
[23] Government of India, *The Water (Prevention and Control of Pollution) Cess Act, 1977 (No 32 of 1977)* (Ministry of Law, Justice and Company Affairs).
[24] FJ Trelease, 'Government Ownership and Trusteeship of Water' (1957) 45(5) Cal L Rev 638.
[25] R Kratovil and FJ Harrison, 'Eminent Domain, Policy and Concept' (1954) 42 (4) CLR 596.
[26] UN, 'Permanent Sovereignty Over Natural Resources' (GA Res. 1803 (XVII) of 14 December 1962).
[27] P Cullet, 'Water Use and Rights' in S Geall, J Liu and S Oellissery (eds), *The Berkshire Encyclopaedia of Sustainability Vol 7: China, India, and East and Southeast Asia: Assessing Sustainability* (Great Barrington, MA: Berkshire Publishing, 2012) 393.
[28] Ibid.

their sovereign right over the resource. This led to the assertion that the state must also possess the right to control, use and manage the resource for public purposes to all surface water including river water, flowing streams, channels and lakes.[29] Similar assertions of control by the state over the resource is evident by several water related statutes in India such as the Madhya Pradesh Irrigation Act of 1931,[30] Bihar Irrigation Act of 1997[31] etc.

Recent enactment of the legislation by the state of Jammu and Kashmir states that the water resource available within the territory of the state is considered as the state's property.[32] This, the author believes, was intended to establish the primary and absolute authority of the state over the natural resource within the territorial jurisdiction of the provincial state. This control of the state over the natural resource is evident by the power vested in the state, the power which authorises them, to allocate, manage or govern the resource. As a result, the state can allocate the surface water to the individuals, companies or institutions for a certain duration of time for a specific purpose under the terms of the licence arising from such power.[33] Thus, guarantees usufructuary right to the individuals over the surface water, which is subject to condition and otherwise revocable at the discretion of the authorities of the state.[34]

At the time, it was the most obvious kind of right the state can exercise over the natural resources within their territorial jurisdiction and was further supported by judicial

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[29] Canal and Drainage Act, 1873 (Act VIII of 1873).

[30] Madhya Pradesh Irrigation Act. 1931 (No.3 of 1931), Section 26: 26. Rights of the Government in water. - All rights in the water of any river, natural stream or natural drainage channel, natural lake or other natural collection of water shall vest in the Government, except to the extent to which rights may have been acquired in water affected by a notification Published under section 27 prior to the publication of such notification.

[31] Bihar Irrigation Act, 1997, Section 3: Rights of the State Government in Water 1. All rights in the water of any river, natural stream or natural drainage channel, natural lake or other natural collection of water shall vest in the State Government subject to the provisions of Article 262 and Entry 56 of list of Seventh Schedule of Constitution of India.1 2. When the State Government proposes to construct a canal it shall publish a notification declaring its intention and indicating the site of head work. 3. No rights shall be acquired against the government under the provisions of the Indian Easements Act, 1882 in the water of any river, natural stream or natural drainage channel, lake or other natural collection of water, which supply water to a canal existing or under construction at the commencement of this Act or any of whose water will supply the canal when constructed.

[32] Government of India, *Jammu and Kashmir Water Resources (Regulation and Management) Act, 2010* Section 3.

[33] Government of India, *The Orrisa Irrigation Act, 1959* Section 21-24.

[34] RR Iyer, 'Governance of Water: The Legal Question' (2010) 17 (1) South Asian Survey 147, 49.

decision.[35] A judicial pronouncement in 1936 declared that the state had the sovereign right to regulate the supply of water in pubic streams,[36] in a fairly recent pronouncement in 2004 the Supreme Court of India declared - the state is the sovereign dominant owner of water.[37] The development of this right and its subsequent confirmation by the legislature, as well as the judiciary, clarifies the dominance of state control over water resource and mainly surface water in India. This had been the dominant and widespread practice which is undergoing transformation by the development of the public trust doctrine.

2.1.2 Historical and Legal Relevance of the Public Trust Doctrine

The public trust doctrine substantiates that the natural resources must be held in trust by the state for the use of the public, as a duty towards its subjects. This doctrine with regard to the water resource is expressed as 'the duty of the state to hold natural water in trust for the public at large' this was mainly referred to surface water.[38] The state as trustee is duty-bound to utilise and distribute the resource in a manner that it does not violate the natural right of an individual or group and also to safeguard the interest of nature and people, both equitably.[39] Historically, this understanding was acceptable in different cultures at different time periods across the world, and they uniformly recognised a public right to the water resource which was commonly available to all.[40] It was also considered as a common right for mankind and nature both, as a principle of natural law.[41] The doctrine has also marked its relevance from its mention in Dharamashastra, as well as by repeated, recognised and confirmed presence in the ancient text of Chinese Water Law of 249-207 BC, in Islamic Water Law, in the Law of

[35] Supreme Court of India, *Tekaba AO v Sakumeren AO* 2004 5 SCC 672; See Also: P Cullet, 'Water Laws in India' in C Antons (eds), *Routledge Handbook of Asian Law* (Routledge 2017) 323, 29.
[36] High Court of Madras, *Secretary of State v. PS Nageswara Iyer, AIR 1936* Madras 923.
[37] Supreme Court of India, Tekaba AO vs Sakumeren AO and Others 29 April, 2004 (Case No: Appeal (civil) 2196 of 1999).
[38] P Cullet, 'Water Law in a Globalised World: the Need for a New Conceptual Framework' (2011) 23 (2) Journal of Environmental Law 233.
[39] MK Scanlan, 'The Evolution of Public Trust Doctrine and the Degradation of Trust Resources: Courts, Trustees and Political Power in Wisconsin' (2000) 27 Ecology Law Quarterly 135.
[40] JL Sax, 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention' (1970) 68 Michigan Law Review 471.
[41] P Kameri-Mbote, 'The Use of Public Trust Doctrine in Environmental Law' (2007) 3 (2) Law, Environment and Development Journal 197.

Mexico, Spain, Russia, etc.[42] Therefore, it was a recognised and practicable means for the management of the natural resources in Asian and many other communities.

From the colonial time to the recent past, the doctrine has never been recognised as the part of legal jurisprudence in the Country. That was until the Supreme Court passed judgement in the case of *MC Mehta v. Kamal Nath* in 1996, where it recognised the public trust doctrine as the part of the Indian legal system based on the argument that the 'Indian legal system is based on English common law which includes the doctrine as part of its jurisprudence'.[43] Moreover, the Supreme Court clarified that the state must protect running freshwater and all other natural resources in trust for the public.[44] This marks the beginning of the recognition of the doctrine in the Indian jurisdiction.

The working understanding of the public trust doctrine in India is similar in its ingredients and importance to the explanation of the doctrine proposed by Professor Sax in 1970.[45] Also, it is harmonious with the US case law in the implication of the doctrine for the regulation and governance of the natural resources such as water. Both these sources mentioned above are referred and quoted as the source of explanation in favour of the doctrine in the operative part of the judgement by the court.[46] Four principles are considered imperative to this understanding of the public trust doctrine.[47] All these principles are visibly incorporated in the Indian jurisdiction, and they can be seen by their explicit mention or due to judicial interpretation in different case laws applied in similar context.

Principle 1 states that the public trust doctrine guards against privatising important public resources or commons. Principle 2 states that the doctrine prohibits full privatisation of certain water resources. These two principals were not only confirmed by the Indian judiciary in *MC Mehta v Kamal Nath (1997),* but the judicial pronouncement of

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[42] JL Sax, 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention' (1970) 68 Michigan Law Review 471.
[43] Supreme Court of India*, MC Mehta v Kamal Nath and Others, 1996* 1 SCC 388. Para 34.
[44] ibid.
[45] JL Sax, 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention' (1970) 68 Michigan Law Review 471.
[46] Supreme Court of India, *MC Mehta v Kamal Nath and Others, 1996* 1 SCC 388.
[47] MK Scanlan, 'A Comparative Analysis of the Public Trust Doctrine for Managing Water in the United States and India' in A Rieu-Clarke, A Allan and S Hendry (eds.)*, Routledge Handbook of Water Law and Policy* (Routledge 2017).

the doctrine in India explicitly prevents the private ownership of all waters and natural resources.[48] Furthermore, this doctrine puts an implicit embargo on the right of the state to transfer public resource to a private individual or entity if it adversely affects the public interest.[49]

Principle 3 states that the doctrine places a continuing duty on the trustee to supervise and protect the trust. The court honours this principle regarding the groundwater resource in two cases: the *Coca-Cola* case[50] and the *Mining case*.[51] In the Coca-Cola case, it has said that 'the right to extract water for every person must be within reasonable limits and company or commercial units for that purpose must not be treated any different'.[52] Additionally, it was stated that it is beyond the power of the state acting as trustee to allow that sort of extraction of public wealth to a private individual. In the mining case, the court said that relying on the public trust doctrine that, 'a landowner has the right to use groundwater only to the extent that it does not affect the rights of others and only for the purpose the land is held in possession'.[53] These cases imposes the continuing duty on the state while acting as a trustee for the resource with an overriding authority.

Lastly, Principle 4 states that the doctrine encourages long-term stewardship aligned with sustainable development and protective of intergenerational equity. This principle affected several cases, where the court clarified the application of the doctrine in a way to ensure the long-term use of the resource by protecting and respecting the long-term rights of people or the *inter-generational rights.*[54] This understanding of the public trust doctrine has become the living law of the land in India because of the judicial pronouncement and by subsequent confirmation of the doctrine in the judgements that

[48] Supreme Court of India, MC Mehta v Kamal Nath and Others, 1996 1 SCC 388, para 21.
[49] Supreme Court of India, *Fomento Resorts & Hotels & Anr v Minguel Martins & Ors* (20 January 2009) Civil Appeal Nos. 4155 and 4156 of 2000.
[50] High Court of Kerala, India, *Perumatty Grama Panchayat v State of Kerala* 2004 (1) KLT 731.
[51] Supreme Court of India, *State of West Bengal v Kesoram Industries Ltd. and Others* (15 January 2004) Appeal (civil) 1532 of 1993.
[52] The Coca Cola Case: High Court of Kerala, India, *Perumatty Grama Panchayat v State of Kerala* 2004 (1) KLT 731.
[53] ibid, Para 104.
[54] Supreme Court of India, *Fomento Resorts & Hotels & Anr v Minguel Martins & Ors* (20 January 2009) Civil Appeal Nos. 4155 and 4156 of 2000, Para 29.

followed. The judicial pronouncements in the Indian jurisdiction act as the precedents and therefore are the source of law.[55]

The judicial pronouncement had confirmed the legal status of the public trust doctrine, determined its content and broadly interpreted its scope in *MC Mehta v Kamal Nath, 1997* and *State of West Bengal v Kesoram Industries, 2004*. Supreme Court of India declared that all surface water, all the natural resource[56] and the groundwater[57] must be regulated in trust by the state for the public at large. In also implies that the state while acting as the trustee have the fiduciary duty of care and responsibility to the public. The court in *Fomento Resorts and Hotels Ltd v Minguel Martis*, confirmed the importance of the doctrine and further said, that the trustee cannot convert such resources into private ownership, or for commercial use because the duty of a trustee particularly applies to the future generations.[58] Thus, given the constitutional distribution of power for the regulation of the resource, the nature of control exercised by the state is undergoing or must undergo change given the development of the public trust doctrine. However, the individuals, community, groups and other legal and social entities possess usufructuary right over the resource irrespective of the nature of control exercised by the state, that is while exerting sovereign control or acting as a trustee.

The usufructuary right to the water resource was the prevalent and customary right over the resource in the Indian sub-continent in the pre-colonial era. And it was based on the assumption that the natural resources are the resource commonly available for public to be shared by the community, and the present generation is like the tenant with the right to use the resources in their lifetime. Most of the rights possessed by the individuals in this context in India are usufructuary, the state assign usufructuary right to surface water as well as groundwater. Although the individual control or the entitlements created are slightly different due to their close proximation with the land rights.

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[55] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 141.
[56] Supreme Court of India, *MC Mehta v Kamal Nath and Others*, 1996 1 SCC 388, para 21.
[57] Supreme Court of India, *State of West Bengal v Kesoram Industries Ltd. and Others* (15 January 2004) Appeal (civil) 1532 of 1993.
[58] Supreme Court of India, *Fomento Resorts and Hotels Ltd v Minguel Martis (2009*) 3 SCC 571, para 36, 40.

2.1.3. Individual Control

In different cases, the legal entitlements to an individual is granted differently. In some cases, the landowner gets the legal right to withdraw a portion of water flowing past his/her land. In other cases, the individual is granted a right to withdraw certain quantity of water for a specific purpose. These kind of usufructuary rights are commonly granted to the individuals over the surface water resource, although they are subject to reasonable restriction. Usually, this kind of entitlements is granted in the form of water licence or permit by the concerning authority such as for the purpose of irrigation or activities related with sustenance such as fishing, boating etc.[59] Usufructuary right to water is granted to the individual over the surface water and the groundwater resource, both. The right to public well, or the right to water using hand-pump are the example of usufructuary right granted over the groundwater resource.[60] The association of water right is closely related with the group of land rights and laws on easement, although, water is not an easement right.[61] And in case of groundwater another dimension of property right originates which is subject of discussion in chapter four.

Based on the observations arising from the discussions above, it can be said that the Indian legal system presents the simultaneous existence of the conflicting ideologies which represents indecision on the part of the government.[62] Differences of opinion are evident between the legislature and the judiciary on the subject matter. Moreover, the overarching influence of the existing ownership regimes over a different component of the freshwater resource is obsolete and detrimental for the future of the water sector. However, in this situation the public trust doctrine could provide a face-saving way and could empower the means for the governance of the resource. The section below will analyse the legislative competence and the limitations faced by the corresponding units of federal government for the regulation of the water resource in the presence of existing

[59] Government of Gujarat, The Gujarat Irrigation and Drainage Act, 2013 (Act No. 6 of 2013) The Gujarat Government Gazette.

[60] AK Mudgal, 'India Handpump Revolution: Challenge and Change Swiss Centre for Development Cooperation in Technology and Management Printed in India', (HTN Working Paper: WP 01/97, September 1997).

[61] P Cullet,

[62] S Vij and V Narain, 'Land, Water and Power: The Demise of Common Property Resources in Peri-Urban Gurgaon, India' (2016) 50 Land Use Policy 59.

legislative uncertainty regarding the status and the means for regulation of water resource.

3. Water and the Laws of India

The water laws in India are fragmented and designed in a piecemeal fashion.[63] They are created with an objective to harness the resource in large scale. Water appears as a subsidiary issue rather than the primary objective in these instruments. The combination of this attitude towards the resource and the power of the federal government to legislate for the subject matter led to the creation of multiple statutes applicable in the same jurisdiction but with different objectives such as the Irrigation Act, Water Pollution Act, Indian Fisheries Act, etc. The variations and contradictions among the overarching legal provisions and the principles became evident within the provincial states, as well as extending to the national level. Ironically, the statutes so made recognised the importance of the resource based on its utility to humankind in various forms, but at the same time, failed to recognise its importance due to its inherent and intrinsic value. Which is why the statutes disregarded concerns such as conservation, protection and holistic management/regulation of the resource.[64] However, for a better understanding of the issue, it is important to understand the legislative reforms at the level of centre and gradual legislative development for the regulation of the groundwater at the level of the centre, as well as the provincial states.

3.1. Legislative Reforms

The water laws which have nation-wide application in India are the Water Act and the Water Cess Act. The first central piece of legislation ever made for water was the Water (Prevention and Control of Pollution) Act in 1974.[65] Since water is the subject matter of the state, therefore it becomes difficult for the centre/union to create the national law without the prior consent or request coming from the states. One such procedure is prescribed in Article 252 of the Indian Constitution, which created the act

[63] P Cullet and J Gupta, 'India: Evolution of Water Law and Policy', in JW Dellapenna and J Gupta (eds), *The Evolution of the Law and Politics of Water* (Springer, Dordrecht 2009) 157; See also, Suresh P. Prabhu, 'India's Water Challenges', (Issue Brief: South Asia Centre, Atlantic Council, October 2012).
[64] SV Kumar, 'Perspectives on a Water Resource Policy for India' (2014) The Energy and Resources Institute: Discussion Paper 1.
[65] Government of India, *Water (Prevention and Control of Pollution) Act, 1974* (No 6 of 1974).

under consideration.[66] It was created to tackle the growing pollution of the resource due to economic development, poor management and industrialisation. The statutes governing air, water and the environment emerged during the same period. Collectively they were characterised as the group of environmental legislation made to deal with the ill-effects of the environmental problems of this century. The prominent similarity in the legislation belonging to this group in India is that they are of preambular nature rather than being comprehensive and precise.

The Water Act prescribes the formation of the Centre and the State Pollution Control Boards to execute the enlisted task. The act addresses water as water: without segregating it into surface and groundwater, therefore it encompasses the ability to regulate pollution of freshwater in all its forms. Moreover, the function of the board directs it to undertake the task of bridging the differences among the states by coordinating activities between the state boards and by resolving the disputes.[67] It empowers and encourages the board to conduct research and development;[68] to train the staff, and to create awareness in every possible way about the need to control and prevent water pollution.[69] Thus, promoting harmonious practices among the adjoining states. Additionally, it creates provisions for updating the permissible limit for waste discharge in the water; to plan, conduct and regulate the activities to reduce the pollution in every manner possible; and to work closely with the state governments to execute the task by monitoring their activities and by providing assistance and advice as required.[70] However, the potential of the act seems to be underutilised in practicality,[71] more so they missed the opportunity to clarify the nature of rights applicable to the resource.

The other national water legislation is the Water Cess Act. This legislation is to levy and collect the tax from the individuals, industries and local authorities based on the units

[66] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 252 (1).
[67] Government of India, *Water (Prevention and Control of Pollution) Act, 1974* (No 6 of 1974) Section 16 (2) B.
[68] ibid Section 16 (2) C and D.
[69] ibid Section 16 (2) D and E.
[70] ibid Section 17 (1).
[71] P Cullet, L Bhullar and S Koonan, 'Regulating the Interactions between Climate Change and Groundwater: Lessons from India', (2017) 42 (6) Water International 646, 655.

of water consumed.[72] This was also an attempt to financially strengthen the boards created under the Water Pollution Act. Apart from these, there is no water legislation in India which applies to the entire country or which can holistically manage the resource. This is mainly due to the lack of ability of the central government to legislate in the subject-matter beyond its jurisdiction. Faced with the reality that the water as a subject-matter primarily belongs to the provincial states, and they usually treat the components of freshwater, the surface water and the groundwater resource differently with different statutes and principles of law, rather than holistically.[73]

Despite this short coming, the regulation of surface water has been elaborate and extensive since the time of colonial rule and was later continued by the post-independence era of development in India. This is sufficiently evidenced by the number of statutes made to regulate or exert control over the surface water by the state within their provincial territories such as irrigation acts, water regulation policies and laws for hydropower plants, mining, and other water-intensive activities. Due to sheer volume of statutes and limited mandate of this thesis and for the reason that these statutes do not involve themselves with the issue of right *per se*, rather, they are concerned with the regulation of the resource given the objective of the statute in consideration. Also, the component of groundwater remained absent from the legislative domain until recently.[74] One of the reasons for this is the absence of a clear understanding about the physical nature of the resource, its hydrological cycle, and the importance of regulation of the resource.[75]

3.2. Legal Treatment of Groundwater Resource in India

The applicability of legal principles when it comes to groundwater is tricky, and the legal practice in India is widely influenced by English case laws. Basic principles governing groundwater legislation was influenced mainly by the understanding developed in the English case law. Early in nineteenth century the court in *Chasemore v Richards* declared that the rules applicable to the regulation of groundwater should be treated differently

[72] Government of India, *The Water (Prevention and Control of Pollution) Cess Act, 1977* (No. 36 of 1977).
[73] International Environmental Law Research Centre, 'Online Reference Guide: India-State Level Water Law Instruments' < http://www.ielrc.org/water/doc_states.php> accessed 20 Nov 2018.
[74] RR Iyer, 'Water Resource Planning: Changing Perspectives' (1998) 33 (50) Economic and Political Weekly 3198, 205.
[75] G Eckstein, *The International Law of Transboundary Groundwater Resources* (Routledge 2017) 9.

from surface water. Court determined that water 'percolating through underground strata, which has no certain course, no defined limits, but which oozes through the soil in every direction in which rain penetrates' is not subject to be treated with the same rules as applicable on the water flowing in rivers and streams.[76]

In *Acton v Blundell*, the court ruled that the rules applicable to groundwater are different thus similar rules which imposes restriction on the landowner to use the water flowing past their land does not apply. Court determines that in the case of groundwater - 'the person who owns the surface (land) may dig therein, and apply all that is found to his own purposes at his free will and pleasure; and that if, in the exercise of such right, he intercepts or drains off the water collected from underground springs in his neighbour's well, this inconvenience to his neighbour falls within the description of *damnum absque injuria*, which cannot become the ground of an action.[77] Thus, eliminating the restriction on the use of the resource.

Later, with the advancement in the capacity to extract groundwater the limitations were imposed on the extraction of groundwater by the court of law. Early in nineteenth century the landowner's right to extract groundwater was restricted where 'groundwater cannot be accessed without touching surface water in a defined surface channel', if the result of extraction had an impact of the surface water in a defined channel then the landowner right to extract were restricted.[78]

Similarly, in *Babaji Ramling Gurav v Appa Vithavja Sutar* [79] court discovered that there lies a connection between the top of the drain and the outlet, and there was thus no need for the channel to be known through excavation to apply the rules concerning defined channels.[80] Thus, there is no doubt that the laws applicable to the groundwater changed with time and influenced by the available information about the resource.

[76] [1859] 7 HLC 349, 374.
[77] [1843] 152 ER 1223, 1235.
[78] Grand Junction Canal Company v Shugar [1870-71] LR Ch App 483.
[79] High Court of Bombay, *Babaji Ramling Gurav v Appa Vithavja Sutar* AIR 1924 Bom 154 (High Court of Bombay in 1923).
[80] Ibid.

However, this has not been the practice in India and the laws in Indian jurisdiction remained unchanged for a long time.[81]

The groundwater resource was mainly hidden until the last century, but then advanced drilling technologies eased the process to access the resource, and scientific developments advanced our understanding regarding them. In last few decades, due to the instant availability of the resource, it became the preferable option for domestic use, as well as for irrigation purposes. The affinity for groundwater has increased to an extent where 60-80% of all the domestic and irrigational requirements of the country are satisfied using groundwater in India.[82] This dependence quickly resulted in over-exploitation of the resource, however, thus compromising the overall quality of freshwater. Additionally, the phenomena of deterioration of the quality and quantity of groundwater also increased significantly. To respond to the exceeding pressure on the resource and to manage the resource sustainably, the Groundwater Model Bill was crafted in 1970 with an intention to promote harmonious regulation of the resource among the federal units of the state. This bill intended to reform the regulation of groundwater, and in the process, it was amended five times, in 1974, 1992, 1996, and 2005. It still proved to be a failure. It neither embraced modern understanding about the resource nor did it detach the land rights from rights over the extraction of groundwater or clarified the position of usufructuary right over the resource. The bill proposed in 2011 has some of the key ingredients which resemble the modern understanding as well as insights from the development of international law in this field.[83] The provincial states did not readily accept the bill, although it did inspire some of the states to reform their legislative and regulatory practices for the regulation of the groundwater resource.

Later, in 2012, the State of Kerala enacted the first groundwater statute.[84] This was partially inspired by the Groundwater Model Bill, and partially inspired by the growing

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[81] P Cullet, 'Groundwater Law in India – Towards a Framework Ensuring Equitable Access and Aquifer Protection', (2014) 26 (1) Journal of Environmental Law 55.

[82] P Cullet, 'The Groundwater Model Bill Rethinking Regulation for the Primary Source of Water' (2012) XLVII (45) Economic & Political Weekly 40.

[83] ibid, See also: Government of India, 'Model Bill for the Conservation, Protection and Regulation of Groundwater, 2011' in Planning Commission's, *Report of the Steering Committee on Water Resources and Sanitation for Twelfth Five Year Plan* (Government of India 2012).

[84] Government of the State of Kerala, India, *Kerala Ground Water (Control and Regulation) Amendment Act, 2005* (No. 22 of 2005).

environmental problems and the experience with the Coco-Cola plant in Plachimada, and the Pepsico plant in Palakkad district.[85] These experiences made them realise the direct impact of the groundwater extraction on the ecology, as well as on the life and livelihood of the people. Likewise, the shift of the state of Maharashtra towards groundwater regulation was driven by, or the inevitable response to, the unavoidable crisis experienced by the state. Although the state of Maharashtra enacted the 'Maharashtra Groundwater Development and Management Act' in 2013, but did not clarify the property right over the resource and the act faces poor implementation.[86] However, the acute water crisis, severe drought, and the depleting water stock compelled the government of Maharashtra to take an administrative decision to ban the digging of borewells below 200 feet, and encouraged the strict implementation of the act of 2013, to ensure conservation of the depleted resource.[87] It was an instant response to the crisis in hand, which almost immediately resulted in contemplation with the existing legal provisions; equating the legal authenticity of this move *vis a vis* existing land right which authorises the extraction of the resource. The parent Groundwater Model Bill and the judicial interpretations were supportive of the administrative decision, but it was difficult to comply with administrative solutions for a long duration without encountering a conflict faced due to legislative uncertainty about the matter in hand.

Alongside the initiative from the federal units of state, a Model Bill was proposed in 2016 for the conservation, protection and management of groundwater as the format to be applied by the states to harmonise their practices for the regulation of the resource. It is the most modern, revolutionary and comprehensive piece of legislation ever proposed.[88] The proposed bill is a draft to be finalised and submitted to the Union Cabinet

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[85] The Coca Cola Case: High Court of Kerala, India, *Perumatty Grama Panchayat v State of Kerala* 2004 (1) KLT 731

[86] Government of the State of Maharashtra, *Maharashtra Groundwater Development and Management Act, 2013* (No. XXVI of 2013).

[87] NDTV, 'Maharashtra Government Bans Digging Borewells Below 200 Feet' (Press Trust of India, 20 April 2016) <http://www.ndtv.com/india-news/maharashtra-government-bans-digging-borewells-below-200-feet-139725 5> accessed on 20 Nov 2018; See also: P Cullet, L Bhullar and S Koonan, 'Regulating the Interactions between Climate Change and Groundwater: Lessons from India', (2017) 42 (6) Water International 646, 655.

[88] Government of India, *Model Bill: For the Conservation, Protection, Regulation and Management of Groundwater, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's: Draft of 17 May 2016).

for approval and later tabled in the Parliament before circulating it to the states.[89] Likewise, the draft National Water Framework Bill is also proposed and is also on the same line with the Groundwater Model Bill.[90] The nature of the Model Bills will be advisory for the states and not mandatory. However, together they can be a blessing for the overall health of the resource, if and when, the states decide to adapt to the proposed Model Bill and to reform their existing practices regarding water management, regulation and overall regulation of the resource. It is obvious that in the present legislative scenario the holistic regulation of resource is extremely challenging, and the existing laws act as the hindrance rather than acting as the facilitator for the working of the proposed policies for the regulation of the resource. Nonetheless, the analysis of the impact and importance of policy-based initiatives follows.

4. Policy and Administrative Reforms

The issue of policy-making for the regulation of the water resource is of particular importance because at the level of both provincial states and the federal-state, the policies run parallel to the body of law. Additionally, they try to bridge the gaps and fill the lacunas discussed above.[91] This plays a prominent role in regulation of the resource, since the local administration enjoys the delegated power to make the rules and the policies for the regulation of the resource given the need of the locality, political commitment for the cause and the administrative effort given their capacity. Therefore, the practices vary to a great extent, and the policies are often intended for short-term implementation.[92] Nevertheless, the policies are of extreme importance, and some examples are discussed below to understand their impact on the regulation of water in India.[93]

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[89] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Parliamentary Procedure in Article 74 and 107.

[90] Government of India*, Draft National Water Framework Model Bill, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 16 May 2016).

[91] P Cullet, 'Governing Water to Foster Equity and Conservation: Need for new Legal Instruments' Economic and Political Weekly (accepted for publication ISSN (online) – 2349-8846).

[92] P Cullet, 'Right to Water in India - Plugging Conceptual and Practical Gaps' (2013) 17 (1) The International Journal of Human Rights 56, 61.

[93] SR Maria, 'Strategic Analysis of Water Institutions in India: Application of a New Research Paradigm' (2004) 79 Research Report (International Water Management Institute, Colombo, Sri Lanka) 1.

One of the examples chosen to demonstrate the impact of policy making and its implementation to ensure efficient water regulation is the Joitygram Scheme from the state of Gujarat.[94] This scheme focuses on the agrarian sector and the need of water and electricity for irrigation. Due to the topographical location, the state suffers from water scarcity, and the agrarian sector of the state mainly depends on the groundwater resource for their use. The electoral benefits to the political leaders in the region depend on keeping their promise to make water accessible for irrigation, as a result, the subsidised electricity is offered to the people that encourages the groundwater extraction. A need of water for irrigation and its dependence for food production makes it a matter for sustenance for agrarian class. Furthermore, the agrarian lobby is politically influential in the state and capable of sabotaging any such legislative means which might restrict their absolute right to extract the groundwater resource.[95] This has been one of the predominant hindrances in the reformation of the water legislation in the state and is considered as the politically fatal move for the concerned political parties. Despite this political scenario, it is the responsibility of the local administration to manage the situation. Therefore, they emphasised the strong link between the electricity supply and the pumping of water by the farmers and made an attempt to address the situation using policy-based initiative.[96]

The state of Gujarat designed a policy called the Jyoitigram Scheme and it was launched in 2004 on a pilot basis in 14 districts of the state by the joint initiative of the International Water Management Institute, the Gujarat Government and the Gujarat Electricity board.[97] In 2006 it gained state-wide implementation, with the aim to provide three-phase electricity to the villages for 24 hours for domestic use; and usage in hospitals, schools, small industries, etc.. It also resulted in increased tariff rate for the electricity. Moreover, farmers had access to the full voltage three-phase power supply for 8 hours a day, as per the pre-announced schedule decided by the local government. This

[94] Government of the State of Gujarat*, India, Joitygram Yogana* <https://ww .scribd.com/document /33811921/Government-of-Gujarat-Jyotigram-Yojana> accessed 20 Nov 2018.
[95] R Bala, 'Policies Intervention for Groundwater Governance in Gujarat and Politics' (2015) 4 (1) International Research Journal of Social Sciences 55.
[96] ibid.
[97] Government of the State of Gujarat*, India, Joitygram Yogana* <https://ww .scribd.com/document /33811921/Government-of-Gujarat-Jyotigram-Yojana> accessed 20 Nov 2018.

gave farmers a limited number of hours to extract the resource using tube-wells and created the impression that the resource is limited and thus needs to be used wisely. The initiative proved successful in curbing wastage of the resource and partially succeeded in creating physiological change towards the resource availability and its usage in the time of distress. Later, it encouraged the farmers to use the water and electricity both in an efficient manner.[98] The initiative inspired the state governments of various other states to adopt and to improve learning from the success and the drawbacks of this initiative. Later it was also considered to be implemented on the nation-wide scale.[99]

The state of Gujarat has invested itself heavily in improving water management and supply, and considered it as the responsibility of the state to provide water for irrigation. Consequently, the state invested in the management, construction and repair of the existing tube wells. Other means adopted by the local government of various states are inclined towards providing options for the farmers to make a voluntary switch towards efficient water usage technique by incentivising those moves. This includes drip irrigation,[100] water harvesting techniques, groundwater recharge and several other plans as an alternative or indirect governance tool are explored for wider implementation.[101] Because agriculture is one of the biggest consumers of the resource, these examples suggest the use of indirect means explored by the local administration of the state to fulfil their responsibilities. These also demonstrate the importance of the policy-making as an important step towards sustainable regulation of the resource especially in the absence of the concrete legislative tools. To further support the cause, the state of Gujarat has come up with a progressive Act to strengthen the objectives of the policy by backing them

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[98] International Water Management Institute, *Success Stories: Innovative electricity scheme sparks rural development in India's Gujarat State - Rewiring the Rural Electricity Grid led to a Surprisingly wide range of benefits 'The Jyotigram Yojana' implemented by the Government of Gujarat reduced Farm Power Subsidy, Capped Groundwater Overdraft and Improved the Quality of Rural Life* (2009-11) <http://www.iwmi.cgiar.org/Publications/SuccessStories/PDF/2011/Issue_9-innovative%20el ectricity%20scheme%20 sparks.pdf> accessed 20 Nov 2018.

[99] J Gronwall, *Power to Segregate: Improving Electricity Access and Reducing Demand in Rural India* (SIWI Paper: 23, Stockholm 2014).

[100] Government of India, *Operational Guidelines of Per Drop More Crop (Micro Irrigation) Component of PMKSY* (Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation & Farmer Welfare Division of Rain-fed Farming System (RFS) Krishi Bhavan, 2017).

[101] Government of India, *Artificial Recharge and Rainwater Harvesting Studies* (Ministry of Water Resources, River Development and Ganga Rejuvenation) <http://www.wrmin.nic.in/forms/ list.aspx?lid=306> accessed 20 Nov 2018.

with the legislative input. Some of the features of the Gujarat Irrigation and Drainage Act, 2013 are exemplary.[102]

Irrigation is one of the biggest users of water in India, this act explicitly recognises the conditional right to use of the water resource – the definition of canal in this act is extensive and inclusive of both surface and groundwater sources for the purposes of the act.[103] It represents strict, reasonable and sustainable system using permit and license to allow individuals access to water. It proposes detailed plan for construction, maintenance, of the field cannels and strictly regulates the procedure and the parameters to grant, monitor and regulate water supply.[104] By specific provisions mentioned in 'Chapter X: special provisions regulating construction and maintenance of tubewells, artesian wells and borewells' of the act, this act extends its jurisdiction to the groundwater and carefully bring the resource within its purview.[105] Since, this section (Chapter X) of the Act has a potential to interfere with the property right to groundwater of an individual, to tackle the situation arising due to competing claims can be dealt with the provision mentioned in Section 58 of the act. This section has the superseding affect and the state government is empowered to over-ride any such provision inconsistent with the provisions of the Act by publishing in official gazette a general or special order.[106] Therefore, it can be argued that this act possess the capacity to strengthen the policy discussed above and other policies designed to ensure holistic and sustainable regulation of water. Additionally, it shapes the attitude of the state towards water resource and its regulation and restates the usufructuary right of an individual over the resource. Also, it partially attempts to establish equity among water users irrespective of the fact it they are land owners or not,

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[102] Government of Gujarat, The Gujarat Irrigation and Drainage Act, 2013 (Act No. 6 of 2013) The Gujarat Government Gazette.

[103] Ibid. Section 2 (d) river or any part thereof, stream, lake, natural collection of water or natural drainage-channels, to which the State Government may apply the provisions of section 4, or the water of which has been applied or used before the passing of this Act for the purpose of any existing canal; (f) all tubewells, artesian wells, borewells, and dugwells, constructed by the Government and maintained or controlled by the Government.

[104] Ibid, Chapter III and IV.

[105] Ibid, Chapter X.

[106] Ibid. Section 58: Power to remove difficulty *(1) If any difficulty arises in giving effect to the provisions of this Act, the State Government may, by general or special order published in the Official Gazette, make such provisions not inconsistent with the provisions of this Act as appear to it to be necessary or expedient for the removal of the difficulty: Provided that no such order shall be made after the expiration of two years from the commencement of this Act. (2) Every order made under sub-section (1) shall be laid as soon as may be, before the State Legislature.*

thus broadly showing the potential to inspire social justice. This shows positive impact in the implementation of the policies backed by the legislative input by the state. Likewise, the following section will explore the capacity of realisation of the *right to water* using policy initiatives in the presence of similar difficulties faced by the administration in general.

4.1. Policy for the Realisation of the Right to Water

The Indian legislature is silent regarding the *human/fundamental right to water*. There is no legal statute which explicitly mentions the *right to water* and maps the manner for the realisation of the right in terms of quality and quantity both. Nonetheless, judicial recognition has recognised the *right to water* as an integral part of the *right to life*, thus making it a fundamental right.[107] In the last decade, some of the provincial states have drafted their own legislation concerning water by explicitly recognising the *right to water* as one of the legal provision of the statute, but they have failed to chart the means and mechanism for its realisation. As argued by Professor Cullet - the absence of recognition of the *right to water* in legal statutes in India, and a plan for the implementation of that right is long overdue.[108] This burden also falls on the administration which tries to address it using several policies at the provincial or national level.

For the realisation of the judicially ascertained right to water, the judiciary has interpreted the correlative duties arising from the recognised fundamental right of the *right to water* as the responsibility of the state arising from the directive principles of the state policies enumerated in Articles 47 and 48 A of the Indian Constitution.[109] The judicial determination for the fulfilment of the right has grown to the extent that in one of the decisions Supreme Court stated that the paucity of funds would not be considered as an excuse on the part of states for non-fulfilment of the rights concerned.[110] This further made it difficult for the administration to comply with such decisions especially in the absence of the appropriate legislation to support.

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[107] Supreme Court of India, *Subhash Kumar v State of Bihar & Ors* (1991) AIR 420; (1991) SCR (1) 5; Writ Petition (1991) AIR 420 (SCC 196/1991).
[108] P Cullet and J Gupta, 'India: Evolution of Water Law and Policy', in JW Dellapenna and J Gupta (eds), *The Evolution of the Law and Politics of Water* (Springer, Dordrecht 2009) 327.
[109] High Court of Madhya Pradesh (India), *Hamid Khan v State of MP* (1997) 191 AIR, para 6.
[110] High Court of Kerala (India), *Vishala Kochi Kudivella Samarkshana Samithi v State of Kerala* (2006) 1 KLT 919, para 3.

However, the role of the executive in the water sector is paramount. The executive branch is widely active in the creation of water policies at both the level of federal and the provincial states. The policies at the level of provincial states are sometimes tailored, as per the local need for a specific purpose such as the Rajasthan Rural Sanitation and Hygiene Policy 2011.[111] However, the National Water Policy,[112] and the Water Policies of the provincial states of Assam,[113] Karnataka,[114] Kerala,[115] Madhya Pradesh,[116] and other states are generic; they are intended to regulate and manage the resource efficiently within the territorial jurisdiction of the state. The drafting of a policy for the regulation of water resource is reflective of the states' intention, although this must not be construed as a guarantee for the implementation of the policy or its outcome. The policy framework is directive in nature. However, it provides for the common objective and the road-map for the state or states to follow. Additionally, these directive policies are driven by the judiciary in case the need arose, in the form of the obligation of the state enlisted in Part IV of the Indian Constitution (directive principles of the state policy). Thus, making the non-enforceable obligations for the state enforceable.

The 'National Rural Drinking Water Programme' could be regarded as the government's initiative to work towards fulfilment of the *right to drinking water and sanitation*.[117] The NRDWP being implemented by the Ministry of Drinking Water and Sanitation, it aims to provide adequate and safe water to every rural person for drinking and domestic needs, and advocate for a decentralised approach and community involvement, thus emphasising the importance of the PRI's. In furtherance of the cause, the Ministry of Drinking Water and Sanitation launched in 2018 the 'Swajal Guidelines: A Community Led Approach to Rural Piped Drinking Water Supply'.[118] In February a pilot scheme was launched in six states of Bihar, Madhya Pradesh, Maharashtra, Uttar Pradesh,

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[111] Government of Rajasthan (India), *Towards Nirmal Rajasthan - Rural Sanitation and Hygiene Strategy* (2012-2022) (Department of Rural Development & Panchayati Raj's, Working Draft of Oct 2011).
[112] Government of India, *National Water Policy* (Ministry of Water Resources 2012).
[113] Government of Assam, *Draft State Water Policy of Assam* (Assam Science Technology and Environment Council, Guwahati 2007).
[114] Government of Karnataka, *State Water Policy* (Water Resources Department 2002).
[115] Government of Kerala, *State Water Policy* (Water Resources Department 2008).
[116] Government of Madhya Pradesh, *State Water Policy* (Water Resources Department 2003).
[117] Government of India, *National Rural Drinking Water Programme Movement towards ensuring people's Drinking Water Security in Rural India Guidelines* (Ministry of Drinking Water & Sanitation, 2013).
[118] Government of India, the 'Swajal Guidelines: A Community Led Approach to Rural Piped Drinking Water Supply, August 2018', (Ministry of Drinking Water and Sanitation.

Rajasthan and Uttarakhand, which was extended to cover all 117 aspirational districts of 28 states in August 2018. This scheme has several interesting and modern features inspiring the water regulation and also commit itself to grant enormous autonomy to the PRI's to look after and design the policy as per the need of the locality. However, given the size of the scheme and the nature of intersecting issues involved in water regulation a legislative input having capacity to coordinate the task and ensure swift implementation of the scheme is very much desired.

The policies mentioned above forms a part of the broader governance strategy. Like the Swajal guidelines created to accomplish the goal set by the NRDWP, however these guidelines also coordinate with other policies and schemes related to the cause and considered necessary such as the ODF (open defecation free state), powering the gram panchayat and the targeted village through solar power or other means of renewal power resource, etc. Due to the intersections and interdependencies arising in the field of water regulation the policies are bound to and they should interact with other factors influencing the regulation of the resource for attaining holistic regulation of the resource. The administrative and the executive branches of government have coined several policies and experimented with different techniques of the regulation at the local, as well as national level. Having realised the potential and interdisciplinary aspect of the regulation of water resource the need for investment is undeniable. Either to holistically regulate the resource or to ensure right to water for all. Therefore, making a case for privatisation an attractive option.

Indian legislature has largely been silent on the issue of privatisation.[119] However, the proposed framework in the form of 'Model Bill' for Water is the first vocal attempt in the history of water legislation in India - to recognise the *right to water for life*.[120] The bill also recognises the duty for the realisation of the *right to water* as a duty attributable to the state. Moreover, it is evident from the bill that it may authorise the private sector participation and investments needed for the projects related with water governance,

[119] Gaurav Dewivedi, 'Privatisation and Commercialisation of Water in India' (CAG, Citizen Consumer and civic action group, 28 September 2016) <https://www.cag.org.in/blogs/privatisation-and-commercialisation-water-india> accessed 20 Nov 2018.

[120] Government of India, *Draft National Water Framework Model Bill, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 16 May 2016).

management and regulation, but it does not *per se* allow the privatisation of water itself.[121] That is the proposed position for consideration by the government of India. Given the political and judicial atmosphere in India, the privatisation of the resource is less likely to take place in the near future. Although, it is premature to make assertions in that regard; though one thing is certain, that the rights-based concern for water (*fundamental right or human right to water*) must hold priority over market forces.[122]

Policy-making by different means and modes seem to have been overburdened by the task of ensuring the sustainable and holistic regulation of the resource and facilitation of the means for the realisation of the right to water, by harmonising the state practices and driving them towards the common objective using nation-wide policies. However, rising water scarcity demands more from the existing legal framework and the institutions involved and responsible for the management and regulation of the water resource. One of the most persistent demands and a hindrance in the holistic regulation of water is a lack of harmonious laws and practices for water management in the federal set-up, which could empower the federal units to legislate and function in an autonomous manner while taking into account the transboundary nature of the resource itself. Therefore, scrutiny of the existing institutions and exploration of the new possibilities is very much required.

For that cause, the Ashok Chawla Committee was established by the government, and after the completion of its inquiry, the findings were published in the form of a report in 2011. The report proposed the need for comprehensive national legislation on water, either by bringing water into the Concurrent List or through a legal framework for treating water as a unified common resource.[123] The parliamentary standing committee on water resources and Parliament's Public Accounts Committee also have favoured this shift. At the time of writing, the entries to the Seventh Schedule remain unchanged, and the recently proposed draft of the framework legislation was in 2016.[124] In the subsequent

[121] ibid, Section 3.
[122] RR Iyer, 'Governance of Water: The Legal Question' (2010) 17 (1) South Asian Survey 147, 53.
[123] Government of India, *Ashok Chawla Panel on Scarce Water Resources* (Ministry of Water Resources, 2011) <http://www.cuts-ccier.org/pdf/ReportoftheCommitteeonAllocationofNaturalResources.pdf> accessed 20 Nov 2018.
[124] Government of India*, Draft National Water Framework Model Bill, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 16 May 2016).

section, the author aims to investigate the legal consequences of the proposed move and continue its exploration to find new possibilities which can fulfil the task of harmonisation.

5. The Union's Responsibility – to harmonise the Law

The harmonisation of law and practices seemed necessary but was hindered within existing constitutional arrangements. The change in the constitutional setup is demanding and a very sensitive subject when it comes to water as it threatens the authority of the provincial states *vis-à-vis* central government. Nevertheless, the problem is less of a technical and more of a political and practical nature, since the issue of water governance is related to certain basic amenities of life and matter of daily regulation by the state.[125] Thus, any alteration which might restrict the behaviour of the state is regarded as the subjugation of the right of the provincial state and causes serious political or electoral loss to the constituency.[126] Additionally, the best means for the regulation of water resource is as locally as possible, by designing the means of the regulation of the resource, given the need of the locality and taking into account other factors with a potential to cause influence. Alternatively, making the argument in favour of the decentralised mechanism.[127]

The idea to reshuffle Schedule Seven as suggested by the Chawala committee by shifting the Entry 17 from the state list to the concurrent list promotes centralisation against the three-tier decentralised system of water governance charted by the Constitution of India and preferred as the better approach for the regulation of the resource globally.[128] Shifting the entry to the Concurrent List have its consequences. The nature of concurrent list is such that it allows both the centre and the state to legislate in the matters, however, the law made by the parliament on the subject matter enumerated

[125] A Banerjee and R Somanathan, 'The Political Economy of Public Goods: Some Evidence from India' (2007) 82 (2) Journal of Development Economics 287.
[126] T Besley and others, 'The Politics of Public Good Provision: Evidence from Indian Local Governments' (2004) 2 (2-3) Journal of the European Economic Association 416.
[127] P Cullet and J Gupta, 'India: Evolution of Water Law and Policy', in JW Dellapenna and J Gupta (eds), *The Evolution of the Law and Politics of Water* (Springer, Dordrecht 2009) 326.
[128] J Evers, 'Transferring International Commitments to the Local Levels: The Case of Integrated Urban Wastewater Management in Hanoi, Vietman' in C de-Boer and others (eds.), *Water Governance, Policy and Knowledge Transfer: International Studied on Contextual Water Management* (Routledge 2013) 167, 75.

in the list will take precedence over the laws made by the state on the same matter.[129] Perhaps this is why the feasibility of this option has never gained priority and the parliament has chosen to lean towards the formulation of Model Bill's for the harmonisation of the state practices concerning the regulation of water resource. They are of advisory nature for the states to follow.

Environmental issues in the country are on the rise and the judicial units have long ago realised that the conventional judicial and legal practices are neither competent nor enough to deal with the problem.[130] Because of the dynamic and multidisciplinary nature of the issues, they cannot be accommodated within the existing legal and institutional framework. This realisation was the decisive factor for the creation of the National Green Tribunal or Green Court in India, with an innovative mindset.[131] Moreover, with the onset of climate change, the situation is getting even worse, and initiatives such as the Green Court are very much appreciated but certainly not enough. The legislative reform is required which can assure codification of the principles and laws applicable and acceptable within the territorial jurisdiction in India. In other words, the transformation of the branch of the environment into a fully-fledged legal discipline is the need of the day. A concern which seems to be missing from the itinerary of the environment ministry or the parliament, for that matter.

As far as the Indian Constitution is concerned, it is of slightly different nature to that of the federal constitution of the USA, Switzerland and Australia. Comparably, the residuary power to legislate for the non-listed issues usually falls within the jurisdictional ambit of the federal units of the nation-state.[132] However, in the case of India, it rests with the parliament/centre and not with provincial states which reflects the tendency to have a strong Centre.[133] Interestingly, the environment as the subject matter is neither mentioned in the State List or the Concurrent List. Therefore, by virtue of the residual

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[129] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 251.
[130] Supreme Court of India, *MC Mehta and Others v Union of India & Ors* 1987 AIR 1086; 1987 SCR (1) 819.
[131] Government of India, *National Green Tribunal, 2010* (Act No. 19 of 2010).
[132] JN Pandey, *The Constitutional Law of India* (51st edn. Central Law Agency 2008) Commentary to Article 248: Residuary Powers of the Parliament.
[133] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 248.

powers entrusted to the Indian Parliament by Article 248,[134] the parliament has the authority to legislate in the matter of environment.

Since, both the centre and the state are competent to legislate in the subject matters mentioned in the concurrent list, and duty to create and codify the procedural code is listed in the Concurrent List of Schedule Seven.[135] The author world argue for the creation of a comprehensive environmental law code followed by the procedural code and the customised rule of evidence for the environment. This proposal suggests the parliament to clarify the meaning, rights and authorities associated with different component of the environment; enlist those components, define them and explicitly mention the interdependencies and the need for holistic regulation of environment; decide the set of principles to be followed while clarifying the applicability of the principles and doctrines and their legal status. Moreover, it is suggested that the parliament clearly advise the state governments to develop the procedural code for specific component of the environment, by delegating the functions and developing the institutions for the said purpose, to make the third-tire of the decentralised machinery work. This proposal opens the opportunity and directs the states to develop a comprehensive legislative and institutional machinery for decentralised regulation of water resource as per the need of the states. Additionally, the practices of different states will be streamlined because they are ultimately tied with the code created by the parliament using the powers vested in Article 248 of the Constitution of India. Thereby resulting in harmonisation of the legislative practices among states. States could gain further assistance by consulting the Model Bill's.

This is what is accepted from the code made by the parliament for the said purpose. A code which contains a detailed account of the laws, principles, theories, doctrines as well as the consolidated list of the substantial and procedural obligations for the parties. A code which insists for the decentralised delegation of the authority and the one which preaches holistic and sustainable regulation of the environment by adapting to the modern understanding and the transboundary impacts of the environmental components in regulation. This could prove beneficial and serve a dual purpose; firstly, by

[134] ibid Article 248.
[135] ibid Seventh Schedule, List III, Entry 1, 2 and 13.

setting the much-desired framework and defining the legal parameters, it will result in the harmonisation of the laws and policies using a top-down approach. Secondly, by providing the legislative flexibility to the states, so that they can formulate their law and policies given the need of the locality from within the set parameters, thus using a bottom-up approach. Additionally, it will avoid those situations which might cause constitutional deadlock and lay down the foundation for the creation of environmental law as a fully-fledged legal discipline. In other words, this will not support centralisation in water regulation rather it represents centralised effort to decentralise and support the decentralisation for the regulation of water resource along with other components of the environment. Thus, promoting the practice for holistic regulation of the environment.

The legal code for the environment might prove revolutionary if cautiously crafted. First and foremost, it needs to update the understanding of the different components of the environment and their interactions with one another. Secondly, it might have to address different components of the environment such as air, water, forest etc., in different parts of the procedural code, while maintaining the general provisions for the environmental concerns. This attempt will tie all the components of the environment together with a single legal thread, thus promoting coherence and holistic governance of the environment. Moreover, the National Green Tribunal of India has the collective jurisdiction over the issues arising from the group of environmental legislation. Therefore, this initiative possesses the potential to profoundly alter the paradigm of environmental law-making, its execution and implementation in the country.

Given the rising water scarcity and depleting resources, the state is obligated to undertake this responsibility. Perhaps, the legislative unit of the state does recognise it as their duty, and that realisation is documented at the beginning of the bill promulgated as the Draft National Water Bill.[136] One can argue that the parliament is aware and willing to undertake this responsibility. However, the path chosen by the state to address the issue

[136] Government of India*, Draft National Water Framework Model Bill, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 16 May 2016). Object para 17, 3.

involves the constitutional provision mentioned in Article 252 (1),[137] instead of Article 248, as argued before.

In comparison to the creation of the recommendatory Model Bill, this initiative entails a massive task for the legislature. However, unlike the Model Bill, the code for the environmental law once created and enforced will have mandatory implications for the states. Additionally, it will complement the political commitments made by India at the national and international forums. It will also reflect as the positive step towards the fulfilment of the *fundamental right to water*,[138] health,[139] and a healthy environment[140] in India. This will further help to ensure environmental justice, and to fulfil the international commitments arising from the covenant of economic, social and cultural rights, by the state. It will be supportive of the multiple efforts and duties the state entails such as to ensure water security; to promote economic and sustainable development; to fight climate change and the like.[141] It could also be understood as an act in furtherance of the responsibility of the state to maintain international peace and security because growing water scarcity is also considered as a potential cause of international dispute,

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[137] Government of India, Ministry of law and Justice Legislative Department, the Constitution of India, 1949 (as on 31st July 2018), Article 252 (1) *'If it appears to the Legislatures of two or more States to be desirable that any of the matters with respect to which Parliament has no power to make laws for the States except as provided in Articles 249 and 250 should be regulated in such States by Parliament by law, and if resolutions to that effect are passed by all the House of the Legislatures of those States, it shall be lawful for Parliament to pass an Act for regulating that matter accordingly, and any Act so passed shall apply to such States and to any other State by which it is adopted afterwards by resolution passed in that behalf by the House or, where there are two Houses, by each of the Houses of the Legislature of that State'.*

[138] Supreme Court of India, *MC Mehta vs Kamal Nath & Ors on 13 December 1996,* Case No. Writ Petition (Civil) No. 182 of 1996.

[139] Supreme Court of India, *State of Punjab v. Mohinder Singh Chawla* (1997) 2 SCC 8 – *"the court held that the right to health is integral to the right to life and the government has a constitutional obligation to provide health facilities"*; See also, Supreme Court of India, *Paschim Banga Khet Mazdoor Samity v. State of West Bengal, 1996* AIR 1996 SC 2426 at 2429 para 9 – *"the court held that failure of a government hospital to provide a patient timely medical treatment results in violation of the patient's right to life"; Supreme Court of India, Bandhua Mukti Morcha v. Union of India, 1984* AIR 1984 SC 802 - *"the court held that the right to live with human dignity, enshrined in Article 21, derives from the directive principles of state policy and therefore includes protection of health".*

[140] Supreme Court of India, *TN Godavarman Thirumulpad vs Union of India & Ors* on 10 April 2006, Case No., Writ Petition (civil) 202 of 1995 – "*Justice Y.K. Sabharwal, held that considering the compulsions of the States and the depletion of forest, legislative measures have shifted the responsibility from States to the Centre. Moreover, any threat to the ecology can lead to the violation of the right of enjoyment of healthy life guaranteed under Art 21, which is required to be protected. The Constitution enjoins upon this Court a duty to protect the environment".*

[141] UN, 'Transforming Our World: The 2030 Agenda for Sustainable Development' (A/RES/70/1).

thus, disturbing international peace and security.[142] On this optimistic note, the next section will conclude the findings of this chapter.

6. Conclusion

It is evident from the discussions put forward in this chapter that the water laws in India are fragmented, complex and often contradictory. Modern environmental problems have started to create ethical conundrums between all the branches of democracy, which demands robust change in legislative efforts to clarify the status of existing contradictions and the means to overcome them with certainty.[143] It is of extreme importance because harmonisation not only helps in the smooth functioning of the policies and regulation made by the federal units of the state by removing unnecessary obstacles between them, it also enhances and ease the process of governance and facilitates the regulation of the resource to accommodate the diversified concerns, further, contributing towards holistic and sustainable regulation of the resource.

Two means to achieve the task of harmonisation are discussed in this chapter, and both look appealing to the academic mind. However, due consideration must be made to the political atmosphere between the centre and the provincial states and the rising water scarcity in the region, which could exacerbate the existing differences among the communities and the one which possesses the capacity to mature as a recipe for the future water conflict. With these in mind, the preferred option must be the one which can be implemented with absolute certainty and with least risk of creating a constitutional deadlock or political friction between the centre and the state.

The first option deals with the Model Bill proposed in 2016. The various propositions of the proposed bill are appealing because the bill addresses most of the key concerns which have always been a hindrance to the holistic regulation of the resource.[144] For the first time, the bill addresses the water resource as the freshwater resource and

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[142] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 51.

[143] RR Iyer, 'Water: Charting a Course for the Future: II' (2001) 36 (14/15) Economic and Political Weekly 1235, 43.

[144] Government of India*, Draft National Water Framework Model Bill, 2016* (Ministry of Water Resources, River Development and Ganga Rejuvenation's draft of 16 May 2016).

specifically establishes direct relations between the surface and groundwater.[145] It clarifies the status of the freshwater in all its forms as the *common resource* to be held in trust by the state using the public trust doctrine.[146] Moreover, the bill not only recognises the *right to water* as a fundamental right but also sets the priority of its use and clarifies the extent of privatisation of the resource, if and when required.[147] At the same time, however, the bill acts as the document of reference or inspiration for the states to develop their laws and policies but lacks binding authority. If history is of any relevance, it seems farfetched that the states will react to these developments positively anytime soon, or, the possibility of the Model Bill getting approval by both the house of the parliament without compromising most of its features and becoming a statute.

The second option deals with the parliamentary duty to initiate the task of producing the consolidated environmental code and procedural manual for the environmental legislation with a clear mandate. This task can be achieved by using constitutional provision mentioned in Article 248,[148] this suggestion does not support centralisation in water regulation. Rather, it represents centralised effort to decentralise and support the decentralisation for the regulation of water resource. This is mandatory in nature. Additionally, the basic components, legal principles, understanding about the resource and the need and manner to structure and implement the decentralised machinery of the state for the cause will set the foundation for the harmonisation of the practices of the state. While states begin the process for legislative remodelling the proposed Model Bill of 2016 could act as the inspiration. This option is preferred by the author mainly because it legitimately allows the parliament to be involved in the task undertaken without conflicting with constitutional provisions. Additionally, it provides a holistic overview of the environmental legislation and ensures that all the components of the environment are dealt with using uniform standards. A holistic overview of the environment translates into a better understanding of the interdependent transboundary

[145] ibid Object para 2.
[146] ibid Section 4.
[147] ibid Section 3.
[148] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Article 248: 248. *Residuary powers of legislation: (1) Parliament has exclusive power to make any law with respect to any matter not enumerated in the Concurrent List or State List; (2) Such power shall include the power of making any law imposing a tax not mentioned in either of those Lists.*

issues of the complex life-cycle of nature. Furthermore, different components of the environment inclusive of water will be subjected to the principles of environmental law which is very much desirable.[149]

As discussed in this chapter the public trust doctrine is the living law of the land and it considers the freshwater as the *common resource*. This is in accordance with the historic or customary manner of categorising and then regulating the resource in India. This is the doctrine which possesses the capacity to balance the interests arising from a different domain of legal or constitutional rights while ensuring sustainable regulation of the resource. Furthermore, it is in line with the argument put forward in Chapter One favouring for the categorisation of the resource as the *common resource for humankind* at the global level. Consequently, it makes the candidature of the public trust doctrine as the perfect and most desirable for inclusion in the environmental code and procedural manual.

A final comment considers a suggestion made by the Ashok Chawla committee.[150] The committee proposed the constitutional amendment to shift the entry of water from the State List to the Concurrent List of the Seventh Schedule of the Indian Constitution. The author is sceptical about this proposition as an amendment to the constitution for the said purpose is far more complex and politically challenging then the alternative suggested. In addition, this has been considered as a direct attack on the autonomy of the provincial states. It does not seem feasible either, as this opportunity has been present, explored and debated by the concerned dignitaries and was put forward to the legislators for consideration over several decades, yet the situation remains unaltered at the present time.[151]

Water is one of the components of the environment, and its interaction with other components of the environment as well as other disciplines for the regulation of the resource is inevitable. As noted by Karl Marx, it is during unstable times that revisiting the

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[149] P Cullet, 'Water Law in a Globalised World: the Need for a New Conceptual Framework' (2011) 23 (2) Journal of Environmental Law 233, 250.

[150] Government of India, *Ashok Chawla Panel on Scarce Water Resources* (Ministry of Water Resources, 2011) <http://www.cuts-ccier.org/pdf/ReportoftheCommitteeonAllocationofNatu ralResources.pdf> accessed 20 Nov 2018.

[151] RR Iyer, 'Water: Charting a Course for the Future: 1' (2001) 36 (13) Economic and Political Weekly 1115, 21.

relationship between individual and society becomes crucial.[152] That is what is required from the means and mechanisms employed in the regulation of the water resource in a given jurisdiction. The task of harmonisation of law and policy is essential. Therefore, it is suggested that the creation of the environment as a self-contained legal discipline seems like a feasible option, and the one which can be exercised by being within the constitutional boundaries. Thus, avoiding ethical conundrum between the branches of democracy. As a consequence, it will develop the culture of environmental law-making and shape the institutional behaviour towards sustainable future.

[152] Adam Schaff, *Marxism and the Human Individual* (Translated by O. Wojtasiewicz. New York: Mcgraw-Hill, 1970)

Part III

Chapter - 4. Property Rights to Groundwater

1. Introduction

The central aim of this thesis is to address the major impediments in terms of existing laws and policies concerning water regulation in India. Part Three of this thesis is designed to deal with property right associated with groundwater and human right to water in India. In this chapter, the aim is to investigate the issues arising from the notion of property right to groundwater associated with land and how that encourages unsustainable use, over-exploitation and leaves the land less owner at a disadvantage to freely access the resource. It accords different rules for application to the groundwater resource to that of the surface water, and because the groundwater forms the major constituent of the freshwater resource,[1] this distinction in the manner we deal with the resource hinders the sustainable management or holistic regulation of the resource.[2]

This chapter in Section One introduces the subject of the investigation and the structure of the chapter. To do this, Section Two provides the background and outlines the key issues which are the main cause of the problem under investigation. Section Three will investigate the legal status of the rights by which the notion of property right gets associated with the groundwater resource.

This analysis will continue in the sub-sections that follow. The first sub-section deals with the colonial rights and investigation of their legal validity against the existing constitutional provisions. Later, it examines the *constitutional right to property* and its relevance to the groundwater resource. In this sub-section, the ambit of the *constitutional right to property* is investigated to assess whether or not the *right to property* associated with the groundwater resource qualifies to be protected under the notion of property right arising from the Constitution of India. The aim is to compare the validity of the claim associated with the property right related to the land laws discussed in this chapter. Finally, it examines the legal statutes themselves and their relevance in the present context from which such rights arose. However, the competence of statutes is under

[1] DK Singh and AK Singh, 'Groundwater Situation in India: Problems and Perspective' (2002) 18 (9) Water Resource Development 563.
[2] PSV Shankar, H Kulkarni and S Krishnan, 'India's Groundwater Challenge and the Way Forward' (2011) XLVI (2) Economic and Political Weekly 37.

investigation due to the change in circumstances and the facts on which the legal principle and the reasoning were based.

An additional concern originates from this analysis, where the property right to groundwater comes into conflict with the *human rights to drinking water and sanitation*.[3] However, this chapter confines itself to the issue of property rights attached to the groundwater resource and leaves the discussion of the rights-based discourse for exploration in Chapter 5 of this thesis.

The main objective of this chapter is to recognise the legal status of rights associated with the groundwater resource, and the other is to disentangle the murky situation arising from the property right to the groundwater resource. There will then be an analysis of legal maxims and principles from which the applicable law in context derives its authority. The investigation in section four aims to determine the legality of such principles/maxims to determine their legal standing and importance at the present time. The last section concludes the findings.

2. Background

The diversified environment and the culture in a given territory in India require different considerations to manage the groundwater resource.[4] Therefore, the natural resources were managed in pre-colonial era at the source using traditional and cultural practices prevalent in that area.[5] As a result, the policies to manage the resource were developed in a piecemeal fashion.[6] With British Raj, the territory was further divided and ruled separately by princely states and the British Empire respectively, and in the manner that appealed to each. Those territories ruled by an Indian ruler managed the resource

[3] T Shah, 'Groundwater and Human Development: Challenges and Opportunities in Livelihoods and Environment' in BR Sharma, KG Villholth and KD Sharma (eds), *Groundwater Research and Management: Integrating Science into Management Decisions Groundwater Governance in Asia Series - I* (International Water Management Institute in association with National Institute of Hydrology and TATA Water Policy Programme 2005).

[4] MS Vani, 'Groundwater Law in India: A New Approach' in RR Iyer (ed), *Water and the Laws in India* (2nd edn, Sage Publications 2012) 442.

[5] DHAN Foundation, 'Indian Laws and Acts on Traditional Tank Irrigation Systems' in RR Iyer (ed*), Water and The Laws in India* (2nd edn, Sage Publications 2012) 477.

[6] P Cullet, *Water Governance in Motion* (OUP 2009).

using Hindu Dharma;[7] those territories under the Mughal emperor managed the resource using Islamic laws, and those territories occupied by the British Raj introduced modern laws of capitalism and resource ownership over the resource.[8] Later, these colonial rules took the form of legal statutes and remained as an integral part of the Indian legal system. The attitude towards management of the resource underwent massive changes during the British Raj, some of the major changes introduced during that time are set out below.

The colonial invasion gradually took control over irrigational facilities, surface water resources, forests, and natural resources, and later introduced several legal instruments to legalise their actions and to establish the idea of property right over the natural resources.[9] This led to a systemised dismantling of the customary usufructuary practices of the native population.[10] Therefore, planting the seed of a problem with long-term impacts which are further broken down below.

Firstly, due to lack of any comprehensive legal regime for the regulation of the water resources or the environment at large, various subject-specific statutes were formulated relating to issues such as water for irrigational use, and for domestic use. It encouraged the making of the object-specific legal statute to ease the regulation of the resource at the local level. This attitude is traceable to colonial history,[11] and is reflected in the environmental legislation of independent India such as the Water Pollution and Control Act 1974,[12] emphasising on pollution control; in state-specific statutes for the

[7] Mahabharat (Hindu religious text), 'meaning: Righteousness is that which nurtures the subjects and in turn the society - The word Righteousness (Dharma) has been used by various holy texts with various connotations. In the context of society: `धृधारयति' means to bear, to support. The word dharma (धर्म (has been derived from the 'धरतिलोकान्प्रियतेपुण्यात्मभि :इतिवा' means Righteousness (Dharma) is that which sustains the people or that which is adopted by meritorious souls; 'धारणात्धर्मंइत्याहुर्धर्मोधारयतीप्रजा– (महाभारत१२.१०९.११) 12.109.11.

[8] F Naz and SV Subramanian, 'Water Management across Space and Time in India' (2010) ZEF Working Paper Series 61, Centre for Development Research-Department of Political and Cultural Change.

[9] British Government, *Indian Forest Act 1865 and 78* (British Colonial Extended Colonial Claim to Indian Forests by the Act), last amended in 2002.

[10] NA Rao, *Forest Ecology in India, Colonial Maharashtra (1850-1950)* (Foundation Books 2007).

[11] V Upadhyay, 'The Ownership of Water in Indian Law' in RR Iyer (ed), *Water and the Laws in India* (2nd edn, Sage Law Publication 2012) 135.

[12] Government of India*, The Water (Prevention and Control of Pollution) Act, 1974* (NO. 6 of 1974).

regulation of water in different capacities; and in irrigation acts within the country, based on Irrigation Act of 1935 introduced during the British Raj.[13]

Secondly, the changes were introduced by gradually challenging the principles of the ancient civilisation,[14] which was based on the assumption that the economic development or development in general depends on the availability of the environmental resource in nature's bounty, for the benefit of humankind.[15] Conversely, emphasising the idea that the ecological concern is subservient to the economic concerns; the accumulation of wealth; and ownership of the resource.[16] Thereby, causing a transition from customary usufructuary rights to the ownership rights over the resource.[17]

The next section analyses the legal status of groundwater attached to the property right in accordance with the Transfer of Property Act, 1882 (TPA), and the Indian Easement Act, 1882 (IEA), both being colonial laws which are still applicable in their entirety with only minor amendments made over the course of time. The author will critically investigate the status of groundwater and the associated property rights to the groundwater arising from land ownership. This investigation will derive its authenticity from the legal and judicial interpretations of the texts available in the field.

3. The Analysis of Legal Status of Groundwater in India

The status of water in independent India is complicated as evident by the examination conducted in chapter three. Surface water is considered as the public resource to which state has primary authority and control due to *eminent domain* principle and is further regulated in trust by the state, for the people and the state, using public trust doctrine.[18] Whereas, groundwater is considered as part and parcel of land ownership. The IEA authorises the owner of the land to extract the water beneath the owned piece of land unless it does not pass in a defined channel.[19] Due to the direct

[13] British Government in India, *The Bengal Irrigation Act, 1876*; See also, V Upadhyay, 'The Ownership of Water in Indian Law' in RR Iyer (ed), *Water and the Laws in India* (2nd edn, Sage Law Publication 2012) 134.
[14] SBV Tripurari, *Ancient Wisdom of Modern Ignorance* (Clarion Call Publishers 1995).
[15] G Shah, *Glimpses of Indian Culture* (Trishul Publications 1989) 164.
[16] JG Gurley, *Capitalist and Maoist Economic Development* (New England Free Press 1971).
[17] Pricy Council, *Maharaja of Pittapuram v Province of Madras* AIR 1909 3. The case was cited with approval in Privy Council, *Raja Shrinath Roy v. Dinbandhu and others* AIR 1914 48.
[18] Supreme Court of India, *MC Mehta v. Kamal Nath and Others* 1997 1 SCC 388.
[19] Government of India, *Indian Easement Act, 1882 (Act No. 5 of Year 1882)* Section 7, illustration (h) and (j).

linkage between the easement rights and the rights related to land ownership, the private property notion of groundwater attracts the provisions of Section 3 and Section 6 (c) of TPA.[20] The TPA is one of the most important pieces of civil legislation with a nation-wide application which deals with the transfer of immovable property in all forms. Interestingly, it exerts its authority over a wide range of rights from tangible to intangible ones and includes the easement rights.[21] The statute drafted in 1882 lacked an explanation of the nature and the extent of such rights, neither has the legislature clarified the issue afterwards. Therefore, this leaves it at the mercy of courts to interpret their ambit as per the circumstances of each and every case and to satisfy the need of the contemporary times (the understanding of the groundwater and its treatment in law is discussed in detail in Chapter 3, Section 3.2).[22]

This section analyses the notion of property rights associated with immovable property and which are guaranteed by the TPA but at times considered as an easement. The Easement Act and the doctrine of dominant heritage are the primary focus of investigation in this section.[23] As explained by Vani, the right to groundwater is a property right and not an easement. Because for an easement right to exist the existence of two heritages or tenements belonging to two different owners is essential.[24] In case of the groundwater the landowner has direct access and no servient is required.

However, the Easement Act defines the easement as the right to beneficial enjoyment associated with a piece of land owned, and in accordance with the provisions of the act it seems like the groundwater has been exempted to be classified as the easement on many occasions.[25] *Section 3* of the IEA explicitly excludes, from the ambit of this act, the right of the government to regulate or manage water for irrigation purposes.[26] Whereas Section 3 (a) states all forms of water resource except groundwater is an

[20] Government of India, *Transfer of Property Act, 1882 (Act No 4. of Year 1882)* Section 3 and Section 6 (c).
[21] RK Sinha, *The Transfer of Property Act* (10th edn, CLA publications 2009) 52.
[22] T Banerjee, 'Right to Water: Some Theoretical Issues' (2010) Contemporary Issues and Ideas in Social Sciences 1.
[23] YR Isar, 'UNESCO and Global Heritage: Global Doctrine, Global Practise' in H Anheier and YR Isar (eds), *The Cultures and Globalisation Series: Heritage, Memory and Identity* (Sage Publications 2011).
[24] MS Vani, 'Groundwater Law in India: A New Approach' in RR Iyer, *Water and the Laws in India* (Sage publications 2009) 435, 44.
[25] Government of India, *Indian Easement Act, 1882 (Act No. 5 of Year 1882)* Section 4.
[26] ibid Section 3 (a).

easement associated with the land rights; and subsection (b) excludes, from the ambit of the easement, the customary or other forms of rights of communal nature associated with the immovable property.[27] Therefore, this implies that the customary rights of people over the resource is protected by the sub-clause (b). The statute indicates its intention not to assign the easement rights to groundwater or to grant absolute right to the resource in association with land ownership in that regard. Thus, it clarifies that the right to water is not an easement, but a property right associated with land.

Section 3, the interpretation clause of the TPA interprets what immovable property means for the transfer of property rights. This section did not explicitly mention that the groundwater constitutes the part of the property attached to the owned immovable property. Which is why the group of land laws are subject to investigation in this chapter to determine the nature of right associated with the groundwater. The legal provisions under investigation were crafted in the late eighteenth century when the groundwater was neither a scare resource, nor, its regulation a matter of concern.[28] The situation at present has changed, over-exploitation is the result of readily available technology which makes drilling and extraction of the resource easy and cost-friendly. Moreover, the hydrological cycle and the impact of uncharted groundwater extraction were not known about as they are at present time. Therefore, it is preposterous to continue managing the resource by the norms based on an understanding which is considered as obsolete in the modern world.[29]

It is important, to present a clear picture of the hierarchy of such rights and to clarify the legal status of such rights, in case they come into conflict with each other. To justify the legal standing of the applicable laws related to groundwater which classify groundwater as property and to determine if such classification of property right qualifies a protection within the constitutional right to property, it is essential to understand the constitutional position of groundwater and the importance of the basic structure of the

[27] ibid Section 3 (b).
[28] P Cullet and J Gupta, 'Evolution of Water Law and Policy in India' in JW Dellapenna and J Gupta (eds), *The Evolution of the Law and Politics of Water* (Springer Academic Publishers 2009) 159, 163.
[29] Centre for Water Policy, New-Delhi, 'Some Critical Issues on Groundwater in India' (June 2005).

Indian constitution.[30] The following section presents a comparative analysis of the legal provision applicable to groundwater with that of the constitutional provisions.

3.1 The Constitution and the Legal Status of the Right to Groundwater

The Indian constitution is the written document from which all other branches such as legislative, executive and judiciary derive powers and function.[31] The preamble of the constitution reflects the objective and purpose or the philosophy of the constitutional text.[32] The preamble plays an important role in determining the validity of legal text *vis a vis* constitutional right. It is referred to, in case of contradiction among the provisions of the document; and used to decipher the meaning of the provision in the light of the object and purpose of the document.[33] The case laws which can enunciate the importance of preamble in the interpretation of the constitution as well as clarify the philosophy of basic structure of the Constitution of India are mentioned below. The doctrine of basic structure was developed by the higher judiciary, and it is the collection of norms or principles which cannot be compromised by any organ of the democratic government.

In the *Golaknath* case, the Supreme Court was of the view that parliament does not possess the power to amend the constitution arbitrarily, rather it must use its power to amend the constitutional provisions in a manner specified in Part Three of the constitution.[34] Whereas in the *Keshavanand Bharti* case, the court was of the opinion that the Parliament has the power to amend any part of the constitution keeping the basic structure intact, this decision was conferred by the biggest constitutional bench consisting of 13 judges and is the landmark case in the constitutional history of India.[35] The Court mentioned some of the principles of the constitution such as sovereignty, democracy, the secular character of policy, the rule of law, independence of the judiciary, fundamental

[30] A Raza, 'The 'Basic Structure' Doctrine in the Indian Constitution: A Judicial Critique' (July 2015) Social Science Research Network, <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2661127> accessed 20 Nov 2018.
[31] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018).
[32] ibid Preamble.
[33] Supreme Court of India, *Berubari Union and others vs Unknown,* AIR 1960 SC 845. See also: For analysis of the principle: UN, Vienna Convention on the Law of Treaties, 1969, Article 31.
[34] K-Subba Rao (Commentary by Ex-Chief Justice of India), 'The Two Judgements: Golaknath and Kesavanand Bharti' (1973) 2 SCC Journal 1.
[35] Supreme Court of India, *Keshavanand Bharti vs State of Kerela*, 1973 4 SCC 225: AIR 1973 SC 1461.

rights of citizens etc., as the basic structure of the Constitution.[36] Therefore, the doctrine of the basic structure constitutes some of the principles of the Constitution of India which cannot be abrogated by any wing of the government and it further establishes constitutional supremacy in India.[37]

Part Three of the Indian constitution deals with the fundamental rights that qualify as the basic principle of the constitution.[38] The Supreme Court of India has interpreted the *right to water* as the most important constituent of the *right to life* (Article 21), conferring the *right to water* the status of a fundamental right.[39] As per Article 141 of the Indian constitution, the Judgement of the Supreme Court acts as precedent and is binding within the territory of India unless reviewed by the court itself,[40] or parliament enacts a law clarifying the meaning and scope of such law or enacting a law contrary to it.[41]

In this scenario, the connotation of a property right to the groundwater resource creates threefold manifestations. Firstly, the groundwater in India is one of the primary sources of water for personal and domestic use, whereas the property rights over groundwater deprive the landless and the marginalised sections of the society from such basic rights.[42] Secondly, the implication of this right is faulty mainly for two reasons. (a) as per the Constitution, no rights are guaranteed in absolute terms, not even the fundamental rights; they are subject to reasonable restrictions.[43] Likewise, sanctioning the property right to a landowner in a manner which authorises the infringement of the rights of others is unreasonable and against the principle of equality enriched in the Constitution.[44] (b) such interpretation interferes with the progressive realisation and access to right to water for the people on the one hand, and on the other, it restricts the

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[36] ibid.
[37] MP Bergman, 'Montesquieu's Theory of Government and the Framing of the American Constitution' (1990-91) 18 (1) Pepperdine Law Review 1.
[38] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018) Part III, Article (12-35).
[39] Supreme Court of India, *MC Mehta v. Kamal Nath and Others* 1997 1 SCC 388.
[40] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 137.
[41] ibid, Article 141; See also, For Commentary - JN Pandey*, The Constitutional Law of India* (45th edn, Central Law Agency 2008) 504.
[42] T Shah, 'Institutional and Policy Reforms' in J Briscoe and RPS Malik, Oxford *Handbook of Water Resources in India: Development, Management and Strategies* (The World Bank and OUP 2007) 306.
[43] JN Pandey*, The Constitutional Law of India* (45th edn, Central Law Agency 2008) 191.
[44] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 14.

customary right of people over the natural resource which authorises the usufructuary right over the resource.[45] Thirdly, the surface water and the groundwater are two indivisible components of the same resource, and thus should be managed with a similar set of laws, perhaps, by implying the public trust doctrine as recommended by the Supreme Court of India and discussed in Chapter 3 of this thesis.[46] This discussion is followed by an analysis of the legislative possibilities arising from the constitution and their contribution in recognising the status of the property right to groundwater in India.

3.2. The Groundwater and the Constitutional Right to Property in India

On the legislative front, the laws were promulgated to regulate or govern the water resource or to execute specific kinds of right over the resource. However, this was done without recognising other individual and community rights over the resource. For instance, the statutes for environmental protection were made with the streamlined objective of the protection of the resource from pollution. They imposed restrictions on the release of a quantum of pollutants for a specific quantity of the resource, and the other premise was not taken into account.[47] Therefore, the law remained distinct from the rights-based concerns arising from the resource such as the property right, community right, constitutional or human right, nor did they consider the perception of ownership related to the resource in general.[48] Nevertheless, the property rights associated with the groundwater resource had the capacity to have an overarching impact on them and later could act as the major impediment while exercising such rights.[49]

Arguably, if we wish to recognise the *right to water* as the fundamental right it is of prime importance that we clarify our perception of other rights related to the same resource in different contexts. This is because the realisation and recognition of the *right to water* mainly depend on the means for its regulation and management. The existing

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[45] DHAN Foundation, 'Study on Customary Rights and Their Relation to Modern Tank Management in Tamil Nadu' (2004). See also, MS Siddiqui, 'Water Policies and Legal Framework in India' (2011) Research Associate Enviro-Legal Defence Firm, Noida, India 578.

[46] Supreme Court of India, *MC Mehta v. Kamal Nath and Others* 1997 1 SCC 388.

[47] Justice BN Kripal, 'MC Bhandari Memorial Lecture - Environmental Justice in India' (2002) 7 SCC (Jour) 1.

[48] Government of India, *The Water (Prevention and Control of Pollution) Act, 1974* (amended in 1988, No. 6 of 1974) Section 16 and 17.

[49] RM Dick and L Nkonya, 'Understanding Legal Pluralism in Water and Land Rights: Lessons from Africa and Asia' in BV Koppen, Giordano and J Butterworth (eds), *Community-based Water Law and Water Resource Management Reform in Developing Countries* (CAB International 2007).

legal or constitutional rights acting in contradiction with the claimed *right to water* create an ethical and a legal conundrum. Therefore, this section will analyse the premise of such rights within the ambit of the Constitution of India and later will investigate their legal validation against the fundamental rights available in context.

3.2.1. Background for Legal Right to Groundwater

The national statute governing the water resource is the Water Pollution and Control Act, 1974,[50] which has nothing to do with the rights associated with the resource whether legal, constitutional or fundamental in nature. The direct and indirect interpretation of the existing land laws are concerned with the rights-based aspect, but these rights are the *proprietary rights* of an individual. These overarching rights were overlooked, as it was neither considered relevant nor the need so extreme. Had the rights not been overlooked in this way, it could have driven a change in the discourse on property rights associated with the ownership of land.[51]

As established earlier that the right over groundwater is not an easement but the property right and property right is said to be protected under the premise of Article 300-A of the Indian constitution; the right to property.[52] The constitutional status of the *right to property* has undergone change in the last century. It was once regarded as a fundamental right and placed in Part III of the Constitution of India. However, the 44th Constitutional Amendment Act of 1978 challenged the status of the *right to property* as a fundamental right. As a consequence, the *right to property* ceased to be a fundamental right but retained its status as the constitutional right enlisted in Chapter IV of Part XII of the constitution.[53] Due to this, protection against the infringement of the *right to property* by an individual has to change its course. Now, in case of infringement of the *right to property*, the individual would no longer be entitled to initiate a proceeding under Article 32 before the Supreme Court of India.[54] This is because Article 32 is reserved only for the violation of the fundamental rights. However, the remedy under Article 226 is still

[50] Government of India, *The Water (Prevention and Control of Pollution) Act, 1974* (amended in 1988, No. 6 of 1974).
[51] High Court of Kerala, *Perumatty Grama Panchayat vs State of Kerala* 2004 (1) KLT 731.
[52] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 300-A.
[53] ibid, 44th Amendment Act, 1978, w.e.f 20-6-1979.
[54] ibid Article 32.

available,[55] because individuals are entitled to approach the High Court of the provincial states in case of violation of their fundamental as well as legal rights. Therefore, it is important to understand the constitutional status of Article 300-A and how far this constitutional right is capable to defend the property right associated with the groundwater resource.

3.2.2. Constitutional Status of Article 300-A

Article 300-A confers constitutional status to *the right to property* of an individual (citizens and aliens both). The term property has been accorded broad meaning within the purview of this article, but any act causing deprivation to the *right to property* of an individual without the proper authority of law could be declared constitutionally void.[56] This deprivation could only be possible by means of legislative action, by authority vested in law and not by executive fiat.[57] The following discussion will examine the 'justification of groundwater as the property within the ambit of Article 300-A', to be protected under the premise of constitutional *right to property* postulated above or not.

The state by virtue of its status possesses certain prerogatives. With these prerogatives, the state is empowered to expropriate the private land/property of an individual by virtue of the doctrine of *eminent domain*.[58] Such expropriation is not against the individual's right, but must justify the broader objective of public good so that the expropriation so made is adequately compensated to the affected parties. When the status of the *right to property* was subject to change, it was done under the ideology of the welfare state by the then government in power (the Janata government) which was influenced with the concept of a socialistic state.[59] Even after the constitutional amendment to de-list the *right to property* from being a fundamental right came into force, its implication in relation to property was greeted with suspicion. However, later with the development of the doctrine of the basic structure of the Indian constitution,

[55] ibid Article 226.
[56] DD Basu, *Commentary on the Constitution of India: AS Comparative Treatise on the Universal Principles of Justice and Constitutional Government with Special Reference to the Organic Instrument of India* (8th edn, LexisNexis Butterworths Wadhwa 2012) 9681.
[57] Supreme Court of India, *Chairman Indore Vikas Pradhikaran v. Pure Industrial Coke and Chemicals Ltd*., AIR 2007 SC 2458: (2007) 8 SCC 705.
[58] ibid 9699-705.
[59] ibid 9689; See also, HM Seervai, *Constitutional Law of India* (3rd edn, Vol 2 Universal law Publication 2005) Para 14.3.

that concern was put to rest.[60] It was made clear that even if the *right to property* remained a fundamental right it was still out of the purview of the doctrine of basic structure.[61] This alternatively is understood as the right to further discussion to be changed or suspended, if required as in the case that it contravenes the basic structure of the Indian constitution. Further clarifying that the status of the *right to property* - as a *fundamental right* or as a *constitutional right* is subordinate to the status of fundamental rights which have been ascertained the status of the basic structure of Indian constitution; the right to life.[62]

Both the case laws concerned with the development of the theory of basic structure of Indian constitution such as *Keshawananda Bharti v State of Kerala*[63]and *Minerwa Mills v UOI*,[64] unanimously conferred the *right to life* under Article 21 of the Indian constitution as an integral part of the basic structure doctrine. Furthermore, the *right to water* under consideration has been interpreted as the pre-condition of or one of the most important ingredients for exercising the *right of life with dignity.*[65] Whereas, the property notion attached to the groundwater is yet to demonstrate its relevance as property to be considered within the ambit of Article 300-A. In order to qualify for the criterion of property as specified in Article 300-A, the groundwater has to satisfy two conditions: firstly, it has to qualify as *property* to be considered within the meaning of property for the purpose of the article under consideration. Secondly, it has to prove that the *deprivation of such property is caused without the authority of law* which depends on the qualification of its pre-condition. Even though the term property has been accorded wider interpretation for the purpose of this article, it still possesses certain limitations. Thus, we will next legally analyse the property right status associated with groundwater resource as *property* defined within the meaning of Article 300-A.

Property in this article connotes wider interpretation; it considers all the corporeal as well as incorporeal interests associated with the property as 'property'.[66] However, the

[60] Supreme Court of India*, Raghunath Rao v Ganapath Rao v. UOI* AIR 1993 SC 1267.
[61] Supreme Court of India, *Indira Gandhi v. Raj Narain* AIR 1975 SC 2299.
[62] ibid.
[63] Supreme Court of India, *Kesavananda Bharti v. State of Kerala* AIR 1973 SC 1463.
[64] Supreme Court of India, *Minerva Mills Ltd. & Others v. UOI & Others* 1980 AIR 1789, 1981 SCR (1) 206.
[65] Supreme Court of India, *MC Mehta v. Kamal Nath and Others* 1997 1 SCC 388.
[66] Supreme Court of India, *Commissioner of Hindu Religious Endowment v.* Lakshmindra 1954 SCR 1005.

limitations so imposed states that the property so regarded must be capable of being acquired, disposed or taken possession of, by itself.[67] Whereas the possession, disposition and acquisition of groundwater are dependent on the possession, dispossession and acquisition of land. Hence, groundwater is not capable to be used or appropriated unless the land beneath such resource is in possession of an individual. Thus, groundwater does not satisfy the requirements of being considered as property based on the argument made in support of law.

It has been postulated in law that the property whether corporeal or incorporeal connotes everything which is subject to ownership.[68] Based on this premise, groundwater connotes the incorporeal interest associated with land ownership, but is not subjected to be regarded as the property, whether corporeal or incorporeal by itself. However, the corporeal or incorporeal interest so mentioned regarding the legal understanding of property understands the incorporeal interest as property which could be owned by itself, such as, good-will associated with business, intellectual property rights associated with the property, etc.,[69] whereas, groundwater does not satisfy such a premise of law.

It has been postulated by law that no rights or interest constitutes 'property' unless the law recognises it as a property right.[70] Whereas, groundwater has not been expressly recognised as property in any of the statutes enforceable within the territory of India. However, it has been considered as property right in association with land ownership.

It has been postulated by law, that any pre-constitutional rights recognised as a property right under Section 299(1) of the Government of India Act, 1935 (hereinafter, GOI Act, 1935)[71] is deemed to be property under Article 300-A of the Indian constitution.[72] It imposes a restriction for the payment of adequate compensation in case the individual is deprived of his/her right to property. Hereby, this section of GOI Act, 1935 does not

[67] Supreme Court of India, *Chiranjit Lal v. UOI* 1950 SCR 869 (925).
[68] Supreme Court of India, *Jilubai Nanabhai Khachar v. State of Gujarat* 1995 (Supp-1) SCC 596.
[69] High Court of Madras - Division Bench, *Shrirur Mutt v. Commissioner of Hindu Religious Endowment Board* 1952 (1) MLJ 557.
[70] Supreme Court of India, AudhBehari v Gajadhar 1995 1 SCR 70 (84).
[71] *Government of India Act, 1935* [26 GEo. 5. CH. 2], Section 299(1) *No person shall be deprived of his property in British India, save by authority of law.*
[72] Supreme Court of India, *State of Gujarat v. VoraFiddali* AIR 1964 SC 1043 (1058).

itself recognise the status of property right to the groundwater resource, thus its relevance as property is preposterous based on the GOI Act 1935. However, the only traceable legal claim on water resource evident from the historic Indian religious text and the text related to the regulation of the resource at different times under different rulers, justifies only the existence of collective usufructuary right of the people on the resource.[73]

It has been postulated by law about incorporeal rights, that the incorporeal rights which cannot be alienated apart from the corpus of the property are not regarded as property within the meaning of this article.[74] However, we have established the case that such alienation of groundwater rights from the corpus of land ownership is not possible. Therefore, they could not be determined as incorporeal property rights as such.

Based on the arguments, it could be concluded that the groundwater does not justify the legal requisites which are considered important to be regarded as property in accordance with the meaning and parameters set for its recognition as the constitutional right specified in Article 300-A. Therefore, the connotation of property right associated with groundwater does not qualify to attain the status of property to be protected as the constitutional right - specified as *right to property*. The second ingredient of Article 300-A is deprivation of the right to property by the authority of law. The discussion of this ingredient does not seem plausible because the pre-condition it was dependent on has failed to establish its identity as property.[75]

If the *right to water* is ascertained the status of fundamental right as per Constitution of India, it becomes right for all and the government will be obliged to perform its duties within its capacity to make this right a reality. Conversely, individual's property right to appropriate indefinite amount of groundwater as it pleases to them might instigate unsustainable use and the existence of such right will be in contradiction with the collective fundamental right of an individual. Needless to say, the 44th

[73] M Moench, 'Allocating the Common Heritage: Debates over Water Rights and Governance Structures in India' (June 27/1998) Economic and Political Weekly A/46, A/48.

[74] DD Basu, *Commentary on the Constitution of India: AS Comparative Treatise on the Universal Principles of Justice and Constitutional Government with Special Reference to the Organic Instrument of India* (8th edn, LexisNexis Butterworths Wadhwa 2012) 9685; See also: *Girijanand v. State of Assam AIR 1956* Assam 33 (48).

[75] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018), Article 300 A.

amendment so made in Indian constitution was made with the ideology and the object in mind that the right to property of an individual is guaranteed and protected as a constitutional right.[76] And the right ceases to be a fundamental right because the political philosophy of state believes in the doctrine of *eminent domain* which rests on two maxims: *salus populiest superema lex* and *necessita public major estquam* (the welfare of the people is paramount in law, and public necessity is greater than private necessity).[77]

As discussed above, the status of a property right to groundwater seems contrary to the Constitutional provisions thus will be subjected to validation. *Article 13* of the Indian constitution attracts the provisions of law which were applicable before the enactment of the constitution, and carefully analyses these. In case the provision under investigation are found to contradict with Part Three of the Constitution they are declared void or *ultra vires*.[78] The group of land laws targeted in this chapter for investigation are colonial laws, therefore, they attract the provisions of Article 13. Arguably, if the provisions of the Transfer of Property Act and the Indian Easement Act related to groundwater is to be applied in entirety, it will amount to the violation of the fundamental *right to water* and the judgement of the Supreme Court of India.[79] Before summarising the issue, the author would like to analyse the legal provisions from which these rights derive their authority within the ambit of applicable legal statutes functional in the country.

3.3. Property Right *vs* Human Right to Water

Almost 70 % of the population is landless and the groundwater is the major source of drinking water use and the use of water for domestic and sustenance activities including irrigating the fields. In Indian context, it overlooks the gender disparity in the ownership of land where not only small section of population hold ownership rights on land, but it is systematically problematic for the women to own the property and have an active control over the property.[80] Also the people living in informal settlements, slum-dwellers, migrants and poor marginalised section of society without land ownership is excluded to access the basic necessity and to access the natural resource freely available

[76] MP Singh (eds), *V.N. Shukla's Constitution of India* (12th edn, Eastern Book Company 2013) 144.
[77] JN Pandey, *The Constitutional Law of India* (45th edn, Central Law Agency 2008) 644.
[78] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 13 (1) and (2).
[79] Supreme Court of India, *MC Mehta v. Kamal Nath and Others* 1997 1 SCC 388.
[80] B Agrawal, *A Field of Her Own* (CUP, 1995) 2.

to the humankind. While looking through the lens of access to *right to water for all* this association of the property right with land becomes extremely problematic. Continuation of property right over the groundwater resource raises equity concerns and exacerbates social inequality.[81] Moreover, if the state is acting as the trustee for the natural resources then the equity concerns extents themselves to this generation and to the future generations, equally.

As discussed in this chapter the right to property accorded to the groundwater is derivative not explicit and the constitutional right to property does not recognise the property nature of such right to be protected by the constitutional right to property, and it partially works against the right to access the human right to water. In the light of the arguments raised, the legislature is accepted to clarify the status of the property right to groundwater by addressing the groundwater and the land through separate and distinct legal regimes, governed by the different principles of law. Alternatively, they can apt for the major reforms in land-law allowing massive redistribution of land.

The legal statutes which accord legal standing to the property right to groundwater, do not stand on a sound legal foundation, as evidenced by the discussion above. However, there is another dimension to private property rights based on the manner in which they are construed. The essence of which was elegantly captured in *A Sand County Almanac* by Leopold in 1949,[82] where he noted that the 'Abrahamic' concept of land and by extension private property was one that ascertains privilege but no obligation for the holder of the right. When these rights were conferred to the land and other natural resources by the culturally dominant idea of private property that was rooted in the classical liberal tradition, it prepared the recipe for environmental degradation.

If we understand this notion in the context of the time it was created, it did not suggest the recipe for environmental exploitation or degradation at all. The development of law at that time was human-centric, and only those legal provisions were crafted to have correlative obligations or duties for the holder of the right, which might cause or are

[81] MS Vani, 'Groundwater Law in India: A New Approach' in RR Iyer (ed), *Water and the Laws in India* (2nd edn, Sage Publications 2012) 440.
[82] A Leopold, *A Sand County Almanac: and Sketches Here and There* (OUP 1949).

suspected to result in the infringement of the rights of other human beings which is evident by the Tort Law. In contrast, property rights were mainly exercised against nature and the extent of harm caused to nature due to the irresponsible use of the legal or other natural resources was either trivial at that time, or beyond the human capacity to measure. Additionally, these laws resulted in cumulative long-term damage, the repercussions of which would be faced by future generations,[83] and the causal link between the harm and the act was not directly established. Therefore, instead of blaming the property rights regime, what is required is to modify the regime in such a way that it no longer works as the recipe for destruction. In this era, all the major legal instruments created in the nineteenth century such as the state, sovereignty, territorial integrity have undergone change, and this is what is required by the property law regime as well. It is feasible to modify and upgrade them as per the requirements of the new world order, instead of creating the new world order altogether.

The alternative or positive use of property law is beautifully crafted and applied in the field of environmental law by New Zealand's Emission Trading Scheme.[84] It is the working instrument of the positive application of the property law with correlative obligations or duties, to be weighed against the communal right to environment. Consequently, it suggests that the property law in this regime does not invest itself in fulfilling the classic liberal aim that supports the individual's right to maximise wealth accumulation. Instead, the scheme serves the aim of conservation of the natural resource for the benefit of the entire community.[85] It denotes the flaw in the manner in which the property law regime is put to use in this era.

In addition to this observation, it is also important to investigate the principles of law from which such statutes derive legitimacy in the past and to evaluate their relevance in current times. Additionally, those principles need to be understood well, to clarify the

[83] Katharine Dow, 'What gets left behind for Future Generations? Reproduction and the Environment in Spey Bay, Scotland', (25 July 2016) 22 Journal of the Royal Anthropological Institute (NS) 653-669.
[84] Government of New Zealand, the New Zealand's Emission Trading Scheme (Ministry for the Environment, Climate Change Division) < http://www.mfe.govt.nz/climate-change/reducing-greenhouse-gas-emissions/new-zealand-emissions-trading-scheme> accessed 20 Nov 2018.
[85] Ben France-Hudson, 'No Private Property in the Atmosphere' in P Martin and others (edn) The Search of Environmental Justice (first published by IUCN Academy of Environmental Law 2015; Edward Elgar Publishing 2017) 116.

legal status of the statute in question, as well as to develop the sound reasoning before reaching any conclusion. Since TPA is the national legislation governing land ownership and ancillary rights, therefore, the applicability of TPA needs to be garnered with caution.

4. Revaluation of the Legal Maxims

In this section, the author would like to investigate the implacability of the legal principles or maxims associated with the groundwater and property rights in India, to establish the clear status of the rights discussed in the previous section. Groundwater is in a state of crisis, and the laws regulating groundwater are piecemeal.[86] The property right to groundwater causes unaccountable extraction of the resource, which causes depletion of resource and disrupts its quality and quantity both, at a rate where it is beyond its natural capacity to recharge itself.[87] Moreover, the natural recharge of groundwater aquifers takes a long duration of time.[88] In this scenario, unaccountable groundwater extraction by the landowners has resulted in the infringement of the rights of others, which is against the principle of equity, and also violates the customary principle of no harm or the principle of *neminem laedere*.[89] Moreover, it partly acts as the reason for the inefficient implementation of government policies.[90] Therefore, it is evident that the applicable laws are not up-to-date to manage or regulate the resource, and the laws of environmental protection or the environmental law, in general, are better suited to the regulation of the freshwater resource.

The Environment Protection Act, of 1986 (EPA) is made to deal with the environmental concerns arising in the country.[91] The provisions of the EPA are aligned with the international environmental laws, and the judiciary has explicitly recognised

[86] A Vaidyanathan and B Jairaj, 'Legal Aspect of Water Resource Management' in RR Iyer (ed) *Water and the Laws in India* (2nd edn, Sage Law Publication 2012) 3.
[87] AD Roy and T Shah, 'Socio-Ecology of Groundwater Irrigation in India' in RL Lams and E Custodio (eds*) Intensive Use of Groundwater: Challenges and Opportunity* (AA Balkema Publishers 2003) 307.
[88] UNEP, 'Groundwater and its Susceptibility to Degradation: A Global Assessment of the Problem and Options for Management' (2003) Division of Early Warning and Assessment, UNEP.
[89] P Cullet, 'Water Laws in India: Overview of Existing Framework and Existing Reform' (2007) IELRC Working Paper 1.
[90] P Cullet and R Madhav, 'Water Law reforms in India: Trends and Prospects' in RR Iyer (ed) *Water and the Laws in India* (2nd edn, Sage Law Publication 2012) 533.
[91] ibid.

modern principles of environmental law such as the *precautionary principle*[92] and the *polluter pays* as the applicable principles of environmental law in the country.[93] Together these constitute the environmental jurisprudence of the country.[94] The EPA in its objectives recognises its responsibility to take appropriate steps for the betterment of the environment and to honour the decisions taken at the Stockholm conference held in 1972,[95] thus reflecting its intention towards the progressive implementation and development of environmental law within the country. It is the special act made for the protection of the environment and to live up to the commitment made in the international forum. Although this act is not competent to deal with the water crisis in its entirety, its well-developed notions of environmental law such as *precautionary principle* and *polluter pays,*[96] should be applied to minimise the harm to the groundwater resource, which is already in a state of crisis.

Forgoing the debate, where uncharted righty over the resource instigates unsustainable use and violates the *no harm rule,*[97] it is primarily the statutes, such as the TPA and the IEA the group of land laws which exert and claim authority over the groundwater of the country. These are the property rights. Whereas, the special statute

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[92] P Sands and J Peel, *Principles of International Environmental Law* (3rd edn, CUP 2012) 217. See also, UN, 'Rio Declaration on Environment and Development' 1992, (The Rio Declaration is one of five agreements coming out of the United Nations Conference on Environment and Development (also called the "Earth Summit") in Rio de Janeiro in June 1992. Although a non-binding, or "soft law" instrument, the Rio Declaration sets forth important principles of international environmental law, especially sustainable development. UN Doc. A/CONF.151/26, Vol. I; 31 ILM 874, 1992) Principle 15.

[93] Sands and Peel, ibid, 228. See also, UN, 'Rio Declaration on Environment and Development' 1992, Principle 16.

[94] Supreme Court of India, *Vellore Citizens' Welfare Forum v. Union of India* 1996 (5) SCC 647: AIR 1996 SC 2715 unanimous judgement delivered by the three-judge bench of Supreme Court of India on 28th August 1996.

[95] UNEP, 'Declaration of The United Nations Conference on Human Environment, (Stockholm Conference in 1972) <http://www.unep.org/Documents.Multilingual/Default.asp?documenti d=97&articleid=1503> accessed 20 Nov 2018.

[96] UN, 'Rio Declaration on Environment and Development' 1992, (The Rio Declaration is one of five agreements coming out of the United Nations Conference on Environment and Development (also called the "Earth Summit") in Rio de Janeiro in June 1992. Although a non-binding, or "soft law" instrument, the Rio Declaration sets forth important principles of international environmental law, especially sustainable development. UN Doc. A/CONF.151/26, Vol. I; 31 ILM 874, 1992) Principle 15.

[97] UN, 'Declaration of the United Nations Conference on Human Environment' (Stockholm Declaration) 1972, (On June 5-16, 1972, delegations from 114 countries met for the UN Conference on the Human Environment, widely regarded as the first global environmental conference. The Conference produced many documents, including this declaration, which contains 26 principles, several of which have been incorporated into subsequent international environmental agreements. U.N. Doc. A/Conf.48/14/Rev. 1(1973); 11 ILM 1416, 1972) Principle 21.

made for the protection of the environment has been accorded a back seat in the regulation of the resource or even to interpret the validity of such age-old rights within the domain of environmental law altogether.[98] Due to the special nature of the statute of environment protection, it must be given priority for two reasons. (1) EPA being the national statute made in 1986 for the said purpose must enjoy the status of the special law on the subject matter concerned. (2) The general property law as discussed above is arbitrary, baseless and discredited in the light of the advanced development of the science and the international water law, both. The principle of *lex specialis derogate generali* dictates the same.[99] Each of the principles and maxims are discussed below.

4.1 'Causes Solum, Eius Est Usque Ad Coelum Et Ad Inferos'

causes solum, eius est usque ad coelum et ad[100] is the legal maxim from which the property right in context derives its authority. It is an age-old principle associated with absolute enjoyment of land ownership which was first recognised in English case law in 1587.[101] Later, it migrated to the Indian sub-continent with the legacy of the Common-Law tradition.[102] This principle reflects the absolute authority over, above and beneath the piece of land owned by any person. A literal explanation of this principle confers the absolute property right to groundwater to the owner of the land.[103]

Historically, this maxim applied to air and the complementary rights related to the usage of free space above and around the land owned as private property.[104] Albeit, when such extensive interpretation of the maxim flourished its implications were confronted

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[98] D Freestone, 'International Environmental Law: Principles Relevant to Transboundary Groundwaters' in SMA Salman, *World Bank Paper No 456. 'Groundwater Legal and Policy Perspective' Proceedings of a World Bank Seminar* (IBRD and The World Bank 1999).

[99] *Oxford Reference- Guide to Latin in International Law* (OUP 2011), <http://www.oxfordreference.com/view/10.1093/acref/9780195369380.001.0001/acref-9780195369380-e-1303> accessed 20 Nov 2018.

[100] *Oxford Reference - Guide to Latin in International Law, the phrase means: for whoever owns the soil, it is theirs up to heaven and down to hell* (OUP 2011) <http://www.oxfordreference.com/view/10.1093/acref/9780195369380.001.0001/acref-9780195369380-e-461> accessed 28 Jan 2018.

[101] Crown Court of England *Bury v Pope* 1587 Cro Eliz 118.

[102] RJ Lazarus, 'Changing Conceptions of Property and Sovereignty in Natural Resources Law: Questioning the Public Trust Doctrine' (1986) 71 Lowa Law Review 631.

[103] RFV Hueston and RS Chambers, *Salmond and Heuston on the Law of Torts,* (18th edn, Sweet and Maxwell 1981) 41; Wright, 'Airspace Utilization on Highway Rights of Way' (1970) 55 Lowa Law Review 761, 782. Although Wright concedes that the origin of the maxim may be Roman or Hebraic, he states that 'the acceptance of the maxim and its effects on Anglo-American law were due entirely to the writings of Coke'.

[104] Y Abramovitch, 'The Maxim "Causes Solum, Eius Est Usque Ad Coelum Et Ad Inferos" As Applied in Aviation' (1962) 8 (4) McGill Law Journal 247.

and evaluated against the development of the aviation industry.[105] Gradually, it had to embrace restrictive implications,[106] and with the enforcement of the Aviation Act in the USA, it has undergone a complete transformation.[107] Likewise, its implication to the groundwater in its absoluteness from the late twentieth century is problematic in India, and therefore, demands revision.

If we combine this argument with the language used in both the statutes such as the TPA and the IEA, it does not suggest or confer property right to the groundwater resource.[108] Additionally, the easement act clarifies that water flowing beneath the land belongs to the owner of the land and the property notion will be accorded to the water once the right to appropriate that water has been exercised, which is absolute even if such right infringes others right.[109] This explanation was acceptable when the information regarding the hydrological cycle was not available, and the means for groundwater extraction were not as advanced as they are currently. Moreover, the tube-well revolution combined with the uncontrolled right to extract the groundwater gave further impetus to the exploitation of the resources.[110] As a result, the continuous exploitation of the resource in certain locations in the country is predicted to cause permanent damage to the ecology of the region.[111]

Interestingly, this Common-Law principle somehow escaped from the principle of reasonableness and maintained its identity for a long duration of time. The observation above also suggests that the strict and absolute interpretation of such rights is *prima facie*

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[105] HM Jacobs, 'Conservation Easements in the US and Abroad: Reflections and Views toward the Future' (2014) Lincoln Institute of Land Policy, Working Paper.

[106] Supreme Court of USA, *United States v Causby* 328 U.S. 256 (1946) 260-61.

[107] Y Abramovitch, 'The Maxim "Causes Solum, Eius Est Usque Ad Coelum Et Ad Inferos" As Applied in Aviation' (1962) 8 (4) McGill Law Journal 247; Government of USA, *Federal Aviation Act of 1958* (Public Law 86-726 Aug. 23, 1958).

[108] R Wilson and B Galpin*, Maxwell on The Interpretation of Statutes* (11th edn, Sweet and Maxwell 1962) 3.

[109] House of Lords (Appeal Case), *Mayor of Bradford v Pickles* 1895 AC 587 [UKHL] 1; High Court of Justice (Chancery Division), *Ballard v Tomlinson* (1884) 26 ChD 194 (first instance); (1885) 29 ChD 115 (CA); For a discussion of common law rights to groundwater, see Clark, *Groundwater Law and Administration in Australia*, (Canberra: Australian Government Publishing Service for the Dept. of National Development on behalf of the Australian Water Resources Council 1979).

[110] SC McCaffrey, *The Law of International Watercourses Non- Navigational Uses* (OUP 2001) 23.

[111] MJ Simpson, F Jazaei and T P Clemet, 'How Long Does It Take for Aquifer Recharge Processes to Reach Steady State?' (2013) 501 Journal of Hydrology 241.

dubious and against the spirit of the law.[112] That being said, this roman maxim of private law does not enjoy the ubiquitous status and is subject to reasonable or appropriate restrictions depending on the nature of the resource and the territory they are applied in.[113] Therefore, the legal maxim is subject to elucidation in the light of relevant legal provisions, and the supporting arguments to synergise the groundwater resource management. One such maxim which has evolved into a general principle of domestic and international law, as well as the customary principle of watercourse law, is discussed below.

4.2. 'Neminem Laedere'[114]

The legal principle of *neminem laedere* reflects the philosophy of Epicurus (Epicureanism); i.e. 'the right is a result of utility commitment, within the scope of men who do not harm each other'.[115] It is a well-recognised principle of customary international law, as well as the recognised principle of legal jurisprudence in India. It has been the foundation of the tortious principle of strict liability,[116] which has been challenged and upgraded to the principle of absolute liability in the aftermath of the *Bhopal Gas Tragedy* in India.[117] It states that the owner of the premises is responsible for any harm caused to others due to any act or omission within his/her premises, and will be held liable for the infringement of the rights of others. Justice Bhagwati further clarified the expression of absolute liability; as any enterprise carrying hazardous activity is obliged to cause no harm to others while performing their activities.[118] Therefore, the *no harm rule* is recognised as the non-derogatory principle of the rule of law in India, whereas, with the advent of the principle of absolute liability, it has further become stringent in implementation. However, this principle of absolute liability applies to determine the liability for the harm caused and is not applied in a precautionary manner. The principle

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[112] OUP Online Resource Centres, Chapter-1 Sayles: Land Law Concentrate 3e <http://global.oup.com/uk/orc/law/land/saylesconcentrate3e/resources/outlines/ch01/> accessed 20 Nov 2018.

[113] ibid.

[114] Alterum Non Laedere (meaning): Do Not injure another. This maxim, and two others, honestevivere, and suumcutquetribuere, are considered by Justinian as fundamental principles upon which all the rules of law are based (Black's Law Dictionary 2nd edn 1995)

[115] F Giglio, *'The Foundations of Restitution for Wrongs'* (Bloomsbury Publishing 2007) 31.

[116] House of Lords, *Rylands v Fletcher* 1868 UKHL 1.

[117] Supreme Court on Record (Public Interest Litigation), *M C Mehta and others vs Union of India and Others* on 17 February 1986, 1987 AIR 965, 1986 SCR (1) 312.

[118] Supreme Court on Record (Writ Petition*), MC Mehta v Union of India (Oleum Gas Leak Case),* 12739/1985 (1986.12.20); See also, ibid.

equally applies in the environmental law domain, as well as in other legal disciplines in India. Moreover, the *no harm rule* is the non-derogatory principle of international law in general and watercourse law in particular.[119] It is to be applied in a precautionary manner as the basis of the making of laws and policies for the regulation of the water resource, unlike as the means to restore the damage from the wrong done. However, the maxim discussed in Section 4.1 when applied in an absolute sense to the groundwater of the country, it does undermine the principle of *no harm.*

The *rule of no harm* in international law and the conventional law of the states is based on the concept of establishing equity between the states or between the individual, respectively. The equity for all the riparian's or the people sharing freshwater as a common resource is the underlying manifestation of the rule of no harm. Whereas, the notion of property right over the resource creates the sense of absolute right over the resource of an individual or state, which distort equity and diminish the sustainable use and management of the resource.[120] The concept of equity forms the basic structure of the Indian constitution and is enumerated as the fundamental right in *Article 14.* Justice Bhagawati states equity as:[121]

> *'Equity is a dynamic concept with many aspects and dimensions, and it cannot be cribbed, cabined and confined' within traditional and domestic limits. From a positivistic point of view, equity is the antithesis to arbitrariness. In fact, equality and arbitrariness are sworn enemies; one belongs to the rule of law in a republic while the other, to the whim and caprice of an absolute monarch. Where an act is arbitrary, it is implicit in it that it is unequal both according to political logic and constitutional law and is therefore violative of article 14.*

It can be said that if the law violates the principle of equity and infringes on the rights of others, it surely is considered as unfair and not competent to satisfy the purpose of the law.[122] However, such concerns were raised only recently in the context of laws

[119] O McIntyre, 'Utilisation of Shared International Freshwater Resources-The Meaning and Role of "Equity" in International Water Law' (2013) 38 (2) Water International 112.
[120] P Gumplova, 'Restraining Permanent Sovereignty over Natural Resources' (2014) 53 Enrahonar. Quaderns de Fulosofia 93.
[121] Supreme Court of India*, EP Royappa v. State of Tamil Nadu* AIR 1974 SC 555; For Commentary See. MP Jain, *The Constitution Law of India* (45th edn CLA, 2008) 78-9.
[122] A T Wolf, 'Criteria for Equitable Allocations: The Heart of International Water Conflict' (1999) 23 Natural Resources Forum 3.

regulating groundwater,[123] in response to the rising freshwater crisis of this century. This should now be given the utmost importance in both policy-making and planning.

4.3 'Generalia Specialibus Non-Derogant'[124]

The principle of g*eneralia specialibus non-derogant* is a widely accepted legal principle in domestic as well as in international legal jurisprudence. The legal right to the groundwater arises from the indirect implications of the group of land laws discussed above. Conversely, the EPA is designed to tackle environmental issues and work for the protection of the environment.[125] If we assume that the groundwater belongs to the group of civil legislations or land laws of the country, then the transboundary concerns associated with the groundwater resource will have an impact on the socio-economic and cultural aspects of life for the people and the state.[126] Moreover, this will affect the surrounding environment and biodiversity.[127] All these are inter-related concerns and can be addressed via holistic and sustainable management of the resource, which is most likely to be addressed by or at least taken into account by the group of environmental law statutes based on well-recognised principles of international environmental law.[128] Furthermore, the higher judiciary is committed to widening the scope of the EPA for the implementation of the provisions of the act in order to accommodate the change in environmental conditions.[129] Therefore, the underlying principles of the EPA should be given predominance for the regulation of the groundwater in the country, over any other statutes available in this context.

The principle of *generalia specialibus non-derogant* is the well-recognised rule of interpretation of the statute. It has been a part of legal jurisprudence in India. The maxim

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[123] O McIntyre, 'The Roles of Customary Rules and Principles in the Environmental Protection of Shared International Freshwater Resources' (2006) 46 Natural Resource Journal 157.

[124] AX Fellmeth and M Horwitz,, *Oxford Reference- Guide to Latin in International Law,* (OUP 2011) <http://www.oxfordreference.com/view/10.1093/acref/9780195369380.001.0001/acref-9780195369380-e-835>accessed> accesses 20 Nov 2018.

[125] CM Abraham, *Environmental Jurisprudence in India* (Kluwer Law International 1999) 68.

[126] MA Abu-Zeid, 'Water and Sustainable Development: The Vision for World Water, Life and the Environment' (1998) 1 (1) Water Policy 9.

[127] Secretariat of the Convention on Biological Diversity, 'CBD Technical Series No. 54: Interdependence of Biodiversity and Development under Global Change' (2010) Published by the Secretariat of the Convention on Biological Diversity.

[128] K Singh (ed), *Handbook of Environment, Forest & Wildlife Protection Laws in India* (2ed edn, Natraj Publishers in collaboration with Wildlife Protection Society of India 1998).

[129] Supreme Court of India (Writ Petition), *Vellore Citizens Welfare Forum v. Union of India (Tanneries Case: Tamil Nadu)* WP 914/1991 (26 April 1996).

dictates - that the rules established by special acts overrule the rules of a general nature on the same subject-matter for better and more efficient outcomes.[130] Therefore, the implications arising from the group of civil legislation for the regulation of the groundwater resource must be evaluated against the outcome offered by the group of environmental legislation. EPA is a statute of special nature designed for a specific purpose, and therefore is a preferable option over the civil legislation applicable to the groundwater resource.

The maxims as such are not construed as the law, rather they are to be considered as *the signpost which directs the traveller but does not choose the destinations*.[131] Contextually, it seems fair to analyse all the maxims and the principles of law directly involved in the regulation of the groundwater resource within the territory of India. The section below concludes the findings.

6. Conclusion

The simultaneous existence of the property right to groundwater and the increasing water scarcity could not both exist together in one jurisdiction. Conflicting and over-arching legal rights applicable in the same jurisdiction often cause delay and complicates the governance and the regulation of the resource. Therefore, clarification as to their legal status and validity is of great importance, the available legal statutes which extend their jurisdiction on the groundwater resource do not accord absolute *right to property* over the groundwater resource. Neither do they propose that the *constitutional right to property* protects such manifestation of property right over the groundwater resource, and therefore accords no protection from the *constitutional right to property*. Moreover, the property right to groundwater exists and is exercised in association with land rights, but this property right to groundwater is limited and qualified and not absolute.[132] As per the Indian constitution, the legal rights that interfere with the constitutional provisions can be restricted, curtailed or abrogated in the spirit of the law.[133] And the property right to groundwater is working against the fundamental/human

[130] SP Maxwell, *Interpretation of Statute* (2nd edn, Sweet and Maxwell publication 1883).
[131] NH Moller, *The Law of Civil Aviation* (Sweet and Maxwell 1936) 176.
[132] Commonwealth Law Report, *Gartner v Kidman* 1962 108 CLR 12, 47.
[133] Supreme Court of India, *Romesh Thappar v. State of Madras* AIR 1950 SC 124; See also, Supreme Court of India, *Motor General Traders v. State of A.P* 1984, 1 SCC 222.

right to water for all. Therefore, the legal standing of the colonial laws under investigation, which are contrary to the spirit of the constitution, is questionable, to say the least, and must be scrutinised as per Article 13 of the Constitution of India, to determine their legality and to ensure their peaceful co-existence with the Constitution of India.

What is required by the legislature in India is a clarification as to the status of the property right to groundwater and the legal standing of other statutes regarding the concerned matter. Based on the discussion conducted in this chapter, it is recommended to the legislature to clarify such status and disentangle the association of property right to groundwater with land ownership. Additionally, subject its regulation using environmental laws and the mechanism to strictly monitor the physical availability of the resource and based on that the resource must be allocated to the user. For such allocation a priority of use needs to be set by the government as suggested by the model water bill's (for freshwater and groundwater) both of 2016. This will require amendments to the provision of the land laws and the environmental laws of the country. Additionally, the regulation regime must realise and acknowledges that the management and monitoring of groundwater is more challenging than that of surface water and that both are tied together by the same hydrological cycle. Unless they are subjected to similar principles of law in conjunctive or integrated fashion, there is no end to the freshwater crisis, and neither will the resource, nor the management of the resource be economically viable in the future.

After careful evaluation of the relevant legal maxims and their validity in the light of scientific and legal advancement, these inferences could be drawn: the maxim of *cuiusestsolum, eiusestusque ad coelum et ad inferos* has become redundant and its association with groundwater resource has lost all meaning. However, if this was not the case, the maxim would have been challenged by the principles of environmental law whenever applied to the natural resources in absoluteness. The main reason for this is that environmental law is created to deal with and regulate the natural resources. The nature of environmental law, and its reasoning, is fundamentally different from the conventional property and land law traditions. Moreover, in present time, the implications arising from the absolute property right over the resource have the potential to surpass and endanger the sustainable management of the resource, as well as to

become a threatening cause for the infringement of various human rights inclusive of the *right to life*.[134]

In comparison to the maxim discussed above, two other maxims have survived the test of time and have accorded themselves the status of customary principles of international law.[135] First, the principle of *no-harm rule* or *no significant harm* is one of the cardinal principles of the Watercourse Convention and is also regarded as the Customary Principle of International Watercourse Law.[136] Second, the principle of *Generalia specialibus non derogant* is a well-recognised principle of international law and an important constituent of the Indian legal jurisprudence. Therefore, based on the international as well as the domestic legal jurisprudence and state practice, it is evident that the special laws have attained higher legal validity and must prevail over the age-old ambiguous legal provisions. Therefore, this makes the strong case for the groundwater or the freshwater in general to be dealt with the environmental legislation of the country.[137]

[134] RR Iyer, 'A Synoptic Survey and Thoughts on Change' in RR Iyer (ed) *Water and The Laws in India* (2nd edn, Sage Publications 2012) 592.
[135] JW Dellapenna, 'The Customary International Law of Transboundary Fresh Waters' (2001) 1 (3:4) International Journal of Global Environmental Issues 264.
[136] UN, Watercourses Convention, 'User's Guide Fact Sheet Series: Number 5 'No Significant Harm Rule' <www.unwatercoursesconvention.org> accessed 20 Nov 2016.
[137] P Cullet, L Bhullar and S Koonan, 'Regulating the Interactions between Climate Change and Groundwater: Lessons from India', (2017) 42 (6) Water International 646, 652.

Chapter 5: The Access to the 'Right to Water' in India

1. Introduction

The central aim of this thesis is to address major impediments in terms of existing law and policy to achieve holistic regulation of the resource in India. The potential of the rights based discourse is explored to do that in this chapter, the *human right to water* in India is interpreted by the judiciary to fall within the purview of a fundamental right. This chapter provides analysis of the extent to which realisation of this right in practice depends on its legal recognition as a human right; and the role that efficient governance and holistic regulation of the resource could play in the accomplishment of this goal.

The *right to water* is highly contestable and is a central priority for many national and international organisations.[1] The situation in India is complicated as far as the *right to water* is concerned, as it is neither recognised as a right by the legislature in any statute, nor in the constitution itself, but is interpreted by the judiciary from the existing fundamental rights in different cases brought before it. This makes it difficult to categorise either the right or the means for realisation of the right. This is precisely the reason to refer the development of the right in international forum and understand how to better realise the right in India. The rights and duties associated with the *right to water* are difficult to determine because of their over-arching impacts among different government departments and the institutions involved in the regulation of the resource. The importance of the right is undeniable and unanimously accepted at the global level,[2] but the necessary manners and techniques for securing the *human right to water for all* have yet to be developed. Indeed, recognition of the right in a national framework could be translated as the first step by a state towards the fulfilment of its positive obligations for the realisation of the right. However, the means of realisation raise many concerns, such as the availability of the resource in terms of quality and quantity; the manner of

[1] United Nations Department of Economic and Social Affairs (UNDESA), 'International Decade for Action 'WATER FOR LIFE' 2005-15'' <http://www.un.org/waterforlifedecade/index.shtml> accessed 20 Nov 2018.
[2] Committee on the Economic, Social and Cultural Rights, 'General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)' (20 January 2003) U.N. Doc. E/C.12/2002/11.

governance of the resource; its regulation; the relationship between the means of regulation of the resource and the positive means of realisation of the right, so that, for instance, in the case of poor or inefficient regulation they can be scrutinized and challenged before the judiciary. There must also be consideration of the relationship between these concerns and the realisation of the right through rights-based discourse.

This chapter is designed to explore the link between the management and regulation of water as a resource, and the realisation of the *right to water.* To do this, the chapter in section two investigates the ways in which the *right to water* has evolved internationally and examines the need for the evolution of the *right to water* as a self-contained legal right. There will then be an analysis of the mechanism of the rights-based discourse, and an application of this to the domestic jurisdiction for a better understanding of the realisation of the *right to water*. The Indian judiciary has affirmed to the *right to water* the status of a fundamental right, which is discussed in Sections Three and Four of this chapter. This is followed by an examination of the need for, and the evolution of, the *right to water* in India, it will briefly outline and analyse this journey by comparing it with the development of other economic, social and cultural rights such as the *right to food* and *right to education*. Based on the analysis conducted in Section Three and Four, this chapter possibly identifies the shortcomings of the rights-based discourse for the realisation of the *right to water*; and make the distinction between the roles played by the state while using the rights-based discourse and the means for the regulation of the resource together for the accomplishment of the desired goal.

After analysing the role and importance of the judiciary in the section four. Section Five articulates the importance of holistic regulation and better means of governance of the resource using rights-based discourse and explores several avenues of the rights-based discourse to further improve and strengthen the regulatory regime for water. This is followed by certain arguments and suggestions based on the discussions raised in this chapter. And the last section discusses and concludes the findings.

2. International Law and the Status of the 'Right to Water'

The spontaneous and ethical answer to the question - is clean freshwater a basic human right? is or should be affirmative, in general, but unfortunately the legal response

to the question has yet to be settled. The *right to water* is a central priority for many national and international organisations concerned with regulation, management and governance of the resource.[3] Its realisation depends on two prominent factors: the finite quantity of water and its vital and non-substitutable nature.[4] Because of the vitality of the resource, and its overarching impact on most if not all aspects of life, its legal categorisation is complex and subject to debate and contestation.[5] It could easily be interpreted as one of the basic ingredients of most of the rights guaranteed in international human rights instruments, such as the International Covenant for Civil and Political Rights, as well as from Social, Economic and Cultural Rights, as described below.[6]

The legal status of the *right to water* in international law arises from explicit and implied recognition of rights from existing human rights instruments. The explicit recognition of the *right to water* is evident from the recent human rights treaties, such as the Convention on the Elimination of all forms of Discrimination against Women;[7] the Convention on the Rights of Child;[8] and the Convention on the Rights of Persons with Disabilities.[9] Implicit recognition of the *right to water* is mainly argued to have its relevance from the *right to life* and *right to an adequate standard of living,* originating from International Human Rights instruments such as the Universal Declaration of Human Rights 1948 (UDHR);[10] the International Covenant on Civil and Political Rights 1966

[3] UN Department of Economic and Social Affairs (UNDESA), 'Focus Ares: Human Right to Water'- International Decade for Action 'WATER FOR LIFE' (2005-15)' <http://www.un.org/waterforlifedecade/index.shtml> accessed 20 Nov 2018.

[4] UN Water/Africa, 'Report of the Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic Development' (Africa Water Vision 2525, published by Economic Commission for Africa) 3-6.

[5] Committee on the Economic, Social and Cultural Rights, 'General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)' (20 January 2003) U.N. Doc. E/C.12/2002/11.

[6] JM Chavarro, *The Human Right to Water: A Legal Comparative Perspective at the International, Regional and Domestic Level* (Intersentia Ltd. 2015) 44.

[7] Convention on the Elimination of All Forms of Discrimination against Women (adopted by General Assembly Res 34/180 of 18 December 1979, entered into force 3 September 1981); UNTS, Vol. 1249, p. 13, as of July 2018 it has 99 Signatories and 189 Parties, Article 14 Para 2.

[8] Convention on the Rights of the Child (adopted by General Assembly Res 44/25 of 20 November 1989, entered into force 2 September 1990); UNTS, Vol. 1577, p. 3, as of July 2018 it has140 Signatories and 196 Parties, Article 24 Para 2.

[9] Convention on the Rights of Persons with Disabilities (adopted on 13 December 2006 by General Assembly Res 61/106, entered into force on 3 May 2008); UNTS Vol. 2515, p. 3, as of July 2018 it has 161 Signatories and 177 Parties, Article 28 (2).

[10] Universal Declaration of Human Rights (adopted by General Assembly Res 217 A (III) on 10 December 1948) Article 25 (1) - Right to Adequate Standard of Living.

(ICCPR);[11] and the International Covenant on Economic, Social and Cultural Rights 1966 (ICESCR).[12] These conventions confer international obligations on all parties to work towards accomplishment of the duties specified in the documents they are party to. At present however, explicit recognition is aimed specifically at individuals who are the intended beneficiary of the conventions mentioned above, such as women, children and persons with disabilities, whilst implicit recognition is for all, as covered by those conventions or treaties that provide for universal recognition and are equally applicable to all the human beings, unless restricted by law.[13] It is interesting to note that recognition of both types of covenant mentioned above has already recognised the *right to water* in one form or another. However, recognition of the *right to water* in covenant does not in itself guarantee realisation of the *right to water* in law, although it might help to initiate the implementation process.

The international community in this regard is having difficult time placing the *right to water* in one of the assigned categories. Some argue that the right should be placed in one of the existing conventions: UDHR; ICCPR or ICESCR due to its implicit recognition in these. Others question this assertion, on the grounds that it says little about the implications of the right for local governing bodies, or the manner in which the right might, or should, be realised.[14] Even if placed explicitly in a Convention or the UN Charter, the dilemma seems obvious, given the panoply of interests it touches on. If we analyse the situation, we could argue that the rights-based discourse is the means for the realisation of the *right to water* and not an end in itself.[15] The work of the Special Rapporteur of the

[11] International Covenant on Civil and Political Rights (adopted by General Assembly Res 2200A (XXI) on 16 December 1966, entered into force on 23 March 1976, in accordance with article 49, for all provisions except those of article 41; 28 March 1979 for the provisions of article 41 (Human Rights Committee), in accordance with paragraph 2 of the said article 41); UNTS, Vol. 999, p. 171, as of July 2018 it has 74 Signatories and 171 Parties, Article 6(1) - Right to Life.

[12] International Covenant on Economic, Social and Cultural Rights (adopted by General Assembly Res 2200A (XXI) on 16 December 1966, entered into force on 3 January 1976, in accordance with article 27); UNTS, Vol. 993, p. 3, as of July 2018 it has 71 Signatories and 168 Parties, Article 11 (2) Right to Food and Article 12 - Right to Health.

[13] A Cahill, 'The Human Right to Water – A Right of Unique Status': The Legal Status and Normative Content of the Right to Water', (2005) 9 (3) The International Journal of Human Rights 389.

[14] SC McCaffrey, 'The Human Right to Water: A False Promise?' (2016) 47 The University of the Pacific Law Review 221, 25.

[15] Salman MA Salman, 'The Human Right to Water and Sanitation: Is the Obligation Deliverable?', (2014) 39 97) Water International 969.

UN for the *right to water* sheds some light in context which might be helpful in overcoming the dilemma internationally community is facing.

2.1. Reports, Studies and the Advancement on the 'Right to Water' by the UN

With the changing global scenario and the realisation of the need to confer the *right to water* a status of international human right, the UN initiated the journey to explore the possible horizons for the advent of such rights. In 1997, Mr El Hadji Guisse was appointed to draft the working paper on 'protection and realisation of the right to drinking water and sanitation for all', by the sub-commission on prevention of discrimination and protection of minorities.[16] The decision was mainly influenced by the collective impact of declaration on Right to Development; Chapter 18 of Agenda 21 and the International Drinking Water Supply and Sanitation Decade. As a result, in the following year he suggested that the commission should undertake an in-depth study of the issue and its relationship with enjoyment of economic, social and cultural rights, due to its complexity and importance in the individual's life.[17] Subsequently, the Human Right commission authorised the sub-commission to appoint Mr El Hadij Guisse as Special Rapporteur in 2002 to conduct the study he has proposed earlier, at both national and international levels.[18] Consequently submitted report clarified the content of the rights as well as the legal basis for the *right to drinking water* at national and international level. He also submitted the draft guidelines for the realisation of the *right to drinking water and sanitation* which was on the line of General Comment No.15.[19] Later in 2007, the High Commissioner for Human Rights (hereinafter UNCHR) submitted the report to the Human Rights Council (hereinafter HRC) as requested by the decision of 2/104 on 27 November 2006. The study affirms;

> *That the 'UN High Commissioner for Human Rights believes that it is now the time to consider access to safe drinking water and sanitation as human right,*

[16] UN High-Commissioner for Human Rights, Sub-Commission Resolution 1997/18 (25th meeting on 27 August 1997).
[17] UN Sub-Commission on the Promotion and Protection of Human Rights, The right of access of everyone to drinking water supply and sanitation services, working paper by Mr. El Hadji Guissé, Special Rapporteur, under Sub-Commission resolution 1997/18, 10 June 1998, E/CN.4/Sub.2/1998/7, <http://www.refworld.org/docid/3b00efbf30.html> accessed 20 Nov 2018.
[18] UN Commission on Human Rights, Report on the Fifty-Eight Session (18 march to 26 April 2002) UN Doc. E/CN.4/2002/200, 393.
[19] UNCHR, 'Realisation of the Right to Drinking Water and Sanitation, Report of the Special Rapporteur, El Hadji Guisse' (11 July 2005) UN Doc. E/CN.4/Sub.2/2005/25.

> *defined as the right to equal and non-discriminatory access to sufficient amount of safe drinking water for personal and domestic use including - drinking, personal sanitation, washing of clothes, food preparation and personal and household hygiene- to sustain life and health'.*[20]

Consequently, HRC appointed Ms Catarina de Albuquerque as an independent expert in September 2008 for the term of three years to take further the study about *right to water* and prepare a compendium of best practices related to access of safe drinking water, in order to accomplish the MDGs (Goal 7 in particular).[21] During her course the HRC recalled the assembly resolution and affirmed that 'the human right to safe drinking water and sanitation' derives from 'the right to highest attainable standard of physical and mental health, as well as from the right to life and human dignity'.[22] In March 2011, her tenure was extended by the HRC and she became Special Rapporteur on the 'human right to safe drinking water and sanitation', where she was concerned with the challenges and obstacles for full realisation of the *right to water*,[23] mainly emphasising on implementation of the established right in accordance with specific content.[24] During the course of her work she touched several related issues and developed comprehensive basis for the realisation of right in every possible sense. Along with the annual report,[25] she prepared the Handbook: Comprising of nine booklets on every topic for reference to the detailed guidelines used for the realisation of the *human right to water and sanitation*.[26] The book on good practices is the result of collective learning experience from across the world, the fact-sheet on the *right to water and sanitation* and the benefits of legal

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[20] UN HRC, 'Report of the United Nations High Commissioner for Human Rights on the scope and content of the relevant human rights obligations related to equitable access to safe drinking water and sanitation under International human rights instruments', (16 August 2007) UN Doc A/HRC/6/3, para 66.

[21] UN HRC Resolution 7/22 (2008), 'Human Rights and Access to Safe Drinking Water and Sanitation', UN Doc. A/HRC/RES/7/22, para 2.

[22] UN HRC Resolution 15/9 (2010), 'Human Rights and Access to Safe Drinking Water and Sanitation', A/HRC/RES/15/9.

[23] UN HRC Resolution 16/2 (2011), 'The Human Right to Safe Drinking Water and Sanitation', UN Doc. A/HRC/RES/16/2, para 5.

[24] Catarina de Albuquerque, On the Right Track, Good Practices in Realising the Rights to Water and Sanitation (Human Right to Water and Sanitation Special Rapporteur with Virginia Roaf), <http://www.worldwatercouncil.org/fileadmin/wwc/Library/Publications_and_reports/OnTheRightTrackBook.pdf accessed 20 Nov 2018.

[25] UN Water, 'Annual Report of the Special Rapporteur on the Human Rights to Water and Sanitation presented at HCR', 12 September 2013, <http://www.ohchr.org/EN/Issues/WaterAndSanitation/SRWater/Pages/AnnualR eports.aspx> accessed 20 Nov 2018.

[26] UN Human Rights Office of the High Commissioner, 'Realizing the human rights to water and sanitation: A Handbook', <http://www.ohchr.org/EN/Issues/WaterAndSanitation/SRWater/Pages/Handbook.aspx> accessed 20 Nov 2018.

entitlements associated with such right were some of other contributions for general use of public.[27]

The course of the two Rapporteurs from 1997-2015, had created phenomenal advancement in the understanding of the *right to water and sanitation* at every possible level. Many resolutions were passed in the UN's General Assembly, from time to time in order to accept and acknowledge the right and to initiate the global proceedings for its accomplishment based on the findings mentioned above. Last 2-3 decades have not only been dedicated for the development and realisation of the *right to water*, but its importance, need and awareness have all together set the global momentum for the cause. Finally, on 17th December 2015, the UN has adopted the resolution recognising the 'human right to safe drinking water and sanitation'.*[28]* Subsequently, on 25th December 2015, the Sustainable Development Goals were adopted with goal 6 specifically dedicated to clean water- 'to ensure availability and sustainability of water and sanitation for all'.[29] Along with the textual advancement, the international literature on freshwater resource and the understanding and the importance of the existence of right, as well as its recognition had inspired the manner these rights and responsibilities could be addressed and taken to the next level. To further the cause, section below will analyse the importance of the recognition of the right and the confirmation of the legal status of that right, in context.

2.2. The Importance of Recognition and Confirmation of Legal Status to the 'Right to Water' in its Realisation

The question now arise is: why is recognition of the *right to water* and its international and domestic legal status so important? This section investigates this query, by analysing the mechanism of the rights-based discourse designed for economic, social and cultural rights (ESC rights), by using the *right to water* in general as a reference, and its practical implication in the Indian jurisdiction, as an example.

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[27] UN Human Rights Office of the Commissioner of the Human Rights, 'The Right to Water: Fact Sheet No.35', <http://www.ohchr.org/Documents/Publications/FactSheet35en.pdf> accessed 20 Nov 2018.
[28] UN, 'The Human Rights to Safe Drinking Water and Sanitation' (adopted by the General Assembly on 17 December 2015, A/RES/70/169).
[29] United Nations, 'Sustainable Development Goals', Goal 6 – Clean Water and Sanitation.

The end of the Second World-War saw the advent of the recognition of human rights by means of a rights-based discourse. In the present day, the world as a whole is facing myriad environmental crisis, including a crisis in the availability of freshwater.[30] In this context, to argue in favour of the importance of the legal status of the *right to water*, an understanding of the emergence of such need to protect the resource using the language of right is essential. The beginning of the language of rights starts with the intent to regulate the object and is followed by the requirement to intensify the regulation by means of protection and conservation, as it was created and in line with the original intent or objective. The element of conservation and protection both encompasses positive obligations for which legal status provides both strength and mechanism.[31]

Freshwater in the present era is a scarce resource and vital for all the life-forms including humans. It therefore needs to be preserved, conserved and recognised as a legal right. The assertion of the legal right to *right to water* initiates correlative positive obligations associated with the group of social, economic and cultural rights, which promotes efficient governance of the resource. Besides, the regulation of the resource prioritises the need and then aims to fulfil these needs. Therefore, if the *right to water* attains the status of a legal right in a given jurisdiction, then the realisation of the right is more likely to be assured by the local governing body.[32] By virtue of this, the duties imposed upon the authority will be both negative and positive: negative in a sense that it restricts others from interfering with the assuring of the right, and positive in a sense that the obligation will make them regulate the resource better.[33]

The need to regulate, conserve and protect the freshwater resource has been acknowledged by the United Nations in the form of human rights obligations[34] and is

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[30] C Tortajada, *Increasing Resilience to Climate Variability and Change: The Roles of Infrastructure and Governance in Context of Adaption* (Springer 2016) 1.

[31] AD'Amato and Sudhir K. Chopra, 'Whales: Their Emerging Right to Life' (1991) 85 American Journal of International Law 21, 62.

[32] DG Evans, 'Human Rights and State Fragility: Conceptual Foundations and Strategic Directions for State-Building' (2009) 1 (2) Journal of Human Right Practice 181, 207.

[33] SA Shah, 'The Provision and Violation of Water Rights (the Case of Pakistan): A human Rights Based Approach' in Julien Chaisse (edn), *Charting the Water Regulatory Future Issues, Challenges and Directions: New Horizons in Environmental and Energy Law series* (Edward Elgar Publishing 2017) 167.

[34] Government Obligations, 'Human Rights Advocacy and the History of International Human Rights Standard', <http://humanrightshistory.umich.edu/accountability/obligationr-of-governments/> accessed 20 Nov 2018.

supported with scientific evidence.[35] The human rights framework further divides the obligations into three components, namely: the obligation to *Respect, Protect and Fulfil*.[36] The obligation to *respect* demands the state parties not to interfere with the enjoyment of the *right to water*, which gets translated as negative right to restrain any third party from interfering in such enjoyment. This is easier to achieve and comes into practise by mere recognition within a territory by the authorised institution. Next comes the obligation to *protect,* which requires state party to protect the guaranteed right and to ensure its protection by positive means.[37] Protection here calls for the adoption of stringent measures by institutions like the police and the courts, to restrain others from interfering with such rights, and to punish them accordingly if they do. This calls for the initiation of positive obligations on the part of domestic and international institutions.[38] However, these kinds of positive obligations are translated as the duty of the government, as it was conceived in the era of the realisation and establishment of fundamental civil and political rights. There lies no hardship in implementation of the obligation to *respect* and *protect* in this regard*,* furthermore, this has already been achieved in some states, for instance in India by the Judiciary, by ascertaining the *right to water* as the fundamental right derived from Article 21 – the *right to life.*

The obligation *to fulfil* is an obligation which is different by nature from the right to protect, and thus demand a different approach which seems specific to the group of economic social and cultural rights highlighted earlier. The Covenant for Economic, Social and Cultural Rights (CESCR) has divided the obligation to *fulfil* into further three components: *to facilitate, promote and provide.*[39] The obligation to *facilitate* demands a state to take positive measures, to assist individuals and communities for the enjoyment

[35] RD Robarts and RG Wetzel, 'The Looming Global Water Crisis and the Need for International Education and Cooperation' (SIL News, Volume 29 Jan 2000) 1, <http://limnology.org/the-looming-global-water-crisis/> accessed 20 Nov 2018.
[36] UN Human Rights Office of the High Commissioner, 'Key Concepts on ESCR's - What are the Obligations of States on Economic, Social and Cultural Rights?' <http://www.ohchr.org/EN/Issues /ESCR/Pages/Whataretheo ligationsofStatesonESCR.aspx> accessed 20 Nov 2018.
[37] ibid.
[38] UNGA, 'Promotion and Protection of all Human Rights, Civil, Political, Economic Social and Cultural Rights, Including the Right to Development' (1 July 2009) A/HRC/12/24 at Para 64.
[39] Committee on the Economic, Social and Cultural Rights, 'General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)' (20 January 2003) U.N. Doc. E/C.12/2002/11. Para 25.

of the *right to water*.[40] It is primarily supply oriented, which calls states to take appropriate measures to facilitate such demand by making positive efforts. The second component is *to promote,* which requires states to raise awareness of the resource and its importance by every means possible.[41] This again requires states to be positively involved. In doing so, the state should be initiating public dialogue. The third component is *to provide:* this obligation is the most important and oriented towards demand for the resource, for which the state must ensure holistic and sustainable regulation of the resource. This part of the obligation to *fulfil* is beyond the realm of recognition of a right, and therefore conferring the right legal status alone is not sufficient. In the context of India, this concern is related to the positive obligation arising on the state towards the holistic regulation of the resource. This is what we aspire to achieve by enhancing the means of regulation of the resource and by ensuring the access to right to water for all.`

The importance of the recognition of right in general is evident: it paves the way for the protection, preservation and conservation of rights, based on the requirement arising from the right and the ability of the institution conferring such rights on an equal basis to all. Although, there is a difference between recognising a right and conferring its legal entitlement, but it is equally true that the second requisite deeply thrives on the foundational existence of the first one.[42] Moreover, the framework for its fulfilment as suggested by the rights-based approach is concise, and has proved efficient over the course of time. Therefore, conferring the status of a legal right to the *right to water* is virtuous and certainly an essential step towards its realisation.[43] As the water crisis becomes more pressing, the recognition of such rights and their legal status in the international as well as the domestic domain becomes critical.[44] Before we try to translate

[40] C-de Albuquerque, 'Water and Sanitation are Human Rights: Why does it matter?' in LB de Chazournes, C Leb and M Tignino, *International Law and Freshwater: The Multiple Challenges* (EE Publishing House 2013) 60.
[41] ibid.
[42] AD'Amato, *Jurisprudence: A Descriptive and Normative Analysis of Law* (Martinus and Nijhoff Publishers 1984) 180.
[43] M Langford, 'The United Nations Concept of Water as a Human Right: A New Paradigm for Old Problems?', (2005) 21 (2) International Journal of Water Resources Development 273.
[44] AD'Amato and SK Chopra, 'Whales: Their Emerging Right to Life' (1991) 85 American Journal of International Law 21, 62.

this understanding to a domestic context, it is important to analyse the status of the *right to water* in India.

3. The Status of 'Right to Water' in India

Part III of the Indian constitution has enumerated certain fundamental rights and these rights are of the highest importance when compared to other constitutional or legal rights available within the territory.[45] The customary practice of the judiciary has been to interpret the *right to water* as an integral part of the *right to life*[46] in various case laws arising from different circumstances. This is similar to Resolution 15/9 adopted by the United Nations Human Rights Council by consensus, which had recalled the General Assemblies resolution 64/292 of 28th July 2010 and affirmed that:

> *The human right to safe drinking water and sanitation is derived from the right to an adequate standard of living, and inextricably related to the right to the highest attainable standard of physical and mental health, as well as the right to life and human dignity.*[47]

Another similarity to the general assembly's resolution is that the *right to life* enumerated in Article 21 of the Indian Constitution applies to all citizens and non-citizens alike, unlike the other fundamental rights, which are mostly oriented for the benefit of Indian citizens. This satisfies the requirement to be applicable to all the individuals within the territory of India without any discrimination.[48] However, the constitutional text still lacks explicit recognition of such a right, although the judicial interpretations have influenced the state to formulate the statutes for regulation of water with explicit recognition of the human *right to water* and the policies for the regulation of the resource also acknowledge/recognise such need.[49] Therefore, it can be said that even in the absence of any legally binding instrument which recognises such a right, the states and the governments are willing to work towards the realisation of the *right to water* within

[45] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Part III.
[46] Supreme Court of India, *Subhash Kumar v. State of Bihar and Ors* 1991 AIR 420, 1991 SCR (1) 5.
[47] UNGA Doc. A/HRC/RES/15/9' 6th Oct 2010 Para 3.
[48] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 21.
[49] Government of India, The Maharashtra Water Resources Regulatory Authority Act No. XVIII OF 2005.

their capacity. Likewise, the overall mind-set of the state, judiciary and the government are supportive of the opinion of the *human right to water for all*.

Fundamental rights are the group of justifiable civil and political rights, whereas the directive principles of state policy are listed as a non-justifiable group of socio-economic and cultural rights specified in Part IV of the Indian Constitution. As the name suggests, these are the directive principles for the Indian provincial states to follow and to design their policies for the progressive realisation of the rights enumerated or a means for the realisation of the ESC rights.[50] However, this distinction is not entirely rigid, because the higher judiciary (the Supreme Court and the High Courts of India) has interpreted the fundamental rights in various occasions, either to make a connection between the two groups mentioned above or to expand their ambit to accommodate the change,[51] one such example is Article 21: the *right to life*. The derivation of a fundamental right, the *right to life* in India is not confined to mere existence, but also guarantees 'right to life with human dignity'.[52] This phrase has been defined extensively by the higher judiciary in various case laws, and the extensive elaboration and interpretation given to the word dignity attached to the *right to life* is one of the most prominent factors for the broader interpretation of the *right to life* in national jurisdiction.[53] However, this seems appropriate in the absence of an effort by the legislature for the recognition or realisation of the *right to water*. In circumstances like this, the courts often look back to the constitution as an independent source of rights and declare other relative rights from the existing ones only if they fit within the constitutional philosophy.[54] Such rights are known as *penumbral* rights and the rights originated by this procedure from the Indian constitution provide good examples of this judicial practice.

The judiciary has also clarified that the *right to life with dignity* does not restrict itself to mere animal existence, but extends to the availability of basic necessities for the dignified life of an individual, such as food, shelter, water, education, free movement and

[50] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 37 & 38.
[51] T Khaitan, 'Directive Principles and the Expressive Accommodation of Ideological Dissenters', (2018) 16 (2) International Journal of Constitutional Law 389.
[52] Supreme Court of India, *Maneka Gandhi v. UOI*, AIR 1978 SC 597.
[53] Supreme Court of India, *Peoples Union for Democratic Rights v. UOI,* AIR 1982 SC 1473.
[54] DK Anton and DL Shelton, *Environmental Protection and Human Rights* (CUP 2011) 476.

so on.[55] However, Article 21 - the *right to life* in the Constitution of India is worded in negative terms, but the judicial interpretation in various case laws have made the right inclusive of several other dimensions of life, giving it greater purpose. Indeed, it is clear that the article has both negative and affirmative dimensions attached to it, thus confirming the origin of positive rights from such fundamental rights guaranteed to individuals.[56] The following section deals with the cases and examines the judicial interpretation emphasising on and leading to the development of the *right to water* in India.

4. Judicial Interpretation of the 'Right to Water' in India

The Indian Constitution is the result of relevant borrowed principles from across the world. After independence was gained from the British Empire, the primary goal for the framers of the Indian Constitution was to protect and cherish the freedom acquired after prolonged colonial rule. As a result, a diverse set of principles taken from across the world were incorporated to safeguard the interests of a diverse society. To protect citizens and to facilitate the development of the nation as an independent and strong nation, it became necessary to protect the true sense of the object and purpose of the constitution by means of an independent judiciary.[57] A judiciary is one of the pillars of a democratic federal state. Judicial priorities have continually changed to adapt to changing scenarios, and as a result existing laws have been modified and amended to fulfil the constitutional objectives, and to accommodate the changes needed in the society.[58]

The advancement of fundamental rights for the protection of environmental rights (or so called third-generational rights) through means of litigation has been customary in India since the 1970s.[59] The protection of such rights by bringing them within the ambit of enlarged interpretation of existing fundamental rights, and later, the development of relevant laws and policies for keeping the promise so made, has been the real motivation

[55] Supreme Court of India, *Francis Coralie v. UT of Delhi*, AIR 1978 SC 597.
[56] MP Jain, *The Constitutional Law of India* (45th ed. CLA Publishers 2008) 230.
[57] D Seckler, Randolph Barker and Upali Amaeasinghe, 'Water Scarcity in the Twenty-first Century' (1999)15 (1-2) Water Resource Development 29.
[58] PN Bhagwati, 'The Role of the Judiciary in the Democratic Process: Balancing Activism and Judicial Restraint' (1992) 18 (4) Commonwealth Law Bulletin 1262.
[59] MG Faure and AV Raja, 'Effectiveness of Environmental Public Interest Litigation in India: Determining the key Variables', (Fall 2010) 21 (2) Fordham Environmental Law Review 239.

for reframing the administrative and legislative institutions and functionaries.[60] Evidently, the recognition of 'universal primary education' as an explicitly recognised fundamental right and the emergence of a separate programme to satisfy the *right to food,* have been remarkable achievements made through the means of rights based litigation. Similarly, the Court has interpreted the *right to water* as an integral part of Article 21. However, prominent cases in this matter relate to different challenges regarding the notion of the *right to water*, and expose some of the flaws of the Indian constitutional and legal framework.

In the case of *Subash Kumar vs State of Bihar*[61] the question was, does the right to pollution free water, qualifies as one of the parameters arising from the liberal explanation of the notions of Article 21? In response to the concern so raised, the Supreme Court stated that:

> Art-21 of the Constitution includes the right of enjoyment of pollution free water and air for full enjoyment of life. If anything endangers or impairs that quality of life in derogation of laws, a citizen has right to have recourse to Art-32 of the Constitution for removing the pollution of water or air which may be detrimental to the quality of life" [30, writ petition 1991 AIR 420 (SCC 196/1991)].

The Supreme Court recognised the *right to water* as it was interpreted and originated from within the *right to life*, but the recognition so made was from a protectionist view point and the protectionism so made was negative protectionism. This was applicable only against negative interference by a third party (inclusive of state). However, the positive obligation of the state for the realisation of such a right was not the matter of concern in this case, and the petition so made was dismissed on technical grounds. Nonetheless, the clear judicial stand regarding the recognition of the right to water and its relevance as a fundamental right was taken by the court.

In the case of *MC Mehta v Kamal Nath,*[62] the Supreme Court has directed the use of natural resources in public trust by the state for the people at large. This case has been the landmark judgement as far as the governance of the resource is concerned, in

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[60] ibid.

[61] Supreme Court of India*, Subhash Kumar v. State of Bihar and Others* 1991 AIR 420, 1991 SCR (1) 5; Writ Petition (1991) AIR 420 (SCC 196/1991) (actual quote from the judgement).

[62] Supreme Court of India, *MC Mehta v. Kamal Nath & Others* (1996) 1 SCC 388 (further detailed account of the case can be found in chapter three of this thesis).

conjunction with its realisation as a community resource. Clear recommendations were made for the governing body regarding the management of the resource, which stated explicitly that 'such resource should not be converted into the resource for private ownership in any case'.[63] Conversely, the judgement again has recognised such right and protected it from negative interference. In this case, the court directed the polluters of groundwater and every other source of water in the vicinity to stop polluting the resource by direct or indirect means. The order passed clearly stated that not adhering to the order will be considered as a direct case of the violation of fundamental rights. This again confirmed the existence of the *right to water* as the fundamental right.

The judicial pronouncement had confirmed the legal status of the public trust doctrine, determined its content and broadly interpreted its scope in *MC Mehta v Kamal Nath, 1997* and *State of West Bengal v Kesoram Industries, 2004*. Supreme Court of India declared that all surface water, all the natural resource[64] and the groundwater[65] must be regulated in trust by the state for the public at large. In also implies that the state while acting as the trustee have the fiduciary duty of care and responsibility to the public. The court in *Fomento Resorts and Hotels Ltd v Minguel Martis*, confirmed the importance of the doctrine and further said, that the trustee cannot convert such resources into private ownership, or for commercial use because the duty of a trustee particularly applies to the future generations.[66] This was the beginning of imposing positive duty and obligation on the state for the realisation of the right.

Furthermore, the court in a case has also placed positive obligations on the government to fulfil the obligations arising from the *right to water*, stating that it is the responsibility of the state under Article 47 (directive principles of state policy Part IV) of the Constitution to improve the health of the public by providing unpolluted drinking water.[67] While interpreting the responsibility of the state in that regard, the courts have stretched their mandate saying that, the state 'is bound to provide drinking water to

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[63] ibid.
[64] Supreme Court of India, *MC Mehta v Kamal Nath and Others*, 1996 1 SCC 388, para 21.
[65] Supreme Court of India, *State of West Bengal v Kesoram Industries Ltd. and Others* (15 January 2004) Appeal (civil) 1532 of 1993.
[66] Supreme Court of India, *Fomento Resorts and Hotels Ltd v Minguel Martis (2009*) 3 SCC 571, para 36, 40.
[67] High Court of Madhya Pradesh, *Hamid Khan vs State of MP* (1996) AIR 1997 MP 191 Para 6.

public' as its foremost duty.[68] Indeed, it could be argued that failure on the part of the state will amount to violation of the *right to life.*[69] Thus, the positive obligations in this regard seem to have originated from the judicial interpretations, but not translated into practise. The recognition, confirmation and acceptance of the *right to water* as a fundamental right within the expanded notion of the *right to life* had been explicit by the abovementioned case laws, but mainly oriented towards its recognition in the form of a negative right. This is notwithstanding the fact that the protection of the right from negative discourse is easier and has been the foundation for realisation of most if not all civil and political rights. This means of protection of rights is comparatively easy to manage by the government in comparison to the positive obligations so imposed for the realisation of the economic, social and cultural rights.[70] Thus, it is preferred as the most common practice by the judiciary for the protection of rights.

The recognition of the *right to water* and its protection against negative interference is settled, but that does not mean that the recognition by means of positive obligation is not possible.[71] However, the judicial approach towards these issues reflects that the judiciary has been trying to use the right-based discourse to direct, shape or strengthen the governance of the resource.[72] By articulating in clear terms that must be regarded as the foremost duty of the government.[73] It is this approach this chapter and broadly this thesis undertakes to investigate. As far as inconsistent judicial decisions and the approach taken by the court while dealing with the issues related with water sector and the *right to water* in different capacities are concerned, they remain the concern of Part Four of this thesis.

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[68] High Court of Kerala, *Vishala Kochi Kudivella Samarkshana Samithi vs State of Kerala* (2006) (1) KLT 919, Para 3.
[69] ibid.
[70] Jean-François Akandji-Kombe, 'Positive obligations under the European Convention on Human Rights: A Guide to the implementation of the European Convention on Human Rights' (2007) 7 Human Rights Handbooks.
[71] Human Rights Library, 'Human Rights in the Administration of Justice: Chapter 14: The Role of the Courts in Protecting Economic, Social and Cultural Rights' University of Minnesota, <http://hrlibrary.umn.edu/monitori ng/adminchap14.html> accessed 20 Nov 2018.
[72] P Cullet, 'Water Sector Reforms and Courts in India Lessons from the Evolving Case Law' RECIEL 19 (3) 20103 328, 329 (ISSN 0962 8797).
[73] High Court of Karela, Vishala Kochi Kudivella Samarkshana Samithi v. State of Kerala 2006 (1) KLT 919 (20 February 2006) available at <https://indiankanoon.org/doc/665405/> accessed 20 Nov 2018.

If we look back at judicial practice, the economic social and cultural rights in India are first recognised or interpreted as a fundamental right, and later the positive liabilities/obligations are designed and imposed on the government for their fulfilment. This type of right and its recognition takes a long time to materialisation due to the negotiation between all the branches of democracy, on the one hand, and on the other, the need to create, deploy and establish the means for their realisation.[74] This has been observed in the case of the *right to food* and *right to primary education* which are discussed in detail in the following sub-sections. Given the fact that once the need for such rights was realised by the government, their fulfilment was progressively achieved by a rights-based discourse. The question thus arises, if these two rights can be accommodated as fundamental rights, then what makes the *right to water* so different? To answer this question, it is important to analyse the journey of those rights, and to consider the importance of the management, regulation and governance of the resource due to its unique vital status.

4.1. An Analogy between the Maturation of the Status of 'Right to Food' and 'Right to Water' as a Fundamental Right

India is a democratic country, therefore legal action to make the state responsible for its liability seems an acceptable choice. This analysis grasps the essence of constitutional layout towards the recognition of ESC rights and the combined efforts of judicial, administrative and legislative bodies in that regard. India witnessed one such public interest litigation (PIL) brought to the higher judiciary by a public-spirited person for the public good.[75] This PIL attracted the attention to an important issue which had not previously attained priority in parliamentary discussions.[76] The Indian Judiciary had not just dignified the effort by bringing the issue to the forefront, but also by clarifying the content of the right, as well as by ascertaining the constitutional and legal mandate for its existence. The *right to water* is one such right which has already started its journey in

[74] UN, 'Economic, Social and Cultural Rights: Handbook for National Human Rights Institutions' (United Nations Publications 2005) 38.
[75] MG Faure and AV Raja, 'Effectiveness of Environmental Public Interest Litigation in India: Determining the key Variables', (Fall 2010) 21 (2) Fordham Environmental Law Review 239.
[76] A Kumar, 'A Global Perspective on Human Rights, 'Public Interest Litigation and the Advancement of Constitutional Rights in India: An Appraisal' (Oxford Human Right Hub), <http://ohrh.law.ox.ac.uk/public-interest-litigation-and-the-advancement-of-constitutional-rights-in-india-an-appraisal/> accessed 20 Nov 2018.

India, so it will be insightful to look at similar cases with an objective to determine the path best suitable for the recognition of the *right to water* as a fundamental right in its entirety.

The *right to food* is one of the most important ESC rights, and the legal action by means of PIL was brought before the Supreme Court of India with the intention of exploring the possibilities to make it a fundamental right.[77] Influenced by legal action, the Supreme Court continued to maintain its pro-active image by protecting the rights of citizens within the well-designed legal framework at its disposal. Although, the case continued for some eight years, it had gained constant support and supervision from the court at every possible level.[78] In the meantime, the Supreme Court appointed several committees to monitor the implementation of relevant schemes at every level, from top to bottom. In addition to constant surveillance, the court also issued several interim orders which have successfully and progressively converted the government policies into legal entitlements for the benefit of the people.[79] The Indian judiciary had in this case exceeded its previous efforts at being pro-active with an approach of continuous orders for the realisation of the *right to food*. These continuous orders were later legally recognised as *continuing mandamus:*[80] an elaborate and innovative method to use the existing writ of *mandamus* to accomplish the desired goal set by the constitution. In this case the judiciary had successfully restated peace among a state suffering from drought, and in doing so preserved the people's faith in government.[81] This approach was also evident in the 'Ganga River Case' which proved very beneficial to the general public, once again restating the interests of society and environment above corporate interests and the corrupt and in-efficient orders of the government.[82]

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[77] Supreme Court of India, *People's Union for Democratic Republic v. Union of India & Others* (1982) AIR 1473, 1983; SCR 1, 456.
[78] ibid.
[79] L Birchfield and J Corsi, 'The Right to Life is the Right to Food: People's Union for Civil Liberties v. Union of India & Others' (2010) 17 (3) The Human Rights Brief: Centre for Human Rights and Humanitarian Law, WCL Journal and Law Review 1.
[80] KG Balakrishnan, Honourable Chief Justice of India, 'The Role of the Judiciary in Environmental Protection' (in DP Shrivastava Memorial Lecture at High Court of Chhattisgarh, Bilaspur 20 March2010).
[81] ML Banda, 'Improving Access to Justice: Recent Trends and Developments in Procedural Environmental Rights' (2015) III UNITAR- Yale Conference on Environmental Governance and Democracy: Human Rights, Environmental Sustainability, Post-2015 Development and the Future of Climate Regime 9.
[82] Supreme Court of India, *T.N. Godavarman v UOI and Others* (1997) 2 SCC 267; and Supreme Court of India, *Vineet Narain V. UOI* (1998) 1 SCC 1998.

As a result, the *right to food* was interpreted as an integral part of the *right to life,* by making it a fundamental right. To ensure its realisation, Part IV of the Constitution was amended with non-enforceable guidelines for the state to act upon. As soon as the *right to food* was made the fundamental right by clear judicial mandate stating that *right to food* qualifies form within the scope of the *right to life*, the Article 47 and Article 39(a) of Part IV of the Constitution were amended in a way to support the legal entitlement associated with the *right to food*. Consequently, turning those directive principles into legal obligations for the government to give effect to the newly declared *fundamental right to food* based on their ability. This is how the declaration of the status of a fundamental right to food imposed positive obligations on the state for its fulfilment.[83] It also led to the enforcement of co-relative legal entitlements arising out of laws and policies designed to give effect to such rights of the people. Non-fulfilment of such would initiate legal proceedings, encouraging the governing bodies to be strict in their actions and further creating the possibility for judicial inspection in case of non-fulfilment, thus converting the nature of directive principles of state policies from being legally non-enforceable to enforceable. This has been an excellent example for the implementation of an ESC right by incorporating it within the constitutional framework of the country.[84] This is also reflective of the political will and legal capacity of the country to realise its duty for the fulfilment of social obligations through a rights-based discourse.[85]

Based on the interpretation of the *right to life* it seems appropriate to accommodate the *right to food* within the expression, because without guaranteed *right to food* the realisation of the expression of *right to life with dignity* could not be exercised. However, the means to realise the *right to food* had similar implications to the *right to water*, but it had some prominent deviating limitations too. As far as the *right to food* is concerned, the government was willing to take this challenge and the judiciary could confirm such a right as a fundamental right, as well as impose positive obligations on the

[83] J Kothari, 'Social Rights and the Indian Constitution', 2004 (2) Law, Social Justice & Global Development Journal (LGD), available at <http://www.go.warwick.ac.uk/ elj/lgd/2004_2/kothari> (last accessed on 20 Nov 2018).
[84] L Knuth and M Vidar, 'The Right to Food: Constitutional and Legal Protection of Right to Food around the World' (Food and Agricultural Organisation, Rome 2011).
[85] Government of India, National Food Security Act (NFSA) 2013 (Department of Food and Public Distribution, Ministry of Consumer Affairs, Food and Public Distribution).

state for its realisation.[86] This was mainly for two reasons; firstly, because the production of food could be increased many-fold; secondly, the food could be imported from other location if needed.[87] By contrast, in case of water the situation is not that easy, as water is impossible to produce and very difficult to import in a sufficient quantity as to realise the *right to water for all*.[88] Therefore, giving the status of a fundamental right to the *right to water* is one thing, but making it a positive obligation on the part of the state is another.

In this case the *right to food* is accommodated within the existing premise of *right to life*, but the analysis shows that in case of *right to education* even though its premise was rooted in the *right to life,* it has been explicitly recognised as a fundamental right in Part III of the Indian Constitution.

4.2. An Analogy between the Maturation of the Status of 'Right to Education' and 'Right to Water' as the Fundamental Right

The *right to education*[89] is another ESC right which has gained the status of a fundamental right due to explicit recognition through constitutional amendment. Soon after independence, the country wanted to make the *right to education* a reality, but could not succeed in reaching positive outcomes for several decades using the conventional legislative and political means. Then the matter was brought before the judiciary in 1992, and the Supreme Court declared the *right to education* as embedded in the *right to life with dignity*.[90] The declaration gained momentum and reinforced the government's effort by adopting a rights-based discourse for realisation of their political goals. To speed-up the execution of the judicial decision, the government have initiated classic parliamentary procedure in both houses of parliament, with an intent to pass the bill for the maturation of the *right to education* as a fundamental right. The proceeding

[86] SM Dev, 'Right to Food in INDIA', (2003) Working Paper No. 50: Centre for Economic and Social Studies, Hyderabad.
[87] UN Conference on Trade and Development, 'Addressing the Global Food Crisis Key Trade, Investment and Commodity Policies in Ensuring Sustainable Food Security and Alleviating Poverty' (UN: New York and Geneva 2008) 21.
[88] B Chellaney, *Water, Peace, and War: Confronting the Global Water Crisis* (Rowman and Littlefield 2015) 141.
[89] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 21 A.
[90] Supreme Court of India, *Mohini Jain v. State of Karnataka* (1992) 3 SCC 666.

initiated the 93rd Constitutional Bill,[91] which was passed from both houses of parliament and later received an assent from the President of India, giving effect to the 86th Constitutional Amendment Act of 2002,[92] which inserted Article 21-A in Part III of Indian Constitution, creating the *right to free and compulsory education for all those aged 6 to14.*

To give effect to newly formed Article 21-A, Articles from Part IV (DPSP) and IV-A (fundamental duties) were also amended to create correlative impact.[93] Article 45 from Part IV was amended to ensure that '*the State shall endeavour to provide early childhood care and education for all children until they complete the age of six years´.*[94] By means of this amendment it became the responsibility of the state to provide basic healthcare and protection to children up to the age of six. This acted as the pre-condition for ensuring that the child is physically and mentally capable to attain the benefit of 'free and compulsory education'.[95] Later, the amendment in Part IV-A, makes it the fundamental duty for every parent or guardian to provide opportunities for their children to access the free education guaranteed by the state.[96] Thus, the Eighty-Sixth Amendment Act made the right to education a legal entitlement, enforceable before the law. By incorporating simultaneous changes in Part IV and IV-A, the act enhanced the positive obligation imposed on the state to work towards fulfilment of the legal entitlement, so created by means of a fundamental right.

With the changing mind-set of society and the political will of the state towards education, several other means were incorporated to make sure that the education and health of children is the basic priority of the state to be taken care of by fulfilling their social obligations. In this regard, the order, passed by the judiciary, to provide a cooked mid-day meal to each child in school as part of the *right to food* proved revolutionary.[97] Thus, by incorporating the progressive accomplishment of the *right to food and right to education*, it was evidently realised by the government that ESC rights are inter-related,

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[91] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) (Ninety-third Amendment) Bill, 2001 (insertion of article 21A, substitution of article 45 and amendment of article 51A).
[92] ibid. Eighty-Sixth Amendment, ACT, 2002 (12 December 2002).
[93] ibid.
[94] ibid Article 45.
[95] ibid Article 21-A.
[96] ibid Article 51-A.
[97] ibid.

with the aim of the overall development of society, which resulted in the inter-linkage of the *right to education* with *right to food*.[98] The constitution ensured that the realisation of the ESC right became the responsibility of government, which is enforceable before law in case of non-fulfilment.[99]

Similarly, drawing the assertions from both the aforementioned rights, the development of the *right to water* could be guided as well. Moreover, it will be safe to say that the judicial intervention to give clarity to the right, its meaning and means for realisation as well as the clarification of their constitutional and legal mandate, is of prime importance. Arguably, both the rights mentioned above are derived from the notion of the *right to life with dignity.* Hence the importance of the *right to water* for the life of an individual, and its relevance to human dignity is undeniable.[100] Although, the hardship with regard to water is due to the existing contradictory legal rights associated with water in different capacities in the same jurisdiction. Unless this is not taken care by the legislature of the state the judiciary is limited in its scope and capacity as to what it can achieve using rights-based approach.[101]

However, the assertion imposing positive obligations on the government in a strict sense by the judiciary seems far-fetched, unless there are correlative duties to ensure such rights can also be created. Management of the freshwater as a resource is the key factor for the realisation of the rights-based aspect associated with it.[102] It makes pragmatic sense if we have a resource available in sufficient quantity and quality and the means to keep that supply static. This might counter-balance the reluctant attitude toward recognition of the *right to water* as a fundamental right in a positive sense or as an independent fundamental right. However, the realisation of the right is very much the

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[98] Government of India, Department of School Education and Literacy, 'Mid-Day Meal Scheme' (1995) Ministry of Human Resource Development, Government of India, <http://mhrd.gov.in/mid-day-meal> accessed 20 Nov 2018.

[99] D Shelton, 'Human Rights, Environmental Rights, and the Right to Environment' (1992-92) 28 Stanford Journal of International Law 103.

[100] International Covenant on Economic, Social and Cultural Rights (adopted by General Assembly Res 2200A (XXI) on 16 December 1966, entered into force on 3 January 1976, in accordance with article 27); UNTS, Vol. 993, p. 3, as of July 2018 it has 71 Signatories and 168 Parties, Article 11 and 12.

[101] P Cullet, 'Water Sector Reforms and Courts in India Lessons from the Evolving Case Law' RECIEL 19 (3) 20103 328 (ISSN 0962 8797).

[102] UN Water, 'Ways to Realise the Human Rights to Water and Sanitation', (Water and Sustainable Development: From Vision to Action, UN Annual International Zaragoza Conference, 15-17 January 2015).

issue of availability of the resource and is quintessentially an issue of the manner resource is regulated and governed in a given territory. This thesis examines this from several dimensions with an effort to enhance the regulation of freshwater within the country and to ensure freshwater security by aiming for the holistic regulation of the resource. Now the question is what rights-based discourse has to offer and how can that avert or mitigate the crisis.

5. Rights-Based Discourse – A Choice or the only Option?

The concluding arguments regarding the recognition of the *right to water* arise from different perspectives. However, the recognition of ESC rights is not as big a problem, as its implementation. The question we are trying to answer is not that whether these rights qualify as rights, but how do we convert such rights into legal entitlements? How can it assist in enhancing holistic regulation of the resource? The challenge lies in the fulfilment of positive obligations by recognising them as legal entitlements and further by working towards their accomplishment by sharing responsibility.[103]

As it has been argued, in personal life we do not accept from nature or the world to owe us living, but in public life we accept that from the state. The statement so made seems appropriate, but its implication does not factually qualify in the eyes of the author. Arguably, nature provides abundance for living but to extract the required from that abundance is our task as a human being to sustain life. And the concept of sovereign state is not natural, nor was it found in nature, but crafted by humans to govern and rule a particular territory. Consequently, the area whether ruled by a king or by the democratic government thrives on the concept of the welfare of the state.[104] The modern sovereign states do not merely have the responsibility to provide necessities to its subjects,[105] but it is the legal duty and obligation which falls on the governing body based on the political set-up in a state.[106] Therefore, the social and economic rights whether qualify as rights in a given set-up or not, they do qualify as basic necessity for the welfare of an individual

[103] Salman MA Salman, 'The Human Right to Water and Sanitation: Is the Obligation Deliverable?' (2014) 39 97) Water International 969.
[104] A Cassese, 'States: Rise and Decline of the Primary Subjects of the International Community' in B Fassbender and A Peters, *The Oxford Handbook of the History of International Law* (OUP 2012).
[105] M Koskenniemi, 'What Use for Sovereignty Today?' (2011) 1 Asian Journal of International Law 61-70.
[106] UN, 'Governments Primary Responsibility for Essential Public Services Stressed by Speakers in Social Development Commission Debate' SOC/4638 (Meeting Coverage and Press Releases, 5 February 2004).

and by extension for the welfare of the state. Creation of legal entitlement for the accomplishment of such rights essentially helps to lay the foundational work for the welfare state.

As proclaimed by the international law that the modern sovereign state has the 'responsibility to protect' its citizens and by virtue of this acceptance of responsibility the state derives legitimacy for governance.[107] This responsibility of the sovereign state is conspicuous in its governance which ensures the highest attainable standard of human dignity for its populace.[108] It can be argued, that the states in the democratic set-up must extend their responsibility to fulfil that objective, and the rights-based discourse provides with sufficient reason to do that by working towards the progressive realisation of the economic, social and cultural rights of an individual. Which in turn enhances and prioritises the efforts of the state government towards the fulfilment of their duties, by bringing their actions within the realm of accountability and scrutiny by the domestic institutions and internationally, both.

The economic, social and cultural rights require positive efforts by the state to assist in realisation of the rights arising from 'freedom to' and not 'freedom from' which only ensures negative enforcement of rights. It can be argued that for the recognition of civil and political rights which arise from negative enforcement arising from 'freedom from' the state did perform certain positive obligations to protect such rights.[109] Arguably, the police, administrative and judicial institutions and the systems were not found in nature they were created by the state to fulfil its obligation, to protect, respect and fulfil the right guaranteed to an individual. Similarly, for the realisation of the *right to water* its recognition as a legal entitlement by the state within its jurisdiction is primarily required.[110] Although, recognition of the *right to water* as a fundamental or legal right need not necessarily resolve the water crisis unless the means for the regulation of the resource is transformed in a given territory.

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[107] FM Deng, S Kimaro, T Lyons and others, *Sovereignty as Responsibility: Conflict Management in Africa* (The Brookings Institution 1996) 32.
[108] ibid.
[109] D Kelley, *A Life of One's Own: Individual Rights and The Welfare State* (Cato Institute 1998) 1.
[110] P Alston and R Goodman, *International Human Rights: The Successor to International Human Rights in Context* (OUP 2013) 300.

It is evident from the judicial pronouncement that the *right to water* has attained the status of fundamental right derived from the *right to life* in India.[111] The judiciary has directed the manner for the regulation of the resource and imposed the duty on the states to respond to the judicial confirmation of the right to water. The discussion conducted in this chapter indicates, that the recognition of the right to water and confirmation of its legal status as the fundamental right, as well as the recommendation to regulate the resource using PTD[112] and by promoting the unification of surface water and groundwater together as one resource has long been achieved by the judicial pronouncement.[113] And the legal advancement of the right in India had attained the significance long before it became the agenda in the international arena. However, the international developments as discussed in section two can prove beneficial in the realisation of the right in India. The manner legislature could use the rights based discourse to strengthen the laws for the facilitation of the realisation of the right to water and to support the policies created for the said cause are discussed in the sub-sections of this section. However, the international development of the right to water has tremendous potential to enrich the policy dimension and to strategies the government efforts for the said purpose.

5.1 Policy and the Realisation of the Right to Water

International development of the right to water makes an argument in favour of explicit and independent recognition of the right, mainly because the realisation of the right to water invokes duties and positive obligation on states to regulate the resource better. Secondly, the *right to water* needs to elaborate in its content - the attributes of water, the quantity and quality of water for a specific purpose and the priority of usage and allocation of the resource.[114] Specific determinants to progressively achieve the right to water needs to be agreed by the state, and accordingly, they have to mobilise their state machinery and means of the regulation of the resource. This is where international development in the recognition and realisation of the right to water could provide as a

[111] Supreme Court of India*, Subhash Kumar v. State of Bihar and Others* 1991 AIR 420, 1991 SCR (1) 5; Writ Petition (1991) AIR 420 (SCC 196/1991).
[112] Supreme Court of India, *MC Mehta v. Kamal Nath & Others* (1996) 1 SCC 388.
[113] Ibid.
[114] GS McGraw, 'Defining and Defending the Right to Water and Its Minimum Core: Legal Construction and the Role of National Jurisprudence' (2011) 8 Loy. U. Chi. Int'l L. Rev. 127.

blueprint for the state to peruse or strategies their path to progressively fulfil the right to water for all.

As projected by the work of special rapporteur's and the work of the UN's, the right to water was declared as the aim and universal priority. Thus, means such as raising awareness for the cause on a global scale, initiation of a dialogue among stakeholders, collection of qualitative and quantitative data for water availability and its allocation, and mapping of the problems encountered in the realisation of the right across different social, economic, political and geographical strata of society and location were few of the important task undertaken.[115] The work of the UN and other international organisation in the last two decades have outlined the intersections and the interdisciplinary avenues and mobilised the monitory, technical and research potential for the cause.[116] They influenced the interdisciplinary and collaborative work to address the issue and also proposed different case studies and the principles to follow for sustainable and holistic regulation of the resource. The most significant push to keep the momentum alive came from the Sustainable Development Goals set for 2030. They have emphasised water related issues in many development goals, and Goal 6 is particularly dedicated to – 'Ensure availability and sustainable management of water and sanitation for all'.[117] Simultaneous development of all these factors is starting to impact the mindset of people and the state for the cause which together will revolutionaries the means and mechanism for the regulation of the freshwater resource in this century.[118]

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[115] UN, 'Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG baselines', (Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) 2017); See also: WHO and UNICEF, 'Core Questions and Indicators for Monitoring WASH in Health Care Facilities in the Sustainable Development Goals', (Geneva: World Health Organization and the United Nations Children's Fund (UNICEF) 2018); See also: UN, 'UN Water: Coordinating the UN's Work on Water and Sanitation' Available at http://www.unwater.org/what-we-do/.

[116] UN, 'UN Water: Coordinating the UN's Work on Water and Sanitation' Available at <http://www.unwater.org/what-we-do/> (accessed 9th April 2019).

[117] UN, Sustainable Development Goals 2013 Knowledge Platform, "Goal 6 - Ensure availability and sustainable management of water and sanitation for all", available at < https://sustainabledevelopment.un.org/sdg6>.

[118] UN, 'The Sustainable Development Goals Report 2018' (UN, New York, 2018)

Some of the important facts and concerns to look for while addressing freshwater crises to ensure progressive realisation of the right to water as indicated by the high-level political forum for SDG are as follows;[119]

1) Charting the population, their geographical location and the necessity in terms of quality and quantity both with a focus on gender and disabled people.
2) Charting out other issues which hamper the holistic and sustainable regulation of the resource and obstructs the realisation of the right to water – such as open defecation and wastewater treatment.[120]
3) Linking these issues as they together pose a threat to the health of people and the environment.[121]
4) Raising awareness, mobilising resources, bringing together stakeholders and encouraging discussions, encouraging public/community participation and designing a mechanism which makes sustainable management of the resource a financially viable business.[122]

All these developments have produced wealth of information, data and the guidance how to sustainably regulate the water resource. The information is readily available in several platforms, as well as the best practices from the states going through different crisis and located at different geographical locations dealing with water crisis is available on the web for learning and reference. Moreover, international organisations dedicated to water research and sustainable development of the resource are available to provide research, practical and technical assistance, globally.[123] All these developments can help the state to design the policies and plan for sustainable and holistic management of the resource and possibly to aim for making it as a movement of national priority. The simultaneous

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[119] UN, 'High-Level Political Forum Goals in Focus, Goal 6: Ensure Availability and Sustainable Management of Water and Sanitation for All' (SDG's Overview Interlinkages) < https://unstats.un.org/sdgs/report/2018/goal-06/>.

[120] UN, Executive Summary: Sustainable Development Goal 6 Synthesis Report 2018 on Water and Sanitation' (UN 29 May 2018).

[121] UNICEF, 'WASH in Health Care Facilities: Global Baseline Report 2019', (Geneva: World Health Organization and the United Nations Children's Fund (UNICEF) 2019).

[122] J Kolker, B Kingdom, S Trémolet and others, 'Financing Options for the 2030 Water Agenda' (Water Global Practice; Knowledge Brief, Nov 2016); See also: A Goksu, S Trémolet, J Kolker and others, 'Easing the Transition to Commercial Finance for Sustainable Water and Sanitation' (Global Water Practice, August 2017).

[123] Such as IWRA, SIWI, FAO, UNEP, Water.org, SDGAcademy, and many more.

government plans and policies such as Swachh Bharat Mission,[124] Swajal for drinking water and sanitation,[125] Open defecation-free states and WASH programs does seem to follow the lead in the same manner and evident at universal level.[126]

The policies often function better when supported by law therefore to strengthen the policies a systemic change in the legal apparatus is suggested below.

5.2 The Importance of the Rights-based Discourse to enhance the Holistic Regulation of the Resource and in securing access to the 'Right to Water' in India

The holistic regulation and efficient management of the freshwater resource is the means and the pre-requisite requirement for the progressive realisation of the legally recognised *right to water*. As we have noticed, the declaration of *the right to water* is a step towards conferring on the *right to water* a legal status in the international or national domain and is oriented towards the fulfilment of the demand for the resource in sufficient quality and quantity for all.[127] The demand for freshwater is increasing, but the quantum of resource available on the planet is static. Thus, the management, conservation and governance of the resource are central elements, prior to demand fulfilment. Fulfilment of which is based on two prominent factors: the physical availability of the resource, and the sustainable and holistic regulation of the resource where it can be reused, treated and directed towards further use.[128] Therefore, in addition to the conservation and wellbeing of the resource, other factors contributing to its well-being must also be considered, such as the overall health of the ecosystem. As well as other attributes of human well-being which are invariably dependent on one another. This is a significant task involving multi-disciplinary efforts, which remain inchoate if the development of freshwater laws and governance techniques are not consulted and learned.[129]

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[124] Government of India, *Swachh Bharat Mission – Gramin* (Ministry of Drinking Water and Sanitation).
[125] Government of India, *Swajal: A Community Led Approach to Rural Piped Drinking Water Supply* (Ministry of Drinking Water and Sanitation, 2018).
[126] Government of India, *ODF Sustainability Guidelines* (Ministry of Drinking Water and Sanitation, 15 Dec 2016).
[127] UN, 'Human Rights and Access to Safe Drinking Water and Sanitation', Doc. A/HRC/RES/15/9, 2010.
[128] JM Chavarro, 'Extraterritorial Obligations to Ensure the Enjoyment of the Human Right to Water in Transboundary Context' (2015) 9 (1) HR&ILD 90.
[129] P Laban, 'Accountability and Rights in Right-based Approaches for Local Water Governance' (2007) 23 (2) Water Resource Development 355.

The development of freshwater laws in the international domain started because of the realisation of the growing water crisis and the difficulties in managing the resource, and the future projections, often dire, related to this. Over last century, the existing legal provisions and principles of law have continually been examined and researched, from this effort had evolved the set of principles to deal with the water crisis of the twenty-first century.[130] The work of international organisations is considered putative in this regard. However, the development of watercourse law started with different objectives but represented considerable similarities in the processes and objectives, between the development of the rights-based aspect of the *right to water* and that of the watercourse law. Both these branches had evolved with a similar approach, i.e. instead of creating new principles of law, or innovative models for management and regulation of the resource, those involved sought remedies using the existing mechanisms that were already in place.[131] As already shown, the *right to water* was derived from the rights-based framework using existing rights already in place, such as the *right to life*; the *right to an adequate standard of living* and so forth.[132] Moreover, the freshwater laws have evolved from existing principles of customary international law. This was achieved by extensively interpreting the principles existing in place and designing new ones which can easily fit into the acceptable legal framework.[133] This represents similarity in the manner, both the branches have evolved and the approach they have taken, both the branches have understood the issue in a similar manner and have evolved to deal with them using similar coping strategies. This is however beyond the scope of this chapter to discuss these coping mechanisms in detail.

Given this understanding, the legislative and judicial units of the country need to ascertain the *right to water* the status of a fundamental right. The explicit recognition of the *right to water* as a fundamental right, not only clarifies the status of overarching rights associated with the resource arising from various constitutional and legal provisions. It

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[130] ILA, 'Berlin Rules on Water Resources: Report of the 71st Conference 3' (2004); 71 ILA 337, 385 (2004).
[131] UN, Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 (Adopted by the General Assembly of the United Nations on 21 May 1997, entered into force on 17 August 2014; See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49), as of July 2018 it has 16 Signatories and 36 Parties).
[132] P Alston and R Goodman, *International Human Rights, The Successor to International Human Rights in Context* (OUP 2013) 287.
[133] ILA, Water Resource Committee, Berlin Conference: Water Resources Law (2004).

will also outlaw the possibility of future recognition of the absolute property right over the groundwater resource as an extended customary notion of the property attached to the land ownership. Moreover, the limitations imposed on the property right to groundwater by this manner neither amounts to the deprivation of the constitutional or the legal *right to property* by law, nor, will it contribute to the ongoing perplexity regarding the conflicting position of the rights associated with the resource as discussed in Chapter Four.

As per the case law analysis in this Chapter, the means of recognition of the right, whether incorporated as self-existing fundamental right or as a component of the pre-existing fundamental rights, works well within the democratic set-up of the country. However, the author would like to argue in favour of explicit and clear statement regarding the recognised *right to water* from within the interpretation of the *right to life,* which not only recognises the protection from negative interference but also emphasises on positive obligation on the part of the government to make it a reality: as done in case of the *right to food*. Additionally, legislature needs to clearly define what the right entails and what attributes must be regarded for its execution.

To justify the choice so made, the author would like to raise two points; firstly, that the *right to life* qualifies to be an inherent part of basic structure of Indian Constitution.[134] Thus, it cannot be impaired by any legislative, judicial or administrative acts in future. Secondly, recognising this fact will make it easier to detach the influence of any overarching right casting an effect on the *right to water*, because any law or policy made in contradiction with the notion of fundamental right is void *ab initio.*[135] Furthermore, the insertion of a new right by means of amendment of the constitution will take a longer time, and the rising crisis needs immediate and robust attention.

Likewise, it is suggested that the legislature and the judicial units must consult with each other and reach an agreement regarding the incorporation of the Articles in Part IV and IV-A of Indian Constitution, which serves the cause of maturation of the correlative

[134] Supreme Court of India, *T.N. Godavarman v UOI and Others* (1997) 2 SCC 267; and Supreme Court of India, *Vineet Narain v. UOI* (1998) 1 SCC 1998.
[135] Supreme Court of India, *Keshavan Madhava Menon v. The State of Bombay* 1951 SCR 228; See also Mahendra Pal Singh, *VN Shukla's Constitution of India* (13th rev edn, Eastern Book Company 2017).

positive obligations arising from the assertion of the *right to water* as a fundamental right, on the part of the government.[136] It must be inclined towards the development and enhancement of the regulation of the resource. This duty could also be linked to the responsibility for the creation of a framework law to regulate the freshwater resource within the country as a strong step by the state towards the enforcement of the right to water.[137] It will provide further impetus to the federal units of the state to comply with the recommendatory framework law in a progressive manner due to its relevance as the legal obligation and the primary duty of the state. This will mark the beginning of and inculcate the culture of law-making for the freshwater resource in the same way as inherited in case of conventional branches of law such as civil and criminal, which will surely strengthen the regulation of the resource.[138] This proposition is made to flourish under the umbrella of the environmental procedural code as suggested elsewhere in this thesis.

So far, the framework law is accepted to set the parameters or prepare the model statute for the federal government of the states to follow while legislating the laws for the regulation of freshwater. Accordingly, the provincial states must re-evaluate their existing laws to fit within the parameters set forth. As per the general principle of law, the laws made with retrospective effect are not the rule but could act as an exception in special cases.[139] Arguably, the law of interpretation of the statute suggest that, any law made to cure the anomaly of existing law or for the benefit of the community could be made to have retrospective effect and, in this case, both the conditions are fulfilled.[140] Therefore, the implementation with retrospective effect could be justified.

Additionally, it will strengthen the federal state governments to decide the parameters for the right and the means to achieve that goal given the needs and requirements of the locality and the ability of local administration to progressively achieve

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[136] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Part XX, Article 368.
[137] C Leb, *Cooperation in the Law of Transboundary Water Resources* (CUP 2015) 211.
[138] GL Rose, 'Gaps in the Implementation of Environmental Law at the National, Regional and Global Level' (2011) UNEP.
[139] Supreme Court of India, *Chota bhai vs Union of India* AIR 1952 SC 1005 (1023).
[140] Justice GP Singh, *Principles of Statutory Interpretation* (9th edn 2004, LexisNexis Butterworths Wadhwa Publications) 238.

that right. For the accomplishment of this task the attributes and the manner for the regulation of the resource and the implementation of the right the water produced by the UN Special Rapporteur could be of great significance for the state.[141] The compilation of best practices across the world and the subject specific details concerning the implementation of the right in different jurisdiction provides a rich volume of information to improvise the means for the regulation of the resource and to decide as to what concerns must be incorporated for the holistic and sustainable regulation of the resource.[142] This is how through the legislative and administrative effort of the state the means for the realisation of the right can be enhanced. The realisation of the right to water demands enormous investment to monitor the resource, understand it better, and then to make the laws and policies, and to finally implement them via institutional and infrastructural mechanisms. Therefore, the following section discusses the means to regulate those investments dealing with the social sector while baring the burden of human right and social justice along with them.

5.3. Investment in Social Sector and the Realisation of the Right to Water

The rights-based discourse or the legal recognition of the *right to water* by the state provides multiple benefits for the state. First of all, it shapes the attitude of the state for the cause and then derives them to channelise their resources towards the fulfilment of the rights so guaranteed. Secondly, it binds the state to follow, or do not derogate from certain minimum standards which are agreed by the international community. Furthermore, it empowers people to get these rights enforced, it provides legitimate ground to question the ability of the state regarding the recognition and fulfilment of such rights by allowing judicial access. Thus, creating a world order which might have an extra-territorial implication. Thirdly, the presence of human or fundamental rights related to environments such as the *right to water,* or the *right to a healthy environment* in a state provides a human face to fight the environmental crisis. It establishes a clear link between the human right and the environment. Because, in the developing word or in the countries of the global south, these issues are directly related with the issues such as equity, survival

[141] C-de Albuquerque and V Roaf, 'On the Right Track: Good Practices in Realising the Rights to Water and Sanitation' (United Nations Special Rapporteur on the human right to safe drinking water and sanitation, 2012) available at <https://www.ohchr.org/documents/issues/water/bookongoodpractices_en.pdf>.
[142] Ibid.

of human-being and the defunct governing practices of the local government.[143] Further, emphasises that the wellbeing of the humans invariably depends on the health and wellbeing of the surrounding environment one belongs, and therefore, making a healthy environment a pre-condition for the enjoyment of most of the human rights.[144]

Due to the inter-disciplinary and vital nature of the resource and based on the earlier observation it is evident that the realisation of the right to water requires enormous investments. The state needs to invest in the research; institutional and infrastructural developments; for conservation, protection and holistic regulation of the resource; for the implementation of the policies; and for data accumulation and data synthesis etc. These investments are going to increase in the near future and the uncertainty in the climate change further ads to the rising challenge, therefore regularising this aspect by means of legislative certainty could prove revolutionary. The rights based discourse creates the obligation on the state and the state can utilize this opportunity in a manner deem fit for the cause. Arguably, as a means for the holistic regulation of the resource the governments can take it upon themselves to define and to strictly regulate the manner for the regulation of the investments in the social sector. Keeping in mind that they need to be dealt differently and not just subjected to the market forces and the principles of economics.

Although, it is an evolving concern but certain international law and policy instruments are available to provide guidance for the states in this context. In accordance with the New Delhi Declaration 2002,[145] good governance is defined as the obligation that obliges the states and the international organisations to abide by the principles of democratic and transparent decision making, anti-corruption, respect for the rule of law

[143] LJ Kotze, 'Human Rights, the Environment and the Global South' in S Alam, S Atapattu, CG Gonzalez and others (eds), International Environmental Law and the Global South (CUP 2015) 171, 179.

[144] UN, 'UN Expert Calls for Global Recognition of the Right to Safe and Healthy Environment' (United Nations Human Rights Office of the High Commissioner) <https://ww w.ohchr.org/EN/N ewsEvents/Pages/DisplayNews.aspx?NewsID=22755&LangID=E> accessed 20 Nov 2018.

[145] United Nations, 'ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development', 2 April 2002 (The 70th Conference of the International Law Association, held in New Delhi, India, 2–6 April 2002; Annex to the letter dated 6 August 2002 from the Permanent Representative of Bangladesh to the United Nations and the Chargé d'affaires a.i of the Permanent Mission of the Netherlands to the United Nations addressed to the Secretary-General of the United Nations) UN GA Res. A/57/329, Principle 6.

and human rights.[146] Further, it emphasises that these practices by the states are important for the codification of the international law relating to sustainable development. The 1992 Rio Declaration requires the states' parties to hold the corporations responsible by effectively manoeuvring them to undertake their corporate and social responsibilities while making an investment in the social sector. The concept of good governance is repeatedly mentioned in several declarations, and the reports prepared and published by the UN recognises it as a key component for achieving sustainable water resource development.[147] Given this understanding, it is the responsibility of the home/borrowing state to carefully plan the investments in the social sector.

Irrespective of the fact that the investments are made by global, regional, or international institutions, contracts between the host state and the foreign investor usually provide the investor's certain protections which are not available to or trump the needs of the local people.[148] Some of them also have a stabilisation clause which requires the host government to compensate the investor in case any regulatory changes are made concerning such investment. This and many other means are available to protect the investor's interest in the global market against the interests of the home state.[149]

Despite water provisions being regulated by the public or private bodies, the history of water provisions indicate that it is a matter of failure in governance and the manner of regulation of the resource.[150] The hegemonic ideologies affect the governing principles to a large extent. Although, the ideologies travel both ways from North to South and South to North, but both the Europe and the North America dominates the ideological and institutional capacities and therefore dominates and disseminate the concepts

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[146] N Schrijver, 'ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development' (2002) 49 (2) Netherlands International Law Review 299.

[147] United Nations, Water for People Water for Life, the United Nations World Water Development Report (UNESCO 2003) 30-33.

[148] United Nations Department of Economic and Social Affairs (UNDESA), 'Foreign Land Purchases for Agriculture: What Impact on Sustainable Development?' (Sustainable Development Innovation Briefs, January 2010) 2.

[149] CG. Gonzalez, 'Food Justice: An Environmental Justice Critique of the Global Food System', in S Alam, S Atapattu, CG. Gonzalez and others (eds), *International Environmental Law and the Global South* (CUP 2015) 401, 421.

[150] K Bakker, Privatising Water: Governance Failure and the World's Urban Water Crisis, (Ithaca, NY and London: Cornell University Press, 2010).

concerning water governance. Collectively, they hold and share influential position in the International Financial Institutions (the IMF and the WB), and these institutions act as the pro-active advocates of the ideological dominance for water governance in practice.[151] With the hegemonic dominance of the neoliberal policies the states of the global south were devoid of freedom to regulate their water resource for their people and the state. The dominant ideas dictate the means of water regulation in the language of freedom, however, the proposed freedom was a pre-text for trade freedom in the form of privatisation and liberalisation.[152] Whereas, this could also be understood as the restriction on the freedom of the state and on the ability of the state as to what it can and must do to regulate its resources. This lack of freedom creates the recipe for crisis and causes difficulty in regulation of the resource.

Ideologically, the perception between the industrialised West and the Asian agrarian societies of the south are different in their understanding and management of the natural resource. The global north is dominated by the capitalistic mindset which purports the view of ownership of the natural resource by treating it as a property to be consumed or exploited for human wellbeing.[153] These societies flourished as the result of the industrialisation which preferred the centralised control over the natural resource, therefore, empowering control to the state using a vertical top-down approach.[154] However, contrast is experienced in Asian societies or the societies of the global south regarding their needs, as well as the approach toward natural resources. Asian agrarian societies were fairly diverse and had a complex system of communitarian management of the resource which was embedded in local, traditional and religious philosophies. This practice considered the local user of the resource an active participant and an integral link in the management of the resource.[155] This perception of the management of the resource is diametrically opposite to the western approach. However, these foundational

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[151] M Goldman, Imperial Nature: the World Bank and Struggles of Social Justice in the Age of Globalisation (New Haven CT: Yale University Press, 2005).
[152] S Alatout, 'Commentary: Water Scarcity in Late Modernity' in LM Harris, JA Goldin and C Sneddon (eds), *Contemporary Water Governance in the Global South: Scarcity, Marketization and Participation* (Routledge 2013) 101.
[153] A Simms, *Ecological Debt: The Health of the Planet and The Wealth of Nations* (London: Pluto Press 2005) 93-109.
[154] N Islam, *the Law of Non-Navigational Uses of International Watercourses: Options for Regional Regime-Building in Asia* (Kluwer Law International 2010) 21.
[155] ibid.

differences were overlooked, and somehow with time the principles of international law or practices preferred by the industrial west became universal and imposed on the rest of the world by using trade agreements or conditions imposed by the WB and other financial institutions. The financial institutions and the development banks played a dominant role in the process.

Over the past few decades, the financial investment in the water sector came across several social issues, and the most persistent among them was the question of equity: inter-generational and intra-generational both.[156] These institutions are not free from the neo-liberal implications of the policy-based considerations on the recipient country. However, in the recent past, many cross-disciplinary concerns inclusive of and in addition to the one mentioned above are considered in the water sector, with an aim to achieve the sustainable and holistic management.[157] As a response, the World Bank has come up with the new internal regulatory mechanism to fight these anomalies.[158] The efforts are being made to holistically manage the resource and other environmental concerns in response to the growing water crisis and thus requiring the change in attitude by the recipient or borrowing states in response to the crisis.

The investment in social sector impacts the human rights of an individual such as the investments concerning the water sector, agriculture, environment, health and others. Thus, to fight the ailments arising from the investments in the social sector, the environment and the human right interface provides a window of opportunity for the countries.[159] The rights-based discourse also act as the agency for the communities and the people to protect their *rights to development* and well-being by giving it a human face and the legal mechanism to fight against injustice, because environmental justice is

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[156] UNESCO-IHE, 'Can efficiency go Hand in Hand with Equity in Water Services?' (A documentary on Neoliberalism and Water Privatization: A Philippines case Study, 2017) <https://www.youtube.com/watch?v =kYHch9lJ-Ms> accessed on 20 Nov 2018.

[157] WWAP (United Nations World Water Assessment Programme)/UN-Water, *The United Nations World Water Development Report 2018: Nature-Based Solutions for Water* (Paris, UNESCO 2018).

[158] S Koeberle, H Bedoya, P Silarsky, and others (eds.), 'Conditionality Revisited Concepts, Experiences, and Lessons' (The International Bank for Reconstruction and Development/ The World Bank, 2005) 231, 259.

[159] CG Gonzalez, 'Food Justice: An Environmental Justice Critique of the Global Food System', in S Alam, S Atapattu, CG. Gonzalez and others (eds), *International Environmental Law and the Global South* (CUP 2015) 401, 423.

basically rooted in a human rights discourse and is supported by the UN Charter and the international covenants of the rights.

The rights-based discourse is the established and a well-known legal mechanism. By virtue of its status, it attracts enormous attention and support from a different level of governance and is one of the most significant legal tools available for the cause. Therefore, by recognising a legal status of the *right to water* in the state, the state also possesses the strength of the rights-based discourse to negotiate the means of governance, investments and other concerns with potential partners within and outside the state, equally. If the state wishes to exploit this opportunity for the protection of the human rights of its citizens, and for the protection and conservation of the environment of the state, which satisfies the pre-condition for the enjoyment of most of the human right, it can do so using the given mechanism. Due to the recognition of the right, and by virtue of the obligation and the primary duty imposed on the state, the state is entitled to create a binding legal or regulatory guideline for all the parties dealing with the concerned right. This could act as the legal shield for the protection of the rights so created by the state.[160] This is precisely how the rights-based discourse empowers the state to negotiate the terms of investments and other agreements with investors which might concern with the fulfilment of, or obstruct the enjoyment of, the economic social or cultural rights of an individual. Thereby, bringing them within the framework of scrutiny and accountability. The utility of the rights-based discourse is undisputed. However, the manner India can utilise the rights-based discourse to deal with the growing freshwater crisis is summarised below.

6. Conclusion

To sum up, it can be said that the recognition and implementation of the *right to water* largely depends on the availability of the resource. In the absence of the resource in sufficient quality and quantity, the realisation of the right will suffer. If we consider the rights-based mechanism, they often seem to be honoured more in breach than the

[160] S Alam, 'Trade and the Environment Perspective from the Global South' in S Alam, S Atapattu, CG Gonzalez and others (eds), International Environmental Law and the Global South (CUP 2015) 297.

observance,[161] thus it usually guarantees negative rights, whereas economic social and cultural rights demand positive obligations from the governing body for their fulfilment. However, the implication of the assertion of positive obligations for the realisation of the *right to water* is important, but different from all other rights from that group. This is because, this kind of positive implication further divides the *right to water* into two separate dimensions of demand and supply; where demand is materialised with the realisation of the right, and supply is dealt with by the means for the holistic regulation of the resource to ensure availability.[162] They complement each other, and one cannot survive or flourish in the weak presence of another. Therefore, it is believed and argued, that the positive obligation imposed with the *right to water* must adhere to the strict standards for the management and regulation of the resource. This adherence will strengthen and guide the resource management on the one hand, and on the other it will make a persuasive case for the realisation of the right.[163] The dysfunctional and disconnected relationship of the two has been the biggest set-back in the realisation of the *right to water*, thus far.

However, the willingness of the state to intervene and enforce the decision is of paramount interest as it ensures implementation of the rights so guaranteed.[164] This willingness can be translated into actions by the state, primarily by ensuring the legal recognition of the right, and then by determining the content of the right and prescribing the manner for its realization. Whereas the correlative duties determine the path to impose positive obligations on the state for the fulfilment of the ESC rights, thus, by incorporating this behavior of holistic regulation of the resource into positive obligations associated with the rights-based aspect of the *right to water,* its progressive realization can be achieved.

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[161] JH Knox, 'Human Rights principles and Climate Change' in Cinnamon P Carlarne, Kevin R Gray and Richard G Tarasofsky (ed), *The Oxford Handbook of International Climate Change* (OUP 2016) 214.

[162] EB Weiss, *International Law for a Water-Scarce World* (The Hague Academy of International Law 2013) 60.

[163] JM Chavarro, 'Extraterritorial Obligations to Ensure the Enjoyment of the Human Right to Water in Transboundary Context' (2015) 9 (1) HR&ILD 90.

[164] WJ Samuels, 'Interrelations between Legal and Economic Processes', (1971) 14 (2) Journal of Law and Economics 435, 50.

To comment on the situation of India, the higher judiciary has failed to impose strict positive obligations on the government for the progressive realisation of the *right to water* for all. That said, even if the judiciary had compelled the state by means of imposing the strict positive obligations for the fulfilment of the *right to water*, it would not have been accomplished. Because it is beyond the judicial authority to confer positive obligations on the state in absolute terms, without over-stepping the boundaries of *the theory of separation of power* entrenched in the Constitution of India. This type of declaration will be of no use without support from the other branches of government, and this has been seen in past events where the judiciary has made such efforts, and the other branches have equally contributed to making them possible (in the cases of the *right to food* and the *right to education*). Thus, it is substantiated that the legislature must take the responsibility and make certain changes in ensuring the holistic regulation of the resource.

To substantiate this claim: the legislature must derive the power from the rights based approach and work simultaneously, to master the art and to deliver a holistic solution to the water crisis. This understanding could be translated in domestic context, and must come from the Constitution of India using the mechanism provided by the rights-based discourse, say from Part IV (*the directive principles of state policies*) in the form of correlative duties created due to assertion of the right; as in the *right to water* in Part III (*the fundamental rights*) of the Constitution of India. This will require constitutional amendment and change in legislative practices. This will then be translated as the paramount obligation on the part of state functionaries to abide by, with the clear intention of honoring the specific ESC right it is created for: the *right to water*. The potential of the legal apparatus or the framework law for the holistic regulation of the resource for the realisation of the right so guaranteed has already been accentuated and demonstrated in the previous section. However, it is argued that the assertion of legal apparatus or the framework statute gets explicitly recognised by the legislature and regarded as the focal issue as well as positive obligation by the state, to strengthen the harmonious regulation of the resource at every possible level and throughout the Indian Territory.

With regard to combat the problems arising from investments in the social sector and to improvise overall governance of the resource; the environment and the human rights interface provides a window of opportunity for the countries in global south.[165] India and most of these countries have adopted a rights-based approach for the protection of the right of the people and the environment. This can be achieved by recognising and making rights such as the *right to water*,[166] the *right to a healthy environment*,[167] and the various rights for nature,[168] among others, a legal entitlement in the states' constitutions or by incorporating legislation to give effect to those rights, either by mentioning them explicitly or by the elaborate judicial interpretation of the existing rights.[169] The recognition of these rights and by establishing the connection between the human right and the environment, it provides a concrete and legitimate ground for the state to negotiate the terms of the investment and means for the regulation of the resource by sharing responsibilities and concerns with other actors. This interface could be beneficial if used intelligently by the state, as it possesses the ability to strengthen the governance, thus facilitating holistic regulation of the resource along the line of legitimate ground rights-based discourse has to offer.

It is also believed that the inclusion of the environment right in the constitution elevates the status of sustainable development in the country.[170] Therefore, the environment and the human right interface is not only appreciated but celebrated as a means to enhance good governance of the natural resources and the environment. India chooses the rights-based aspect for the development of the means to ensure and strengthen environmental protection. This is because the existing legal situation is not

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[165] CG Gonzalez, 'Food Justice: An Environmental Justice Critique of the Global Food System', in S Alam, S Atapattu, CG. Gonzalez and others (eds), *International Environmental Law and the Global South* (CUP 2015) 401, 423.

[166] Supreme Court of India, *MC Mehta vs Kanam Nath* 1998 SSC 1.

[167] JH Knox, 'Framework Principles on Human Rights and the Environment: the main human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 2018' (United Nations Human Rights Special Procedures, Special Rapporteur, Independent Experts and Working Groups 2018).

[168] Erin L O'Donnell, 'At the Intersection of the Sacred and the Legal: Rights for Nature in Uttarakhand, India' (2018) 30 (1) Journal of Environmental Law 135; See also: Rafi Youatt, 'Personhood and the Rights of Nature: The New Subjects of Contemporary Earth Politics' (2017) 11 (1) International Political Sociology 39.

[169] Ole W Pedersen, 'The European Court of Human Rights and International Environmental Law' in John H Knox and Ramin Pejan eds., *The Human Right to a Healthy Environment* (CUP 2018) 86.

[170] LJ Kotze and A. du Plessis, 'Some Brief Observations on Fifteen Years of Environmental Rights Jurisprudence in South Africa' (2011) 3 (1) Journal of Court Innovation 101, 115.

sufficiently competent, which makes the policies and the avenue of policy making a strong contender to regulate the environmental concerns in India. The policies in Indian jurisdiction are non-justifiable, meaning they can at times either be discredited or ignored. However, if the laws are made in favour of the cause the very policies will function better and assist in swift and holistic regulation of the resource.

The recognition of the environmental rights as constitutional or fundamental rights provides a guarantee for their protection by making them fundamentally justifiable. This further ensures that the state legally protects those rights, by directing that certain attributes be considered in day-to-day regulation of the resource and for the progressive realisation of the right.[171] It can be argued based on the discussions conducted in this thesis, that the rights-based discourse does possess the capacity to be used as a legal tool of competence to enhance the holistic regulation of water by the state. In addition to the direct benefit of strengthening the realisation of the right so guaranteed, it could also be used to reinforce and evaluate the efforts of the state in the form of positive obligations arising from the economic, social and cultural rights. Thus, bringing the state within the frame of accountability. Given this reach of the rights-based discourse, it is suggested to the state to explore its potential and to design the tools considered appropriate for the fulfilment of the set objective using legislative means.

[171] LJ Kotze, 'Human Rights, the Environment and the Global South' in S Alam. S Atapattu, C G, Gonzalez and others (eds), International Environmental Law and the Global South' (CUP 2015) 171, 190.

Part IV

Chapter 6: National Green Tribunal

1. Introduction

After investigating the legal doctrine, law and policy regulating the water resource in Part Two of this thesis, and investigating the legal rights associated with water in Part Three, it is desirable to investigate the institutions designed to protect those rights and ensure *access to environmental justice* for all. The central aim of this thesis is to investigate the impediments in the regulation of the water resource and in the progressive realisation of the *right to water* in terms of law and policy. Therefore, those institutions which are designed to honour these rights and evaluate the governing practices for the regulation of the resource need to be investigated. In this thesis the judicial interpretation and their contribution for the cause is well established and the detailed examination of the judicial input by examining the court system is beyond the mandate of this thesis. However, two institutions are chosen for the investigation in this part of the thesis (Part IV).

Two of the tribunals exist in India to impart green justice and ensure good governance of the resource: the National Green Tribunal (NGT) and the Inter-State Water Dispute Tribunal. This chapter deals specifically with the NGT, whilst the next chapter deals with the Inter-State Water Disputes Tribunal. The contribution of the main stream judiciary in the enhancement of the regulation of the water resource and in enabling access to the right to water is uncanny. However, the judiciary time and again felt the need for a specialised institution for dealing with environmental disputes due to the interdisciplinary concern involved. This led the judiciary to request the legislature for the creation of such an institute, as a result the National Green Tribunal was created in 2010. Therefore, in this chapter the making of this institution and the cause it was created for is investigated and comparatively analysed alongside the main stream judiciary.

The NGT as an institution is the subject of investigation in this chapter. Its various attributes are considered, and its capacity to ensure holistic regulation and improved governance of the resource, and to ease *the access to environmental justice* for the

people, is analysed.[1] It is fascinating to observe the changes that might occur within the environmental jurisprudence of the country, given the fact that the institute under observation is tasked with imparting *green justice* and is equipped with the specialised technical and scientific expertise to do so.

The laws to manage the freshwater resource in India have developed in a piecemeal fashion and these often arise as an instant response to specific concerns or crises at different times and in different places.[2] At times, these laws overlap or even contradict one another. This reactive attitude is troublesome for the wellbeing of the resource or at odds with the modern understanding of the resource and the principles dictating its management or holistic regulation. The tribunal so created is bound by law to determine the validity of statutes governing environmental issues based on certain specific and well-accepted principles of environmental law.[3] It also possesses the competence to develop a consistent trend, something that was previously lacking in the environmental decisions of Indian courts. The hope is that this tribunal could ensure consistency in laws and policies governing the water resource. Thus, the contrast between the two phases of development of the laws, and the manner in which its agencies, specifically the judiciary and the tribunal, execute justice, is subject to analysis in this chapter.

This section introduces the objectives and outlines the content of the discussions in the sections that follow. In Sections Two and Three, the author provides an analysis of the requirement for the creation of a specialised institution for the adjudication of the environmental disputes, in the international and the national jurisdiction respectively. Later, it examines the importance of environmental courts or tribunals to ensure *access to environmental justice* for the public at large. This analysis is intended to reflect the uniqueness of the concerns arising from the environmental disputes, and at the same time

[1] Government of India in official Gazette of India, 'The National Green Tribunal Act, 2010 (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010.
[2] VK Agarwal, 'Environmental Laws in India: Challenges for Enforcement' (2005) 15 Bulletin of the National Institute of Ecology 227.
[3] Government of India in official Gazette of India, 'The National Green Tribunal Act, 2010 (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 20.

trying to identify in what manner the existing institutions and the legal discipline need to change in order to accommodate rising environmental concerns.

Section Four analyses the tribunals competence regarding its ability to align the laws and policies governing natural resource with common principles of law by making them coherent with each other and by encouraging sustainability in a broader context.[4] Later, in the chapter, the author will critically investigate various attributes of the tribunal such as its jurisdiction, competence, and legal and judicial authority. This will be done to determine the tribunals impact on the preservation of the *environment,* and the protection of the *right to environment*. This will contribute to the analysis of the tribunals competence.[5] It will be interesting to observe and analyse the path chosen by the tribunal, its response to serious pressure, and its reception in local jurisdictions.

The main questions this analysis raises are: What about rights which are not yet inferred as the legal, constitutional or fundamental right concerning the environment? Does the tribunal possess the ability to create new rights of the kind considered here and does it have the ability to crystallise the existing rights? Is it possible, given its limited jurisdiction, for the tribunal to address different and complicated aspects associated with the *right to water*? How far can the tribunal harmonise the water governance practices in terms of law and policy?

These concerns are investigated in sections Two, Three and Four of this chapter, whilst Section Five evaluates the usefulness of the tribunal by comparing it with other available options. Throughout this chapter, the comparative analysis of the competence of the specialised tribunal takes place against the backdrop of the conventional court set-up. This is mainly based on attributes such as the ability of the court to entertain public interest litigation (PIL); their jurisdictional authority, and their overall impact on the environmental jurisprudence of the country. This analysis is essential to scrutinise the worth of the specialised institution against the court system, as well as to highlight the

[4] K Mulqueeny, S Bonifacio and J Esperilla, 'Asian Judges, Green Courts, and Access to Environmental Justice: An Asian Judges Network on the Environment' (2010) 3 Journal for Climate Innovation 277.
[5] Government of India in official Gazette of India, 'The National Green Tribunal Act, 2010 (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Preamble.

shortcomings of the institution so created. The last section concludes the findings and makes appropriate suggestions.

2. Evolution of Environmental Courts in the International Domain

The need to impart environmental justice and the importance of environmental courts to this process became apparent because of the growing complexities arising from environmental disputes. In response to this concern, the Stockholm[6] and Rio Declarations[7] jointly called for further advancement of the law, bearing on environmental liability and compensation. Principle 22 of the Stockholm Declaration refers to international law only, and Principle 13 of the Rio Declaration refers to both national and international law.[8] The need for developing administrative and legislative units at the national level to implement the phenomenon of *access to environmental justice* arose from Rio de Janeiro (1992)[9] and Rio +20, (2012),[10] which together resulted in raised awareness in every field possible, at the national and international level.[11] The genesis of this was rooted in the conceptual

[6] United Nations, 'Stockholm Declaration or Declaration of the United Nations Conference on the Human Environment, 1972', (On June 5-16, 1972, delegations from 114 countries met for the UN Conference on the Human Environment, widely regarded as the first global environmental conference. The Conference produced many documents, including this Declaration which contains 26 principles, several of which have been incorporated into subsequent international environmental agreements) UN Doc. A/Conf.48/14/Rev. 1(1973); 11 ILM 1416 (1972).

[7] United Nations, 'Rio Declaration on Environment and Development, 1992', (The Rio Declaration is one of five agreements coming out of the United Nations Conference on Environment and Development (also called the "Earth Summit") in Rio de Janeiro in June 1992. Although a non-binding, or "soft law" instrument, the Rio Declaration sets forth important principles of international environmental law, especially sustainable development) UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992).

[8] G Handl, 'Declaration of the United Nations Conference on the Human Environment Stockholm, 16 June 1972; Rio Declaration on Environment and Development Rio de Janeiro, 14 June 1992' in UN, Audio-Visual Library of International Law <http://legal.un.org/avl/ha/dunche/dunche.html> accessed 20 Nov 2018.

[9] United Nations, 'Rio Declaration on Environment and Development, 1992', (The Rio Declaration is one of five agreements coming out of the United Nations Conference on Environment and Development (also called the "Earth Summit") in Rio de Janeiro in June 1992. Although a non-binding, or "soft law" instrument, the Rio Declaration sets forth important principles of international environmental law, especially sustainable development) UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992); In addition to Principle 10, the Rio Declaration Principle 11 asserts that States should "enact effective environmental legislation." Principle 15 speaks about the precautionary principle. Principle 17 states that environmental impact assessments are a national instrument" and should "be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority".

[10] United Nations, 'Resolution adopted by the General Assembly on 27 July 2012 - The Future We Want', (The General Assembly, recalling its resolution 64/236 of 24 December 2009, in which it decided to organize the United Nations Conference on Sustainable Development at the highest possible level in 2012, as well as its resolution 66/197 of 22 December 2011) UN Doc A/RES/66/288, 11 September 2012.

[11] Banisar, David, S Parmar, and others, 'Moving from Principles to Rights: Rio 2012 and Access to Information, Public Participation, and Justice' (2012) 12 (3) Sustainable Development Law & Policy 8, 51.

understanding that the enforcement of environmental regulatory measures has to take place at the national level, which could later be transformed into the international, regional or global level.[12] Additionally, the Aarhus convention highlighted the importance of *access to environmental justice,* for which it calls upon the judicial and legislative developments of the state (country level),[13] which led to the development of specialised institutions to impart environmental justice.

The need and status of, the realisation of the right to *access to environmental justice* has been enhanced and its importance has been reiterated via the international conventions and declarations mentioned above.[14] *Access to environmental justice* is considered one of the most important rights in the set of environmental rights. Lately, this right has been accorded the status of a standalone right or a foundational right for the realisation of all other environmental rights.[15] This is a procedural gateway for the realisation of the right through specialised institutions, which further press for the need for specialised environmental courts/tribunals.[16] During the process of realisation of the *right to access environmental justice,* the attributes of this right were elaborately discussed, and the need for a different kind of adjudicating body was realised. This would be a body that partially deviates from the conventional adjudicating/judicial bodies, owing to the fact that interdisciplinary intersections arise from environmental problems and they cannot all be accommodated from the existing institutional set-up. The ability to accommodate those concerns would ensure that it was competent and equipped with the expertise required to deliver environmental justice.[17]

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[12] GN Gill, 'The National Green Tribunal of India: A Sustainable Future through the Principles of International Environmental Law' (2014) 16 (3) Environmental Law Review 217.

[13] United Nations, 'Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters' on 25 June 1998, Aarhus, Denmark, (entered into force on 30 October 2001, in accordance with article 20(1) and definitively on 30 October 2001, in accordance with article 20(1); UNTS, Vol. 2161, p. 447, as of July 2018 it has 39 Signatories and 47 Parties).

[14] NA Robinson, 'Ensuring Access to Justice through Environmental Courts' (2012) 29 (2) Pace Environmental Law Review 363.

[15] E-U Petersmann, 'Theories of Justice, Human Right and the Constitution of International Markets' (2003) 37 Loyala of Los Angeles Law Review 407.

[16] J Agyeman, RD Bullard and B Evans, 'Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity' (2002) 6 (1) Journal for Space and Polity 77.

[17] J Harrison, 'Reflections on the Role of International Courts and Tribunals in the Settlement of Environmental Disputes and the Development of International Environmental Law' (2013) 25 (3) Journal of Environmental Law 501.

The development of international environmental laws, in soft law as well as hard law principles, is grounded in an understanding of the trans-boundary impact of environmental problems.[18] This understanding has led to the adoption of principles of international environmental law in national jurisdictions, to adjudicate disputes and help disputing parties reach an amicable solution.[19] The developing state practice and acceptance regarding the impact of the transboundary harm in environmental issues gradually qualifies as the constituent of the *de facto* international common law, regarding the subject matter which proved mutually beneficial and led to the crystallisation of the principles of the international environmental law.[20] With increasing interconnectedness and complexity arising from environmental disputes between the parties at both national and international level, it is no longer possible to resolve all kinds of disputes from a conventional legal standpoint.[21] Therefore, an institution is desirable which is capable of dealing with these issues holistically and proactively whilst keeping the environmental concerns at the fore. This requires an institution that can balance the judicial, legal, scientific, and other crosscutting administrative and social issues arising from the same dispute. With this in mind, the competence of the NGT is investigated. The section below briefly gives historical and philosophical context of such development and outlines the journey of the making of green courts in India.

3. The Evolution of Green Courts in India

The genesis for the need to have specialised units for adjudication of environmental disputes can be traced back to the recommendations made by the Supreme Court of India. At first, while dealing with the *Oleum Gas Leak Case* in 1987,[22] the Supreme Court stated that there was a requirement for a specialised judicial unit with scientific expertise to resolve environmental disputes. Later, in several other case laws, the higher judiciary confirmed the demand for a specialised institution due to increasing

[18] JH Knox, 'The Myth and Reality of Transboundary Environmental Impact Assessment' (April 2002) 96 (2) The American Journal of International Law 291.
[19] BH Desai, 'Environmental Law: Some Reflections' (1996) 23 (3-4) Indian Bar Review 191.
[20] AT Guzman, 'International Tribunals: A Rational Choice Analysis' (2008) 157 University of Pennsylvania Law Review 171.
[21] P Sands, 'Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law' VII Global Forum for International Investment (OECD, March 2008) 1.
[22] Supreme Court of India, *MC Mehta and Others vs Union of India & Ors* 1987 AIR 1086; 1987 SCR (1) 819.

practical difficulties in the resolution of environmental disputes.[23] Additionally, the higher judiciary had declared the *right to a wholesome environment* as a fundamental right arising from within the interpretation of the *right to life* which was embedded in 1985.[24] With a consistent change of judicial attitude towards the protection of the environment, and a rising awareness of this as a growing concern, *the right to access environmental justice* became imperative, and so is the need for a specialised court.

The requirement for a specialised body to adjudicate environmental disputes is essential because the conventional judicial practices do not seem adequate. If we learn from past experience, the higher judiciary has had some success in its efforts to protect and preserve the environment, as well as the rights of people.[25] However, the judiciary has constantly felt that its judgements was impaired due to a lack of knowledge and understanding about the branches which overarch certain legal aspects of the disputes, such as scientific, geographical, hydrological and other discrete areas of expertise. This can make it difficult to fully integrate such concerns whilst deciding a case. For example in the case of the *Gabchikovo-Nagymaros project,*[26] the court had realised the complexity and interdisciplinary nature of the environmental problems which had led it to try certain new and innovative techniques to understand the issue and to adjudicate them.[27] Additionally, the court has highlighted the need for specialised environmental courts that could adequately administer justice in this field.[28] It is interesting to note that the International Court of Justice, which is resourceful and has the most sophisticated and

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[23] Supreme Court of India, *MC Mehta v. Union of India* 1987 (2) SCC 176; Supreme Court of India, *Indian Council for Environmental-Legal Action v. Union of India* 1996 (3) SCC 212; Supreme Court of India, *A.P. Pollution Control Board v. MV Nayudu*, 1999 (2) SCC 178 (dated 27/01/1999); and Supreme Court of India, *A.P Pollution Control Board v. MV Nayudu II*, 2001 (2) SCC 62.

[24] Supreme Court of India, *Rural litigation and Entitlement Kendra v. State of Uttar Pradesh* AIR 1985 SC 652 (SC has issued several orders and opinions: AIR 1985 SC 1259; 1985 (2) S.C.A.L.E. 906; AIR 1987 SC 359; AIR 1987 SC 2426; AIR 1988 SC 2187; J.T. 1988 (4) SC 710; J.T. 1990 (2) SC 391.

[25] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Writ Jurisdiction of HC and SC Article 226 and 32 respectively.

[26] International Court of Justice, *GabCikovo-Nagymaros Project (Hungary/Slovakia) Judgment on 25 September 1997, ICJ Reports 1997*, p 7; See press release, Visit to Location - ICJ, visit by the court to the site of the Gabcikovo-Nagymaros hydro-electric dam project (17 February 1997) <http://www.icj-cij.org/docket/index.php?pr =262&p1=3&p2=1&case=92&p3=6> accessed 20 Nov 2018.

[27] ibid, For Visit to Location of the Dispute - ICJ: See press release, visit by the court to the site of the Gabcikovo-Nagymaros hydro-electric dam project (17 February 1997) <http://www.icj-cij.org/docket/index.php?pr= 262&p1=3&p2=1&case=92&p3=6> accessed 20 Nov 2018.

[28] BH Desai and B Sidhu, 'On the Quest for Green Courts in India' (2010) 3 (1) Journal of Court Innovation 79, 87.

qualified judges at its disposal, also felt the need for specialised courts to resolve these issues. Similarly, judges from different jurisdictions of the world, who have been entrusted by conventional courts to resolve environmental disputes, have suffered similar problems. This has led to calls from judges and the judiciary for a body of experts to deal with such an issue.[29]

In response, the government of India asked the Law Commission of India to undertake a study of the issue. The commission submitted its findings in the form of a report - the 186th Law Commission report of India.[30] The report found in favour of the constitution of environmental courts in India. The commission stated in its opening remarks that the proposition so made for the creation of a specialised institution to deal with complex environmental issues is pursuant to the observations made by the Supreme Court of India. The proposal was later presented to the Indian parliament for debate. This subsequent debate was contested however, and in the end, a compromise was reached on the creation of an environmental tribunal, instead of a full court. The findings and the reasons presented and argued by the commission for the formulation of the environmental court were nonetheless highly influential and provided the structural basis for the creation of the tribunal. It was certainly the dawn of an era of new possibilities for the adjudication of environmental disputes by a specialised institute of competence.[31]

It is clear from this analysis that the establishment of an institute with interdisciplinary jurisdiction and expertise, and with innovative powers to adopt to the concern and interpret the law accordingly to resolve a dispute, is essential to ensure environmental justice. The development of green courts/tribunals is seen to have developed in three phases by the end of the 20th century in India.[32] The first phase is marked by the handing over of environmental disputes to the conventional judicial set-up. The second phase was the internal specialisation of the existing judicial body in the

[29] M Sunkin, 'Modernising Environmental Justice: Regulation and the Role of an Environmental Tribunal' (2004) 16 (2) Journal of Environmental Law 307, 308.
[30] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India.
[31] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010 (No 19 of 2010)'* Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010.
[32] D Amirante, 'Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India' (2011-12) 29 Pace Environmental Law Review 441, 446.

form of green judicial bench or green judge-led litigation.[33] However, this phase must not be confused with the creation of a special institution for the purpose; rather it was led by judges and advocates interested in environmental issues. The third phase advocates the development of specialised institutions for the adjudication of environmental disputes in the form of the National Green Tribunal of India.[34] Although, the environmental component of the water disputes is undeniable but these disputes and broadly most of the environmental disputes also possess a strong dimension to human rights and social justice. And this tribunal is subject of investigation in this chapter mainly because it is contested that any institution except for the main stream and higher judiciary is competent to address the cause. [

3.1. The Phases I and II in Development of Green Courts in India

The first and second phases of the development of green courts in India flourished alongside the existing conventional courts. The situation in India is a bit different to the rest of the world because, during the first and second phase of development of the green courts, (between 1970 and 2010), environmental law and litigation practices were glorified by the 'judge-made law' and not by legislative effort. For example, one of the pro-green judges.

> *Justice PN Bhagwati, was of the opinion, that: "judicial activism is imperative, both for strengthening participatory democracy and for realisation of the basic human right by large number of people of the country".[35] It is the duty of a particular judge to interpret the law made by legislature and apply it in real world and it is this process of interpretation which constitutes most creative function of that judge.[36]*

The use of 'public interest litigation' is imperative to the journey of environmental litigation in India, and the advancement of environmental legislation more broadly.[37] The number of cases environmental litigation approaching the higher judiciary (the Supreme

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[33] Asian Justices Forum on Strengthening Court Capacity on Environmental Adjudication 'Judicial Activism and the Role of Green Benches in India', (Manila 4th to 7th July 2007) See also: Samiksha S, 'The Evolution of Green Benches' in our Higher Judiciary!' < http://www.yourarticlelibrary.com/law/the-evolution-of-green-benches-in-our-higher-judiciary/5742/> accessed 20 Nov 2018.

[34] D Amirante, 'Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India' (2011-12) 29 Pace Environmental Law Review 441.

[35] PN Bhagwati, 'The Role of Judiciary in the Democratic Process: Balancing Activism and Judicial Restraint' (1992) 18 Commonwealth Law Bulletin 1262.

[36] ibid.

[37] BN Kripal, 'Public Interest Litigation: Potential and Problems' in *Supreme but not Infallible –Essay in Honour of Supreme Court of India* (OUP 2000) 159.

Court and the High Courts of the state) in the first and the second phase using writ jurisdiction in particular, rose considerably at this time. To further the cause and encourage this initiative, the court deliberately enlarged the scope of the environmental matter brought before the judiciary, by being within the constitutional and the institutional framework. Either by creating appropriate techniques to ease the process such as liberalising the rule of *locus standi*, or, by encouraging wider interpretation of the constitutional and legislative provisions to further the cause.[38]

In recent decades, the courts had deviated from conventional practices and coined certain innovative and powerful means to bring justice to poor and disadvantaged section of society.[39] The higher judiciary has managed to maintain the justice balance by always looking at the broader picture, rather than by adhering to well-defined jurisdictions or strict interpretations of legal provisions.[40] As a result, India has emerged as one of the few jurisdictions in the world where the national judiciary has deliberately driven environmental legislations to the next level. Other jurisdictions to have done this includes the courts of South Africa, New Zealand, the Philippines and New South Wales (Australia).[41]

The development of environmental legislation in India is the result of judicial pronouncement and recommendations made by the court. Therefore, the judgement of the court has not only crystallised the principles of international environmental law, it has also provided good reasons to adapt these as a part of the environmental jurisprudence of the country.[42] The new environmental legislation; the development of environmental rights, and the newly formed constitutional order which is protected by the judiciary, all have a basis in the 42nd Amendment of the Indian Constitution, which is popularly known

[38] D Amirante, 'Post-Modern Constitutionalism in Asia: Perspectives from the Indian Experience' (2013) 6 NUJS Law Review 213.
[39] Z Holladay, 'Public Interest Litigation in India as a Paradigm for Developing Nations' (2012) 19 (2) Indian Journal of Global Legal Studies, Article 9.
[40] S Divan and A Rosencranz, *Environmental Law and Policy in India* (OUP 2001) 50.
[41] SK Patra and VV Krishna, 'National Green Tribunal and Environmental Justice in India' (2014) 44 (4) Indian Journal of Geo-Marine Science 1.
[42] M Parikh, 'Environmental Governance and the Role of Indian Supreme Court, with special focus on the period from 1988 to 1996: A Critical Analysis' (July 2017) 6 (7) International Journal of Humanities and Social Science Invention 55.

as the *mini-constitution.*[43] In addition to the mode of litigation and judicial practice, the constitutional framework in India is supportive of the practice because distributive social justice is the underlying philosophy of the constitution. This duty originates from Part IV of the Constitution of India, where it ascertains that social justice is the central feature of the new constitutional order.[44]

The mode of litigation and the importance of judicial input is at the core of preserving and evaluating environmental laws and policies, and ensuring the governance of the resource in relation to the environment, its components, and other natural resources, along with the protection of environmental rights in India. Therefore, the tribunal would have to contribute mainly on that line and evolve itself as a body pro-actively involved in the development of environmental legislation and in preserving the rights that originated from it.[45] This background and the customary practices are important. Because most of the environmental legislation in India is articulated in broad visionary statements, rather than well-defined exhaustive statutes. Thus, interpretation and clarification are of high importance.[46]

3.2. The Beginning of Phase III

The development of the third phase favours the development of specialised institutions in response to growing concern about the environment. This trend of specialised expertise has its roots in international law. Specifically, the trend owes much to international efforts to maintain judicial order in response to complexity of disputes arising from globalisation.[47] In an increasingly inter-dependent world, adhering to universal norms in the fight to preserve the environment is preferable and desirable.

This third phase is also marked by the advent of the National Green Tribunal (NGT). This is a comparatively a new institution and has been operative since July 2011. This has five zonal benches alongside the principle bench, which sits at New Delhi (the national

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[43] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018) 42nd Amendment Act.
[44] ibid, Part IV.
[45] S Shrotria, 'Environmental justice: Is the National Green Tribunal of India effective?' (Sep 2015) 17 (3) Environmental Law Review 169, 172.
[46] M Menon and K Kohli, 'Executive's Environmental Dilemmas: Unpacking a Committee's Report' (2014) Vol XLIX (50) Economic and Political Weekly 10, 11.
[47] MB Zimmer, 'Overview of Specialized Courts' (June 2009) International Journal for Court Administration 1.

capital).[48] This has been possible because of the cumulative effect of the judicial input, which was followed by the effort of the legislature to embed the constitutional tribunal. Namely, such provisions were incorporated by the 42nd Amendment Act of 1976,[49] which incorporated Article 48-A[50]*(DPSP: protection and improvement of the environment and safeguarding of forest and wildlife);* and Article 51-A(g)[51]*(FD: to protect and improve the natural environment, including forests, lakes, rivers and wild-life and to have compassion for living creatures)* in favour of environmental protection. It also incorporated Articles 17A and 17B in a concurrent list to cover forests and the protection of wildlife and birds under the same amendment.[52] The following section examines the attributes of the green tribunal at length.

4. The National Green Tribunal

The central government established the National Green Tribunal (NGT) in 2010.[53] Its establishment was under the constitutional provision specified in Article 323, which determines the norms for the creation, jurisdiction and other functional aspects of the tribunal. This tribunal replaces two of its predecessors made for the same purpose, the National Environmental Tribunal Act, 1995,[54] and the National Environmental Appellate Authority Act, 1997.[55] The former never reached its objective, and the latter never came into existence, although the specialised tribunal was long awaited. The tribunal was designed to ensure environmental justice for the masses, to conduct speedy trials, and to reduce the burden of environmental litigation from the overburdened judiciary. The NGT in India is still in its infancy and represents the aspiration to enable *access to environmental justice* for all.[56]

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[48] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010 (No 19 of 2010)'* Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010.
[49] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) 42nd Amendment Act of 1976.
[50] ibid, Article 48-A.
[51] ibid, Article 51-G.
[52] ibid, Concurrent List.
[53] Government of India, 'The Official Gazette of India: Extraordinary: Part II, Section 3 (ii)', Notification No. 2163 by Ministry of Environment and Forests, New Delhi 18th October 2010.
[54] Government of India, *The National Environment Tribunal Act, 1995* (No.27 Of 1995).
[55] Government of India, *The National Environment Appellate Authority Act, 1997* (No. 22 Of 1997).
[56] S Stephen (edn), *Handbook on Access to Justice under the Aarhus Convention* (Ministry of the Environment Republic of Estonia, Hungary 2003).

The National Green Tribunal Act states the objective of the tribunal in its introductory paragraph as a body dedicated for effective and expeditious disposal of cases in relation to environmental protection, forest conservation and other natural resources.[57] It exists to enforce legal rights relating to the environment and in cases of its violation or infringement, to compensate the victim. The act further promises to maintain the commitments made by the country as a party to the conferences at Stockholm and Rio: to ensure *access to environmental justice* through judicial and administrative proceedings, and to develop the liability law to redress and remedy the victims of pollution and other environmental damages.[58] It also promises to maintain the judicial pronouncement of the country that confirmed the *right to environment* as the right derived from the *right to life*.[59] This looks very promising and innovative on the part of the legislature. The tribunal surely has some promising features, but its utility will determine its success in years to come. Some of the attributes that make the tribunals desirable are discussed below.

4.1. The Tribunals Jurisdiction and the Disposal of Cases

One of the reasons for the creation of the tribunal was to relieve the over-burdened judiciary of having to deal with environmental disputes. Traditional litigation proceedings in India are time-consuming and full of technicalities that cause delays in the disposal of cases.[60] Because of this, the rules created for the tribunals were relatively relaxed. This freed the tribunals from the shackles of civil procedural rules,[61] as well as from the technicalities of evidence law.[62] The tribunal remains, however, bound by the rules of natural justice.[63] Although exempted from following the rules of civil procedure, the tribunal still enjoys the powers of a civil court and the order passed by the tribunal has the same impact as that of a decree of a civil court.[64] Together these provisions make the institution desirable and promise swifter environmental justice without unnecessary

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[57] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010 (No 19 of 2010)'* Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Preamble.
[58] ibid.
[59] High Court of Madras, (India), *R. Venkataswami Nyadu v. South India Viscose Ltd.* 1985, AIR 1416.
[60] B Cartwright, 'Conclusion: Disputes and Reported Cases' (1975) 9 (2) Law & Society Review 369.
[61] Government of India, *Civil Procedure Code, 1908* (Act No. 5 of Year 1908).
[62] Government of India, *Indian Easement Act, 1882* (Act No. 5 of Year 1882).
[63] J Micheal Angstadt, 'Securing Access to Justice through Environmental Courts and Tribunals: A Case in Diversity' (2015-16) 17 Vermont Journal of Environmental Law 346, 354.
[64] Government of India, *Civil Procedure Code, 1908* (Act No. 5 of Year 1908) Section 2 (2).

delays. This makes it important to investigate how far the tribunal can succeed in reducing the burden of the judiciary as it is only entrusted to deal with civil and administrative cases within the constraints of the statute.

The original jurisdiction of the tribunal assigns all the civil cases to it. In the public domain, this concerns the decisions taken by the public authority working not in conformity with the environmental standards although, originating from the provisions mentioned in the statutes specified in Schedule I of the NGT Act. Additionally, all other matters concerning the substantial question of law arising from Schedule I and the protection of the legal *right to the environment* are the tribunals responsibility.[65] In this sense, the ambit of the tribunals jurisdiction was clarified in one of the its judgments, stating that the jurisdiction of the tribunal is confined to only the civil and administrative cases arising in relation to the statutes mentioned in Schedule I of the Act.[66] Additionally, the extent and scope of the phrase 'substantial question of law' initially generated a lot of hope. However, the tribunal clarified this and stated that the 'substantial question of law' must be the one which is not yet settled,[67] or the one which is debatable, and must relate to the implementation of the enactments specified in Schedule I of the Act.[68] This effectively means that all other matters arising directly or indirectly from environmental disputes are out of the tribunals jurisdiction.

In addition to these limitations, another factual component is missing from the jurisdiction of the tribunal, which is evident by the federal structure of the Indian Constitution. This authorises the state to make the law/statute for the regulation of natural resource within the territorial boundary of the state or a part of it.[69] However, such state made laws do not fall within the jurisdiction of the tribunal. For instance, if we concentrate only on the statutes governing the freshwater resource of the country, the

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[65] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 14.
[66] National Green Tribunal of India, *Sachin Potre v. State of Maharashtra and others* OA No.13/2013 (THC) (WZ).
[67] National Green Tribunal of India, *Goa Foundation v. Union of India* Application No. 20 of 2012. Decision: 18 July 2013.
[68] S Shrotia, 'Environmental Justice: Is the National Green Tribunal of India Effective?' (2015) 17 (3) Environmental Law Review 169, 178.
[69] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Part XI.

Water Pollution and Control Act,[70] along with the Water Cess Act[71] are specified in Schedule I of the statute. However, the Irrigation Act of the provincial states is missing and so are the laws and policies regulating the groundwater. This is problematic because irrigation uses some 70% of the total quantum of freshwater resource, and India mainly depends on groundwater for that purpose.[72] Perhaps other departments, like mining, hydropower plants and other water consuming sectors are kept out of the purview of this act. Therefore, even if the tribunal tries its best to protect the integrity of the water resource by maintaining and developing stringent measures to protect the resource, the primary objective of preserving the integrity of the resource is defiled due to the non-competence of the tribunal to equate all the inter-related aspects of the resource. This risks eventually wrecking the positive efforts made elsewhere for the protection and management of the resource and letting the objective and purpose of the statute fail.

The tribunal is short of jurisdiction. This is probably the reason why the tribunal keeps enlarging its scope by widely interpreting the term 'environment' and thus bringing the concerned policies and the legal provisions within its ambit. Again, the environment as a term encompasses most if not all of the concerns which are brought to the tribunal, however, this attitude of the tribunal is desirable to fulfil the objective it was created for. At the same time this does raise an eye on the jurisdiction and authority of the tribunal.

After the establishment of NGT in 2010, the cases and issues pending before the judiciary in the matters concerning the statutes mentioned in Schedule I of the Act were referred to the tribunal, as it enjoys the exclusive appellate jurisdiction for the subject-matter.[73] The hierarchy of appeal in the tribunal runs from the regional bench to the national bench and against the order of the national bench to the Supreme Court of India, using Article 136 of the Indian Constitution, relating to Special Leave Petition.[74] In effect, barring the writ jurisdiction of the higher judiciary under Article 226 and 32 of the Indian

[70] Government of India, *The Water (Prevention and Control of Pollution) Act, 1974* (Act No. 6 of Year 1974).
[71] Government of India, *The Water (Prevention and Control of Pollution) Cess Act, 1977* (Act No. 36 of Year 1977).
[72] MD Kumar, 'Food security and Sustainable Agriculture in India: The Water Management Challenge' (2003) Working Paper 60 IWIM.
[73] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 16.
[74] ibid Section 22.

Constitution, respectively.[75] This bar to the writ jurisdiction creates constitutional deadlock, as it is considered as an ingredient of the *basic structure doctrine* of the constitution. On that note, the Supreme Court had elsewhere confirmed that, in case of conflict between the powers of the tribunal and the power of the High Court, the tribunal, which bars the inherent power of High Court under Article 226, is to be treated as illegal and arbitrary.[76]

In addition to the above, the Law Commission's comment regarding this issue suggests that the high court usually refrains from interfering in jurisdictional aspects of the tribunal. This is because the tribunal was created to assist the judiciary in the speedy disposal of cases, and the final appellate authority against the order of the tribunal lies with the Supreme Court of India, thus, the interest of justice is guarded.[77] The record shall reflect that the concern of limited jurisdiction of the tribunal and the possibility of it conflicting with the writ jurisdiction of the high court was considered by the commission and therefore, they were not in favour of the creation of the tribunal.[78] However, the amount of cases flooding the judiciary after the creation of the tribunal has considerably decreased, but they certainly are not free from them.

The tribunal also acted as the watchdog over the activities of the bodies within its jurisdiction and dealt with PILs as well. Along with resolving disputes and passing orders in that regard, it is entitled to make suggestions to the concerned departments suggesting the means and manner to tackle with the situation.[79] The tribunal is required to address all the statutes mentioned in Schedule I of the Act with similar principles of law and to decide the issues using the same legal considerations under the auspices of the assistance of experts in the relevant field. Therefore, the powers the tribunal is entrusted with would have been of great importance in building consistent and coherent environmental

[75] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 226.
[76] Supreme Court of India, *L Chandra Kumar v. Union of India* AIR 1997 SC 1125: (1997) 3 SCC 261.
[77] Supreme Court of India*, S Jagadeesan v. Avya*, AIR 1984 SC 1512; Supreme Court of India, *Titagarh Paper Mills v. State of Orissa*, AIR 1983 SC 603.
[78] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India.
[79] PJ Dilip Kumar, 'Western Ghats Conservation Experts' Reports and a View from the Ground' (July 19, 2014) XLIX (29) EPW Economic & Political Weekly 224.

practises and streamlining the laws and policies working within the domestic jurisdiction, if subjected to wider jurisdiction.[80]

However, the limited jurisdiction of the tribunal leaves the possibility for the multiplicity of judgements and court proceedings in the parallel jurisdiction. This gives rise to legal deadlock in the form of *Res Judicata* by violating the principles of law or at least raising questions regarding the authenticity and legality of the tribunal. This hampers its credibility. Arguably, situations like this will continue to involve the judiciary in a convoluted manner.[81] Thus far, we have seen that limited jurisdiction becomes problematic in accomplishing the objective to set the judiciary free from dealing with environmental disputes. Similarly, the next section will explore the attributes of interdisciplinary concerns faced by the judiciary and the tribunal.

4.2. Interdisciplinary Concern's

The main concern felt by the Supreme Court while dealing with environmental cases was the difficulty in understanding and implying scientific evidence, and the lack of judicial expertise to tackle non-conventional cases.[82] The judiciary has vast jurisdiction and power required for the adjudication of all legal matters but was subjected to a new challenge with environmental disputes. This made it difficult for the judiciary to apply conventional legal principles in the rapidly evolving non-conventional judicial discipline.[83] Based on the experience of the judiciary and the shortcomings they had gone through, the tribunal had a clear mandate to follow. [84]

As a result, the composition of the panel of the tribunal consists of a scientific expert whose opinion forms part of the judgement. This begins to accommodate the

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[80] A Rosencranz and G Sahu, 'Assessing the National Green Tribunal after Four Years' (2014) 5 Journal of Indian Law and Society 191.

[81] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India, Chapter XI Proposals for Environmental Courts in India.

[82] Supreme Court of India, *MC Mehta v. Union of India* 1987 (2) SCC 176; Supreme Court of India, *Indian Council for Environmental-Legal Action v. Union of India* 1996 (3) SCC 212; Supreme Court of India, *A.P. Pollution Control Board v. MV Nayudu*, 1999 (2) SCC 178 (dated 27/01/1999); and Supreme Court of India, *A.P Pollution Control Board v. MV Nayudu II*, 2001 (2) SCC 62.

[83] George (Rock) Pring and Catherine (Kitty) Pring, 'Environmental Courts & Tribunals: A Guide for Policy Makers' (UNEP, Published by UN Environment 2016) 1, 26.

[84] George (Rock) Pring and Catherine (Kitty) Pring, *Greening Justice: Creating and Improving Environmental Courts and Tribunals* (The Access Initiative World Resources Institute, 2009) 1.

interdisciplinary nature of the problem within the judicial frame of reference.[85] The tribunal is authorised to mobilise the experts at their disposal and to consult other experts to acquire the requisite in-depth knowledge about the matters concerned. The experts' opinion assists the tribunal in deciding the manner these evolving concepts of environmental law must be applied in a particular case. Mainly, this is to balance the developmental and environmental concerns, on the one hand, and on the other, to maintain the balance between the rights of the people over a communal resource and the means to manage the natural resource itself.[86] The mentioned pool of experts is not to be confused with the expert member(s) of the panel, rather it could be understood as being in addition to them. This is not the mandatory procedure, but the discretionary right exercised by the panel to further the objective of the tribunal, and has been a dominant practice of the tribunal since it was created.

The need for an interdisciplinary platform does not only suggest scientific interconnectedness but other interdisciplinary concerns as well. It meant two separate things in the context of the judiciary and the tribunal: for the judiciary, it meant a meeting point where science meets law, as it did not have restrictive jurisdictional limitation. Whereas, for the tribunal, it meant interdisciplinary jurisdictions where overarching laws could meet on the common ground. Despite the presence of a scientific expert in the tribunals panel, it suffers the interdisciplinary nature of the dispute due to its limited jurisdiction. Mainly because of the concerns arising from the intersecting or overarching legal jurisdictions. Therefore, the body entrusted with the task of adjudicating environmental cases is often thought to have exceeded its limited jurisdiction provided by the statute, making decisions *ultra vires*.[87]

In contrast to the tribunals experience, the need for a broader interdisciplinary jurisdiction with a holistic vision was proposed and evident from the observations of *Supreme Court in MV Nayudu case*,[88] which needs discussion. The interdisciplinary nature

[85] L Harold, 'Environmental Decision-making and the Role of the Courts' (1974) 122 (3) University of Pennsylvania Law Review 509.
[86] P Brian, 'Characteristics of Successful Environmental Courts and Tribunals' (2014) 26 (3) Journal of Environmental law 365.
[87] P Brian, 'Operating an environment court: The experience of the Land and Environment Court of New South Wales' (2008) 25 Environmental and Planning Law Journal 385.
[88] Supreme Court of India, *A.P Pollution Control Board v. M.V Nayudu* 2001 (2) SCC 62.

of environmental issues is broad and could not be defined exhaustively within the meaning of a statute for that purpose. Moreover, the juridical limitations of the tribunal do assign them the duty to regulate environmental issues effectively, but at the same time restrict their ability to a list of statutes mentioned in Schedule I of the Tribunal Act.[89] Unfortunately, these are not authorised to deal with other interdisciplinary questions which may arise outside the limited jurisdiction specified by the NGT Act, but within the broader domain of law and justice. This includes questions which may raise concerns about the authenticity of the existing laws and principles of law applicable outside the realm of the environment, but within said jurisdiction.[90] This is not the case with the higher judiciary, which remains free to deal with any legal issue arising within the national jurisdiction. Additionally, the higher judiciary remains immune from such jurisdictional constraints except for the issues raised in the case law concerned. Therefore, the future success of the tribunal is dependent on the functional success of the attributes such as autonomy, jurisdictional limitations, and its authentic implementation.

Likewise, the Land and Environment Court of New South Wales, Australia (established in 1979),[91] and the Environment Court of New Zealand are of great importance in this context. This is because they were used as models for the creation of green courts by the Indian lawmakers and were used as a point of reference by the Supreme Court of India and the Indian Law Commission.[92] The proposed model of the Australian court is note-worthy, keeping in mind the fact that every country has different expectations of, and needs for, their institutions. However, the contemporary court of New Zealand has some interesting features to offer which seems appealing in the Indian scenario. One fascinating feature is that it has environmental commissioners in addition to technical experts in the panel of the court, and the court is also empowered to make declarations of law,[93] which resembles the writ jurisdiction of the higher judiciary in India. Moreover, the power associated with writ jurisdiction has already proved its significance

[89] Government of India in official Gazette of India, '*The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Schedule I.
[90] High Court of Kerala, *Perumatty Grama Panchayat v. State of Kerala 2004* (1) KLT 731.
[91] Government of Australia, *New South Wales, Land and Environment Court, Act 1979 No 204*.
[92] R Sharma, 'Green Courts in India: Strengthening Environmental Governance?' (2008) 4 (1) Law, Environment and Development Journal 50.
[93] Parliament of New Zealand, *Resource Management Amendment Act, 1996, Public Act 1996 No 160*.

in the last few decades concerning environmental litigations in the country. However, the tribunal is devoid of a similar power, which has been the backbone of this kind of litigation in India.

Resolving the interdisciplinary issue is mentioned as one of the goals to be achieved in the preamble of the statute, but not enough tools were left at its disposal to honour that commitment in the main text, which is the operative part of the statute.[94] Evidently, the interdisciplinary concern mentioned here does not only restrict itself to the scientific interface of environmental problems, but to other complex issues. The legislative body has once again acted in the same manner it has done with other recommendations made by the judiciary. This can mean that the recommendations so made are followed monotonously and without thought, or, that the main objective is compromised during the legislative process, resulting in the formulation of yet another statute, but lacking the strength to serve its purpose.[95] Nevertheless, the tribunal faces certain deficiencies and the legislature does not seem to have learned from this yet.

4.3. The Public Interest Litigation and the need for Consistency in Environmental Jurisprudence

India is a multi-cultural and vast country, the judiciary has tried its best to maintain a consistent attitude with its pronouncements, but taken on a case-by-case basis, the practice of the ordinary courts often seems to differ in the application of the innovative principles of environmental law.[96] At times, the precedents have failed to represent consistency in the decisions pronounced, or in the principles believed.[97] One consequence of this is inconsistent application of the legal principle mainly due to the absence of a legal statute recognising them in a given jurisdiction.[98] This seems obvious because the judges are not well versed to deal with environmental disputes, and they do not possess

[94] Government of India in official Gazette of India, '*The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Preamble.
[95] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India.
[96] D Amirante, 'Environmental Courts in Comparative Perspective: Preliminary Reflections on the National Green Tribunal of India' (2011-12) 29 Pace Environmental Law Review 441, 468.
[97] P Cullet, 'Water Sector Reforms and Courts in India: Lessons from the Evolving Case Law' RECIEL 19 (3) 20103, ISSN 0962 8797.
[98] High Court of Kerala (India), *Perumatty Grama Panchayat vs State of Kerala* 2004 (1) KLT 731.

elaborate and up-to-date knowledge in the field, which is both vibrant and subject to spontaneous changes to accommodate the changing needs of society.

The PILs became the primary source of litigation for environmental concerns and proved revolutionary. Although the judiciary was not free from flaws, in the post-Rio era (from 1995 onwards) the judiciary was often accused of many sins, including:

- Giving preferential treatment to influential litigants over poor litigants.[99]
- Favouring the needs of the emerging middle class.
- Being reluctant to entertain and decide a case against government-led development projects,[100]
- Rejecting or over-looking the experts' opinions on certain matters, and;[101]
- Failing, whilst deciding the cases, to comply in a consistent manner with environmental principles such as the precautionary principle,[102] and the polluter pays principle.[103]

This attitude of judiciary became possible due to the absence of legal statutes which could recognise these principles of environmental law as the working legal principles within the domestic jurisdiction. This provided opportunities for the judges to abdicate their moral and social responsibility in certain matters. Moreover, the non-competence of the courts of generalised jurisdictions and the system's lack of faith in emerging principles and manners coined by the higher judiciary of the state for the adjudication of environmental disputes, along with their vested interests, gave them

[99] G Bhan, 'This is No Longer the City I Once Knew: Evictions, the Urban Poor and the Right to the City in Millennial Delhi' (2009) 21 (1) Environment and Urbanization 127.
[100] P Bhushan, 'Supreme Court and PIL: Changing Perspectives under Liberalization' (2004) 39 (18) Economic and Political Weekly 1770.
[101] Supreme Court of India, *Deepak Nitrate Ltd v. State of Gujarat,* 2004 Civil Appeal No. 1521 of 2001.
[102] Supreme Court of India, *Essar Oil Ltd v. Halar Utkarsh Samiti and Others,* 2004 Civil Appeal No. 352-353 of 2004; 2 SCC 392, 408.
[103] Supreme Court of India, *Karnataka Industrial Area Development Board v. Sri. C Kenchappa and Others*, 2006 Civil Appeal 7405 of 2000.

sufficient reason to abandon the trend in the making.[104] This made it difficult for the judiciary to deliver judgements with consistency.

One can expect consistent practice and evaluation of legal principles from the specialised institutions, as well as well-coordinated and consistent decisions, to enrich the environmental jurisprudence of the country.[105] One can understand the desirability of consistent practices in a field that is at an evolutionary stage. These consistent practices can only be expected to grow and evolve in the right direction if they keep coming from similar sources of expertise, grounded in the knowledge required to understand the complexity of an issue with certainty.[106] Additionally, it is important that the opinions of the technical/scientific experts cannot easily be overlooked by the tribunal, because they are recorded and form an important part of the official order or the judgement of the tribunal.[107] The specialised tribunal has tremendous possibilities for harmonising and developing environmental jurisprudence to a certain standard in the country. This is very much required for the development of national jurisprudence and to make a clear impact globally in support of the practices carried forward. The specialised environmental courts are expected to be the hope for a green and sustainable future, and the platform where PIL's could be heard and analysed with expertise. This demands the evaluation of the principles of law and the rules governing them with an objective to create sustainable environmental jurisprudence to determine consistent, coherent and sustainable laws and principles. These can thus act as the legal bedrock governing policies on a broad scale.

The liberalised rules of public interest litigation for environmental disputes by the judiciary has been of utmost importance for encouraging public-spirited citizens to raise issues in public and to evaluate the administrative efforts for the protection of the

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[104] K Patel and K Dey, 'The Trajectory of Environmental Justice in India: Prospects and Challenges for the National Green Tribunal' in M Tim, N Trivedi and D Vajpeyi (eds) *Perspectives on Governance and Society: Essays in Honour of Professor OP Dwivedi* (Rawat Publications 2013) 160-74.

[105] GN Gill, 'The National Green Tribunal of India: A Sustainable Future through the Principles of International Environmental Law' (2014) 16 (3) Environmental Law Review 217.

[106] Barzilai, Jonathan, WD Cook, and B Golany, 'Consistent Weights for Judgements Matrices of the Relative Importance of Alternatives' (1987) 6 (3) Operations Research Letters 131.

[107] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 19 (5).

environment.[108] By so doing, the duty of government to protect the environment and the rights of the citizens was rethought and revaluated in India. For instance, the *right to environment* and the *right to water* has been interpreted as a component of the *right to life* by the judicial body of the state, through litigations. Similarly, the green tribunals possess the competence to deal with public interest litigations, but in comparison to the higher judiciary, they lack writ jurisdiction to give effect to them. However, the *locus standi* to bring the case to the tribunal is as elaborate as it was with the higher judiciary.[109] Unlike the higher judiciary the jurisdictional constraints of the tribunal do not permit them to deal with the rights-based question of law, especially when such rights are not yet determined as legal rights in the domestic jurisdiction of the state. The rights-based litigation has been the customary primary source in India for questioning the ways we deal with nature and the respective equation of rights and duties to accomplish a designated goal. However, the attributes of PIL designated to the tribunal seem to have constrained it to acting within the ambit of specific legal statutes mentioned in Schedule I of the Tribunals Act.

4.3.1. Rights Based Concerns

For the sake of argument, the example in this section is designed to explore the possibilities the tribunal might face in comparison to the higher judiciary, if a similar PIL was filed before it. For instance, if a petition is filed before the tribunal asking if the *right to water* is determined as the fundamental right within the meaning of the *right to life* by the Supreme Court of India,[110] will this confirmation amount to a declaration of the same as a legal right? What will be the consequence given the limitations of the tribunal?

To resolve these issues, the tribunal needs to decipher the matter in hand based on the jurisdictional authority it possesses. Therefore, it will determine the matter based on two grounds:

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[108] G Sahu, 'Implication of Indian Supreme Courts Innovation for Environmental Jurisprudence' (2008) 4 (1) Law, Environmental and Development Journal.

[109] KG Balakrishnan, 'Growth of Public Interest Litigation in India', Chief Justice of India in Singapore Academy of Law, (Fifteenth Annual Lecture October 8, 2008), <http://supremecourtofindia.nic.in/speeches/speeches_2008/8%5B1%5D.10.08_singapore_growth_of_public_interest_litigation.pdf> accessed 20 Nov 2018.

[110] Supreme Court of India, *MC Mehta v. Kamal Nath and others, 1996* (WP No. 182/1996, Judgement on 15 March 2002, Beas River Case: Imposition of Exemplary Damages).

1) The *right to water* is not mentioned in any legal statute as a legal right as per the list of statutes mentioned in the Schedule I of the Tribunals Act. Thus, it does not amount to the legal right for the tribunal.

2) The *right to water* does not amount to the right in a positive sense within the ambit of legal right confined in the statutes mentioned above or in judicial pronouncement.[111]

Thus, it is beyond the tribunals jurisdiction to resolve such a query. This is because, the issue lies outside the jurisdiction of the statutes mentioned in Schedule I of the Act, and it does not qualify as the duty to protect the environment mentioned in the preamble of the tribunals' statute in the strict sense. The duty to protect the environment in this sense mainly deals with the well-defined legal right to the environment, which unfortunately is not the case with the pronouncement of the *right to water*, as mentioned above. That said, we can argue that the duty to protect the *right to environment* could be enlarged in scope by the tribunal to cover a wide variety of topics. This is because the statute did not explain the meaning of the term and this ambiguity could be used to accommodate different interpretations.

4.3.2. Multidisciplinary Social Concerns

Let's take dam building projects as an example, several concerns arise with the construction of a dam,[112] such as the displacement of people; ecological deterioration; procedural issues such as uninformed decision making; violation of environmental and social impact assessments; conflicting rights related to property law, and other issues dealing with rights associated with a dam building project. All these concerns have environmental dimension to them, but at the same time, they raise broader question of equity, protection of social rights and the interests of a variety of people and ecologies.[113] The only body competent to address these issues is the higher judiciary, and no other institution or specialised body will ever be competent to address them. The point of this

[111] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Schedule I.
[112] Supreme Court of India*, Narmada Bachao Andolan v. Union of India And Ors* (Writ Petition No. 328 of 2002 Judgement on 15 March 2005 by SC Bench consisting YK Sabharwal, KG Balakrishnan and SB Sinha).
[113] S Narula, 'The Story of Narmada Bachao Andolan: Human Rights in the Global Economy and the Struggle Against the World Bank' (2008) New York University Public Law and Legal Theory Working Papers, Paper 106.

discussion is to clarify that the rights based issues will always be out of the purview of the tribunals jurisdiction, even if the jurisdiction is enlarged by means of an amendment.[114] Moreover, environmental issues will continue to push into several other disciplines and engage themselves in social issues, but they can never be confined within the restrictive jurisdiction prescribed in a statute or a group of statutes. Unless these issues can be addressed together, the utility of the tribunal in this regard and the possibility of developing consistent environmental jurisprudence or aligning the environmental statutes with similar legal standard is preposterous.

By virtue of Section 33 of the Tribunals Act, the NGT enjoys an overriding influence over every other piece of legislation.[115] Additionally, it has the power to outlaw all the provisions of every other statute which is inconsistent with it.[116] This gives it superiority over other statutes and laws, which could have been of great importance had the jurisdiction been wide and authoritative. This Act has the potential to resolve most of these problems and is a great forum for adjudication of environmental disputes, as well as for the consistent development of environmental jurisprudence in that field. Unfortunately, once again the laws and statutes are not being crafted to deal with environmental problems of the 21st century, rather, attempts are made to address environmental issues using the available statutes or principles of law at its disposal. This is a major flaw. Unless the conservation and management of the environment are planned with due reference to its inherent value, the holistic improvement of the environment cannot not be achieved. This therefore requires a change in attitude and re-orientation concerning the issue.[117]

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[114] Padmapriya Govindarajan, 'How India's National Green Tribunal Upheld Environmental Protections in 2016:
India's National Green Tribunal played an important part in several notable environmental cases in 2016' (3 Jan 2016, The Diplomat) <https://thediplomat.com/2017/01/how-indias-national-green-tribunal-upheld-environmental-protections-in-2016/> accessed 20 Nov 2018.

[115] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 33.

[116] ibid.

[117] Her Majesties' Government of the UK, *The Natural Choice: Securing the Value of Nature* (2011, The Stationery Office Limited on behalf of the Controller of Her Majesty's Stationery Office).

The specialised tribunal has tremendous possibilities, but its potential is undermined mainly by two reasons: a limited jurisdiction, and the composition of the panel, the latter of which is discussed next.

4.4. The Composition of the Tribunal

The composition of the tribunal consists of a retired judge from the Supreme Court of India, or the retired Chief Justice of the High Court as the chairperson, and a judicial member who is also a retired high court judge.[118] There should also be an expert member or members (s) who either have a master's degree or doctorate in an appropriate field in the physical or life sciences, engineering or technology.[119] Additionally, they must possess fifteen years' of experience, with at least five years' of practical experience in the field of forest and environment from a national institute of repute.[120] Alternatively, they should have fifteen years' of experience with the central or state government, including five years' of dealing with environmental matters in a state or central level institution or a reputed state or national institution.[121] The central government is empowered to appoint the members of the tribunal.[122] The composition of the green panel looks impressive, but it does possess scope for improvement. The panel has a judicial and scientific expert with expertise in their respective fields. The presence of a judicial member who is trained to decide conventional disputes is the requirement to ensure the neutrality of judicial decision.[123] The panel still lacks however an individual with advanced knowledge of environmental law and social science.

The sole objective for the establishment of a specialised tribunal rests on the idea that it must be experienced enough to decide such disputes. Concisely one such member who has extensive knowledge of environmental laws and principles and is up to date with their changing global trends and perceptions regarding implication is missing from the panel - an expert member in environmental law. Perhaps the presence of such a member

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[118] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 5 (1).
[119] ibid Section 4.
[120] ibid Section 5 (2) a.
[121] ibid Section 5 (2) b.
[122] ibid Section 6 (1).
[123] PN Bhagwati, 'Judicial Activism and Public Interest Litigation' (1984-85) 23 Columbia Journal of Transitional Law 561.

could be useful for refining the legal statutes and the environmental principles, and to examine the utility of these once applied in a specific jurisdiction.[124] The suggested composition of the panel would also have assisted in breaking the stereotype implication of technical advice from the scientific expert and could have legally challenged the bureaucratic mind-set. Stereotype in a sense that the scientific opinion is accommodated in judicial decision making, but it is not yet processed to the limit of sophistication which can incorporate and embed the principles of environmental law in a judicial and legal set-up. Thus, inspiring the environmental law making. The tribunal could make a difference and enhance the level of impact it creates in refining the environmental principles and contributing to the environmental jurisprudence of the country. Since the tribunal is in its initial stage, it must be open to suggestions. The section below examines the legal quotient of the Tribunal Act.

4.5 Legal Quotient of the Tribunal: Progressive or Conservative?

The tribunal is required by the act to apply the principles of *sustainable development, the precautionary principle, and the polluter pays* principle while deciding a case.[125] These principles are the recognised principles of international environmental law and have been confirmed by the higher judiciary as part of national jurisprudence as well.[126] They form the indivisible part of the environmental legislation of the country, and their explicit inclusion in the NGT act further gave these principles relevance and authenticity.[127] Explicit acknowledgement of these principles further consolidates and takes forward the efforts of the higher judiciary.[128] It reconfirms the pledge of the tribunals act to give effect to the decisions taken in international environmental

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[124] D Bodansky, 'The Legitimacy of International Governance: A Coming Challenge for International Environmental Law?' (1999) American Journal of International Law 596.

[125] United Nations, 'Rio Declaration on Environment and Development, 1992', (The Rio Declaration is one of five agreements coming out of the United Nations Conference on Environment and Development (also called the "Earth Summit") in Rio de Janeiro in June 1992. Although a non-binding, or "soft law" instrument, the Rio Declaration sets forth important principles of international environmental law, especially sustainable development) UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992).

[126] Supreme Court of India, *Indian Council for Enviro-Legal v. Union of India and* Others, 2011 Writ Petition (c) No. 967 of 1989.

[127]Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 20; See also, B Gupta, 'National Green Tribunal and Environmental Jurisprudence: Synergy of Actions' (2015) 1 (2) Journal of Public Policy.

[128] GN Gill, 'Analysis A Green Tribunal for India' (2010) Journal of Environmental Law 1, 14.

conferences.[129] Although the effort is very much appreciated, the task for the codification and crystallisation of the norms are limited, and a similar treatment for the other qualifying norms in the future has been accepted. Some of the norms which qualify for similar treatment are subject to analysis in this section.

The principle of no-fault liability/absolute liability has attained a specific place in the statute.[130] This is an obsolete principle which was upgraded by the Supreme Court of India in 1986, when it was stated that in certain cases the defence argued in 'tortuous principle of strict liability' does not apply and the offender cannot use it as an excuse.[131] As a consequence, the principle of *absolute liability* was upgraded to *strict liability*. However, the Tribunals Act has deliberately incorporated the older and lighter version of the principle and has not even considered the presence of both the principles being used contextually. This raises a question about the intent of the legislature which is reflective of the bias towards the economic development rather than the sustainable development of the country. This again is contrary to the objective stated in the tribunals' statute.

The other concern expressed in the statement might deal with the fact that two of the national water acts acquire a place in Schedule I of the Tribunals Act. Unfortunately, both of these acts concern themselves with pollution control, which means protection of the *right to water* arising due to a violation of the provisions of the statute.[132] The protection granted by the tribunal for the violation of any of the rights and duties mentioned in those acts are stringent and can be swiftly implemented.[133] However, the lack of a holistic understanding of the resource, its management, and its impact on social and ecological factors, undermines the positive efforts taken by the tribunal for the protection of the resource. This discussion hosts few technical issues contrary to the

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[129] Khoday, Kishan, and L Perch, 'Green Equity: Environmental Justice for more Inclusive Growth' (2012) 19 Policy Research Brief, International Policy Centre for Inclusive Growth 1.

[130] Government of India in official Gazette of India, '*The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010., Section 17 (3).

[131] Supreme Court of India, *MC Mehta and others v. Union of India and others*, 1986 (1987 AIR 1086; 1987 SCR (1) 819.

[132] Government of India, *The Water (Prevention and Control of Pollution) Cess Act, 1977* (Act No. 36 of Year 1977).

[133] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 15 and 26.

principles of environmental law mentioned in the statute. As per Section 20 of the statute, the tribunal is obliged to consider the principals of *Sustainable Development; Precautionary Principle, and the Polluter Pays Principle* before pronouncing its judgement.[134] Based on the issue raised above, the *principle of sustainable development* is compromised in isolation.

If the jurisdictional ambit of the act under consideration does not consider the environment holistically, then the implication of these principles suffers because by nature these principles cannot flourish or satisfy their objective, when confined within a statutory jurisdiction, without considering the transboundary impact on the environment holistically.[135] Moreover, other relative concerns might come under the jurisdiction of a different statute or policy considerations, and be subject to different principles of law. Therefore, the approach to deal with the components of the environment in isolation is against the *principle of sustainable development* and is refuted by the modern principles of international environmental law. It is also supported by scientific evidence.[136] This is to say, that the tribunal is not at fault whilst performing its task, but the fault lies in the tribunals act itself. It is the nature of the principle of *sustainable development* that it cannot flourish in restrictive jurisdictions, and its partial application will not produce sustainable results.[137] The tribunals statute is not only a living embodiment of the half-hearted effort of the legislature, but its components also clash with its objective.[138]

The other doctrine which has already marked its presence in the national jurisdiction is the *public trust doctrine.*[139] This has not yet attained an explicit legal assertion in this statute, but for reasons that are not justifiable. Needless to say, incorporation of this principle in the tribunals act would have been a clear indication against the right of absolute extraction of the groundwater resource (as discussed in Chapters Three and Four), thus, conclusively refuting the property right placed on the

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[134] ibid, Section 20.
[135] J Robinson, 'Squaring the Circle? Some Thoughts on the Idea of Sustainable Development', (April 2004) 48 (4) Ecological Economics 369.
[136] JM Harris, 'Basic Principles of Sustainable Development' (2000) Global Development and Environment Institute: Working Paper 00-04.
[137] HE Daly, 'Toward some operational principles of sustainable development' 2 (1) Ecological Economics 1.
[138] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010.
[139] Supreme Court of India, *MC Mehta v. Kamal Nath and others,* 1996 (No 182 0f 1996).

resource. The other set of principles which could have been the basis for the statute were the *principle of the no-harm rule*;[140] *regulation and understanding of transboundary harm,* and *equitable and reasonable utilisation*;[141] but these were somehow omitted from the discussion. Additionally, the clear and modern understanding of these principles and their interaction with the components of the environment were again missing from the Tribunals Act. The incorporation of the set of principles stated above would have assured a modern understanding of the resource and the environment. Moreover, the task of evaluating the laws and policies to make them coherent and sustainable would have been easier. In addition, at the time this statute came into force, the legislature had all the information available regarding the development of environmental principles, their impact, and the growing threat of environmental crisis that the world is facing. It is unfortunate that the legislature missed the opportunity for the codification of these principles of environmental law. This could have had a phenomenal impact in the domestic jurisdiction.[142] This attitude of the legislature is both consistent and worrisome.

4.6. The Legitimacy of Tribunals Decisions

The tribunal is working at a good pace but there are certain obstacles. If we want it to function as per the objectives set by the statute for *the protection of the environment* and *the protection of the right to environment*. A wider jurisdiction and improvement of the act, by the removal of anomalies and incorporation of more stringent provisions, could serve these objectives better. Once the Ministry creates the tribunal and sanctions the budget, it does not and cannot interfere with the working of the tribunal.[143] Both the bodies, the government and the tribunal share working territory, therefore, their interests are bound to clash.[144] However, the tribunal has been accused of exceeding its jurisdiction in some cases, mostly when its actions were against government departments.[145]

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[140] United Nations, 'Convention on the Law of the Non-Navigational Uses of International Watercourses' (1997) (Adopted by the GA of the UN's on 21 May 1997, entered into force on 17 August 2014) GA Res 51/229; Annex Official Records of the GA Fifty-First Session, Supplement No. 49 (A/51/49), Article 5.
[141] ibid Article 7.
[142] B Boer, 'Sustainability Law for the New Millennium and the Role of Environmental Legal Education' (2000) 123 (1-4) Water, Air, and Soil Pollution 447.
[143] Wilfred J V, Ministry of Environment and Forest, NGT Judgement, 17 July 2014 para 34.
[144] Y Chaudhary, 'Tribunal on trial', (30 November 2014) Down to Earth Magazine India Coverage <http://www.downtoearth.org.in/coverage/tribunal-on-trial-47400> accessed 20 Nov 2017.
[145] ibid.

The authenticity of the tribunal mainly comes into question when either it exercises self-acclaimed right to initiate *suo motu* (on its own) proceedings, or when the issue brought before it falls outside of the defined jurisdictional limit. The tribunal does not enjoy the power to initiate the proceeding by itself.[146] However, it is recorded to have initiated several proceedings on its own by taking cognisance of cases brought to its notice by the media or another anonymous sources. Examples of *suo motu* cognisance include *the case of increased vehicular traffic in Himachal Pradesh*,[147] and *dolomite mining in the tiger reserve forest in Khana National Park*.[148] Although, the efforts made by the tribunal in such cases are praiseworthy and in conformity with the objective of the act 'for the protection and conservation of forest and environment' they are certainly not in conformity with the law. The tribunal has gradually come to realise that, given its limited jurisdiction, it is impossible to keep up with its broader aims and objectives. Thus, it claims to have accorded the power to take *sue moto* cognisance of cases. Unfortunately, the ministry denied conferring such power on the tribunal in a written affidavit filed by the ministry before the Supreme Court of India.[149] Furthermore, the ministry asked the tribunal to stick to the statute and follow its provisions.[150]

Although the intention of the tribunal was *bona fide*, certainly their actions were not. In fact, the tribunal is sworn by the statute to be bound by the principles of *natural justice*,[151] this being the only requirement imposed on the tribunal. In this context, the tribunal seems to have violated that very principle of law the moment it exceeded its jurisdiction. This violation of the norm of natural justice means a denial of justice itself.

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[146] KM Ashok, 'Exceeded Jurisdiction': SC Sets Aside NGT's Direction For Pilgrims To Maintain Silence In Front Of Amarnath Ji Maha Shivling' (18 April 2018, Livelaw.in), <https://www.livelaw.in/exceeded-jurisdiction-sc-sets-aside-ngts-direction-pilgrims-maintain-silence-front-amarnath-ji-maha-shivling/> accessed 20 Nov 2018; See also: Priyamvada Grover, 'NGT's Amarnath Ruling isn't its First Controversial Order this Year' (14 December 2017, The Print: Governance), < https://theprint.in/governance/ngts-amarnath-order-isnt-its-first-controversial-order-this-year/22520/> accessed 20 Nov 2018.

[147] National Green Tribunal Case, *Tribunal on its own motion v. State of Himanchal Pradesh*, NGT Judgement 6 February 2014.

[148] National Green Tribunal Case, *Tribunal on its own motion v. Secretary, Ministry of Environment and Forest*, NGT Judgement 4 April 2014.

[149] A Vishnoi, 'No Sue Moto Powers Provided for You, MoEF Tell Green Tribunal' (The Indian Express Archive 26 Aug 2013) <http://archive.indianexpress.com/news/no-suo-motu-powers-provided-for-you-moef-tells-green-tribunal/1160046/> accessed 20 Nov 2018.

[150] National Green Tribunal Case, *Baijnat Prajapati v. MoEF,* NGT Judgement 20 Jan 2012.

[151] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 19 (1).

This is the reason the credibility of the tribunal is in question and is often referred to as a 'power-hungry' body.[152] The tribunal's consistent attempt to acquire the power to initiate *suo motu* proceedings or to conduct a judicial review is a constant reminder that the tribunal faces difficulties in conducting the tasks it is entrusted with. Therefore, it craves the powers inherent in the higher judiciary, as lobbied for by the judge in the tribunal, who has argued that the power of *suo motu* cognisance is not inherent in the High Court either, but is exercised nonetheless as the inherent power of the court.[153]

Additionally, the observation made above suggests that it is the practice of the tribunal that it seeks to consider the issues by broadly interpreting them as being part of the environment, to satisfy itself of the fact and the law, that it has the jurisdiction to entertain such cases. The development of this practice is justifiable as it has limited jurisdiction and a broad mandate to serve. After taking the cognisance of the case and conducting a preliminary investigation, if the question of its authority arises, the matter then gets transferred to the Supreme Court of India – serving as the highest appellate body against the tribunals order, where it proceeds with the matter based on the merit of the report received by the tribunal. The tribunal and the judiciary both, are then blamed for exceeding their jurisdictions by not paying strict attention to the jurisdictional technicalities of the case. It has been customary for both the tribunal and the judiciary to expand their jurisdictions in order to serve the objective and purpose of the founding statute. This again represents the fact that the judicial bodies in question have to sometimes over-step their boundaries to compensate for legislative incompetence: this is what happens when the government does not wish to lose control. This attitude is troublesome as it threatens the delicate balance required between the branches of democracy to function properly. After careful investigation of the tribunal, and analysis of all the relevant attributes, the author would like to elucidate some of the key findings and make appropriate suggestions.

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[152] Y Chaudhary, 'Tribunal on trial', (30 November 2014) Down to Earth Magazine India Coverage <http://www.downtoearth.org.in/coverage/tribunal-on-trial-47400> accessed 20 Nov 2018.

[153] Justice Swatanter Kumar has been chairing the National Green Tribunal (NGT) for nearly two years now. In an interview to Down To Earth, he speaks about some basic issues confronting the tribunal. (30 November 2014) < http://www.downtoearth.org.in/interviews/ngt-must-have-suo-motu-powers-47542> accessed 20 Nov 2018.

5. Is the Tribunal a Viable Option?

It is important to understand that the green tribunal has been a working prototype of the environmental court in India since 2011, but it is neither exactly what was suggested by the judicial pronouncements mentioned above, nor the exact model proposed by the Law Commission of India.[154] Most of the suggested provisions of the commission were compromised during the debate in parliament for one reason or another. Furthermore, the Law Commission's report specifically suggests the formation of the court under Article 247 of the Constitution and has also discussed why the tribunal under Article 323 is not a preferable choice.[155] The recommendation made by both the bodies (the Law Commission and the Supreme Court) could foresee the impact of such an institution, as well as the shortcomings that might arise.

The jurisdiction proposed by the commission for the establishment of a court after comparison and analysis with other jurisdictions was not absolute, but sufficient within the constitutional boundaries, and the legislature was vested with the power to create such an institution.[156] For instance, if we comparatively analyse the possibility for the creation of the court with that of the tribunal, all we can be certain of is that the overall performance of the environmental court would have defensibly worked better. However, the court suggested under the provision of Article 247 of the Indian Constitution as proposed by the Law Commission differs from the higher judiciary as well as the conventional judiciary of the country.[157] These are special courts made by parliament for the administration of any 'Union Law' when it is satisfied that the Courts of the provincial states (conventional court set-up in states) are not competent enough to handle such issues.[158] This means that these courts would not be competent to deal with the federal

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[154] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India, Chapter VI: Can a Law made by Parliament under Art 252 (Like the Water (P&CP) Act, 1974), be amended by Parliament under a law made under Art. 253? What is the purpose of Art 247?' 101-116.

[155] ibid.

[156] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018) Article 252, 253.

[157] K Raj, 'Decentralising Environmental Justice Debating the National Green Tribunal' (Nov 2014) 49 (48) Economic and Political Weekly.

[158] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 247.

laws created by the provincial states; neither would they enjoy the power of writ jurisdiction. This therefore, would not have been a preferable choice.

The alternative to the environmental court is the possibility of a specialised institution in the form of a tribunal as discussed in this chapter in the context of India. The tribunal is working efficiently and has disposed of a large number of cases in the last few years.[159] To satisfy the rising number of litigations and to make the tribunal accessible to more people, most of the zonal branches have extended into several benches within the zones, and these are known as a circuit bench of the tribunal.[160] From a legal perspective, the tribunal faces certain limitations, which limits the prospects of inclusion of criminal jurisdiction, writ jurisdiction and the rights based issues from the purview of the tribunal, in addition to the shortcomings observed in this chapter. As per the Constitution of India, this remains exclusive power of the mainstream judiciary and the higher judiciary of the state.[161] Moreover, it is accepted that the tribunal will work within the restraints of jurisdiction and power limitations imposed by law and statutes.[162] The ultimate power of adjudication is the absolute right of the judiciary, and it is expected of the judiciary to safeguard the interests of the constitution and statutes whilst exercising that power.[163] This task cannot be delegated or transferred to another entity without disturbing constitutional philosophy or challenging the foundational principle of the separation of powers embedded in the constitution. It is therefore in the best interests of all concerned that those cases that go beyond the competence of the tribunal concerning environmental issues must continue to go to the higher judiciary.[164]

The NGT is formed using the provision mentioned in Article 323 of the Constitution of India. The tribunal is a body which is formed with a definite objective, to supplement

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[159] WWF-India, 'Green Tribunal: Categorisation of cases filed in the National Green Tribunal' (2015) <http://www.wwfindia.org/aboutwwf/enablers/cel/national_green_tribunal/> accessed 20 Nov 2018.

[160] National Green Tribunal, official website: <http://www.greentribunal.gov.in/Southern_zonal_member.aspx) accessed 20 Nov 2018.

[161] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Part XIVA.

[162] ibid, Article 323 A and B.

[163] V Rana and A Gupta, 'Bombay High Court's Say upon the Powers of NGT', (SS Rana and Co Advocates, 3 January 2017).

[164] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India.

the work and reduce the burden of the judiciary, but not to substitute the judiciary.[165] Tribunals are subject-specific specialised institutions for the adjudication of the disputes. Many tribunals are working in India, in the fields of tax, consumer protection, security appellate tribunals etc., all using the same constitutional provision. The working of these tribunals is rooted in the fact that they have specialised knowledge and expertise to resolve matters, and the limited jurisdiction and power granted to them is sufficient for the smooth and effective working of these tribunals.[166] This is because the nature of their work is such that it can be confined within the boundaries of the legal statute or group of statutes made for that purpose. However, what seems to hold true for every other tribunal might not seem appropriate for the environmental tribunal due to the interdisciplinary and transboundary nature of the matters in hand. This is the very reason the NGT require different treatment, and this is possibly the reason for choosing the court over the tribunal as a preferred choice for environmental matters.[167]

The investigation above suggests that the tribunal in its existing state is not competent to address the objectives it was created to meet, and therefore, struggles for survival. The following section will conclude the findings and make appropriate suggestions.

6. Conclusion

As we have discussed in this chapter, the National Green Tribunal is a great initiative towards *access to environmental justice;* it has great potential if put to genuine use, although it does have some shortcomings.[168] The problems identified in this chapter are systemic though, such as the issue with jurisdiction; the meaning and the importance of the principles of law; a profound lack of understanding of the environment in a holistic sense, and the stubborn reluctance of the legislature towards change.

First and foremost, the environmental concerns are interdisciplinary and growing at an exponential rate. It is difficult to confine all the environmental concerns within the

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[165] DD Basu (eds), *Commentary on the Constitution of India* (8th edn, LexisNexis Butterworths Wadhwa Publishers, (2011) 10701.
[166] DP Arvind, 'Tribunalisation of Justice in India' (2006) Acta Juridica 288.
[167] Law Commission of India, '186th Report on Proposal to Constitute Environmental Courts' (September 2003) Government of India.
[168] Sir R Carnwath, 'Tribunal Justice- a New Start' (2009) PL 48.

well-defined boundaries of a statute (s), which determines the jurisdiction of the tribunal in a broad sense. Not all the environmental issues are regulated by the statutes in the domestic jurisdiction. Indeed, many of them are being governed using policies and local means of governance, which might or might not have an affiliation with any specific legislation. This is why environmental concerns need to be looked at through a holistic vision and with broader aim for ensuring holistic environmental regulation.

The central government can fix the existing anomalies arising from the limited jurisdictional power of the tribunal. To do this the government must use its power to amend the provisions of the tribunal's statute.[169] The content and the reason for inclusion of the concerns are discussed in detail in the discussion above, which might provide some guidance in that regard. Alternatively, the central government can make use of this power in a manner which empowers the tribunal to modify its jurisdictional ambit, if and when required, by laying out the parameters or qualifying grounds for consideration.[170] This alternative suggestion might have interesting implications and prove beneficial, but a cautious approach in required while exploring the potential of such an option. Because, the tribunal is not legally entitled to exceed its power or to distort the constitutional fabric by trying to acquire powers which are vested in and are the prerogative of the higher judiciary.

It is worth noting, that the overall competence of the tribunal can be enhanced by incorporation of the advanced principles of law, doctrines and a modern understanding of the resource into the tribunals act. This can be the various statutes that the tribunal has some jurisdiction over, or in the tribunal's founding act, which acts as the basis of the tribunal and have an overriding legal status. This will serve the cause of harmonisation of the environmental laws and policies in the country, thus ensuring sustainableregulation of the resource.[171] A lack of coherence in the laws and policies governing the water

[169] Government of India in official Gazette of India, '*The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 34.
[170] PJ William, 'Environmental Planning and Management: The Need for an Integrative Perspective' (1980) 4 (4) Environmental Management 287.
[171] KK Day and L Perch, 'Green Equity: Environmental Justice for more Inclusive Growth' (2012) 19 International Policy Centre for Inclusive Growth 1.

resource is one of the major hindrances in water regulation, therefore, the tribunals competence to address this flaw will prove beneficial.

It is crucial to note that the orders passed by the tribunals do not constitute a precedent. As a consequence, instead of acting as the source of law, these orders possess jurisprudential value due to their ability to influence or direct environmental law making in the country.[172] One of the expectations from the tribunal is consistency in its judgements and crystallisation of the principles of environmental law. That will gradually advance the national environmental laws to an international standard.[173] In addition to the suggestion made above, a change in the composition of the tribunal could help in achieving this aim by using the technical procedure which empowers the central government to make rules.[174] The introduction of an expert member as discussed in the previous section could elevate the possibility of the development of the branch of environmental law and the crystallisation of the legal principles in the field. It would also facilitate the consistent development of environmental jurisprudence within the domestic jurisdiction.[175] This would reduce the burden on the judiciary by developing a culture of environmental law-making which can ease the process of adjudication for the disputes arising in the future, by sorting out the nomenclature and the hierarchy of the rules and principles to be followed. By acting upon these suggestions, the tribunal could play a central role in reviving the culture of environmental law. Moreover, this revival is essential for the efficient adjudication of environmental disputes and for refining the environmental governance in India.

The author here would like to suggest an alternative to the tribunal in the form of 'green court or green bench of the court' parallel to the working court system of the High Courts and the Supreme Court of India.[176] The preposition for the formation of green

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[172] KC Joshi, 'Constitutional Status of Tribunals', (January-March 1999) 41 (1) Journal of the Indian Law Institute 116; Government of India, 'Law Commission Report No. 272: Assessment of Statutory Frameworks of Tribunals in India', (October 2017) 1.

[173] S Kiefel, 'English, European and Australian Law: Convergence and Divergence' (2005) 79 Australian Law Journal 220, 227.

[174] Government of India in official Gazette of India, *'The National Green Tribunal Act, 2010* (No 19 of 2010)' Ministry of Law and Justice in Extraordinary Section 1 of Gazette on New Delhi 2nd June 2010, Section 35.

[175] B Boer, 'The Rise of Environmental Law in Asian Region', (1999) 32 University of Richmond Law Review 1503, 1510.

[176] R Sharma, 'Green Courts in India: Strengthening Environmental Governance?' (2008) 4 (1) Law, Environment and Development Journal 50.

benches of the court is not revolutionary, they have existed for more than two decades. Although, what could prove revolutionary is their formal recognition with a different set of tools at their disposal.[177] The reasons for supporting this claim are following: firstly, the permanent green bench of the High Courts and the Supreme Court of India will be free from the jurisdictional problems suffered by the tribunal. Secondly, the rights-based issues and the broader issue involving social justice and equity will be subjected to a proper forum for redressal.[178] Thirdly, the court will be competent to determine the validity of other legal rights and principles against the interest of the objective of the green courts, thus, setting the course for a hierarchy of rights in terms of their legal validity.

However, formation of these green benches must be catered as per the requirements and considerations used for the creation of the tribunal, because the need for an environmental court differs in principle from every other specialised bench of the court. Thus, the panel of the green bench must be equipped with the requisite legal and scientific expertise for a better and more holistic outcome. Additionally, to make the green bench of the higher judiciary a reality, we must make progress towards making the environmental law a full-fledged legal discipline, with tailor made rules of procedural code and evidence, as discussed elsewhere in this thesis.

Another workable option suggests the improvement of the tribunal by re-orienting its purpose, so that, it could work simultaneously with the green bench of higher judiciary. In this scenario, only those cases that are beyond the power of the tribunal to deal with must be directed towards the judiciary. This includes such matters as rights-based issues and matters beyond the specified jurisdiction of the tribunal. Both institutions, the tribunal and the court could work simultaneously if harmony is maintained between the two, and their jurisdiction and working spaces are respected. Therefore, by developing this idea of parallel governance, the mainstream judiciary will be completely free from the shackles of environmental disputes of all kinds, inclusive of the rights-based litigation.

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[177] Indian Environmental Portal Knowledge for Change, 'Green Benches', On April 16,1996, a division bench of the Supreme Court (SC) comprising Justices Kuldip Singh and S Saghir Ahmed directed the chief justice of the Calcutta High Court to constitute a special division bench to hear environment-related petitions - and the nation's first green bench was born, <http://www.indiaenvironmentportal.org.in/content/18739/green-benches/> accessed 20 Nov 2018.

[178] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Article 214-37.

They could work together to make *access to environmental justice* a reality in a strict sense.[179]

If the working of this parallel system creates a strong legal basis for handling environmental issues, the government is at liberty to either merge or abolish the tribunal, depending on the need of the hour. Given the reach of the environmental issues and the changing climatic conditions, it is suggested that the state must revaluate the competence and utility of the tribunal in the light of the issues raised in this chapter.

[179] J Lubchenco, 'Entering the Century of the Environment: A New Social Contract for Science' (1998) 279 (5350) Science 491.

Chapter 7 – Consensus, Federalism and the Inter-State Water Disputes in India

1. Introduction

The central aim of this thesis is to address major impediments in terms of existing law and policy in the regulation of the water resource in India. The sharing of river water between the territory of two or more states and the conflict arising due to the sharing of river water is the concern of this chapter. And it has been high on the agenda of both central and federal states in India. The Constitution of India makes specific provisions to deal with the sharing of river water between the states, it also led to the establishment of a tribunal to adjudicate disputes arising from the sharing of river water. This tribunal is chosen for investigation in this thesis because the existence of tribunal derives its authority from constitutional distribution of power and it is dedicated to resolve the dispute arising from sharing of river water among states.

The Constitution has distributed the powers to govern and legislate between the centre and the state governments based on a list of entries provided in the Seventh Schedule.[1] According to this Schedule, the provincial State/s are authorised to regulate the water resource within their territory.[2] However, the parliament is authorised to regulate the Inter-State River Water Disputes.[3] For that purpose, a provision in Article 262 of the Constitution of India empowers parliament to resolve any Inter-State River Water Dispute. As a result, parliament has enacted the - 'Inter-State River Water Dispute Tribunal Act of 1956',[4] which allows the central/federal government to constitute the tribunal for the adjudication of the dispute between the states; and expressly bars judicial intervention in the matter.[5] This arrangement was intended to resolve the dispute using political, diplomatic or the administrative means, without deliberately interfering with the sovereign power of the states to govern the water resource.

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[1] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Seventh Schedule.
[2] ibid Seventh Schedule, List II: Entry 17.
[3] ibid Seventh Schedule, List I: Entry 56.
[4] Government of India, *The Inter-State River Water Dispute Act, 1956* (Act No. 33 of 1956).
[5] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 262.

However, the situation in the present context is complicated, unsatisfactory and politically charged.[6] Changes in climatic conditions, increasing demand for the limited resource, and advances in understanding of the freshwater cycle are all pressing matters which are missing from the existing legal regime. It appears at present that neither the existing legal and political tools nor the legislative mechanism, or the institutional units can accommodate the rising challenge of effective regulation of the water resource. This has led to increased politicisation of Inter-State Water Disputes. Against this background, this chapter critically analyses the ability of the existing constitutional and institutional units involved in the task. It analyses the existing mechanisms and extends its investigation to the sharing of the freshwater resource instead of river water, in general, providing a holistic picture of the current situation. In doing so, this chapter examines the competence of the tribunal as the adjudicating body using as a case study a well-known and long-lasting Inter-State Water Dispute in India – The Cauvery Water Dispute.[7]

The purpose of the discussion of Inter-State Water Disputes in this chapter is to look beyond the proportional distribution of water among various stakeholders or between riparian states, and to better understand the underlying causes of such disputes. To do this, this chapter is organised in six sections. First section will introduce the object of study and lay out the structure to be followed. The Second Section will briefly describe the historical importance of water to the distribution of power between the central/federal government and the governments of the provincial states. Section Three provides a detailed analysis of the constitutional provisions for the regulation of the water resource, and the ability, scope and competence of these to deal with the water crises of the present century.

Section Four considers the regulation of water through the lens of sovereignty, using the theory of 'the separation of powers' and the 'granting of internal sovereignty',

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[6] Times of India, 'Karnataka Election Insights: The Politics of the Cauvery Water Dispute' (9 May 2018) <https://timesofindia.indiatimes.com/india/karnataka-election-insights-the-politics-of-the-cauvery-water-dispute/articleshow/64095746.cms> accessed on 20 Nov 2018.

[7] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 20 Nov 2018.

by the federal state to its units for the governance of the resource. The notion of sovereignty is discussed in two ways in relation to the governance of the water resource - first, as a *responsibility* of the state and second, as an *obligation* of the state, arising from the sovereign authority of the state. Since the duality of the sovereign power coexists with the central and provincial states, that is, the overall sovereign authority of the nation state, and the internal sovereignty of the provincial states as the federal units of governance belonging to a nation state, in terms of separation of power. It further investigates the principle of sovereignty in international law and the shift experienced by the concept of statehood in the last century.[8] The aim is to examine the change in the relationship between the concept of sovereignty, and the regulation of the water resource in the light of the development of international environmental law. It is hoped that this analysis will help in strengthening the regulation of the resource within the respective boundaries of the federal-state.

Section Five uses the Cauvery water dispute as a case study to investigate the issues from a practical perspective by analysing the tribunals' award of 2007. The hope is that it will assist in understanding the causes of disputes, as well as highlight the shortcomings and contradictions regarding the law, competence of the tribunal and the means of governance, based on the general shortcomings observed in this chapter. Section Six will consider the recent judicial and legislative developments in the concerned matter. Finally, Section Seven proposes appropriate institutional, legislative and judicial reforms needed to strengthen the regulation of water in India within a wider framework of environmental law.

2. Historical Background and Importance of Water to the Separation of Powers in India

Soon after independence, at the time of the drafting of the Constitution of India, water played a key role in the negotiation of the distribution of power between the centre and the states.[9] The negotiation mainly focused on the issue of whether water, and other natural resources, should be managed locally by the provincial states or be subjected to

[8] JH Jackson, 'Sovereignty - Modern: A New Approach to an Outdated Concept' (2003) 97 American Journal of International Law 782.
[9] V Asthana, *Water Policy Processes in India: Discourses of Power and Resistance* (Routledge 2009) 9.

supra-ordinate rule by the Union of India.[10] Consequently, the territory, after independence, was reorganised on a linguistic basis, resulting in the formation of states with particular linguistic and cultural affiliations and orientations.[11] At present India possesses twenty-nine states and seven union territories, with varying topography and geographical situations, and all territorial divisions are competent and empowered to make laws for the regulation and management of water resource.[12] However, during the process of negotiation, the central/federal government reserved some of the provisions in its favour, which gave them wider powers to legislate on national issues, and in relation to the sharing of river water among other things.[13] Notwithstanding the legislative arrangement, due to the natural course water moves freely across the territorial divisions, which makes sharing of the resource among the territorial divisions both involuntary and unavoidable. A further issue is that natural resources are not evenly distributed, and indeed, nature is unaware of, and indifferent to, human-made territorial divisions. As a consequence, in times of crisis or rising demand, disputes have broken out among riparian or non-riparian states over sharing of water.[14]

The legislative competence and jurisdictional authority of the union and the states for the regulation of the water resource are not rigid, and therefore overlap at times,[15] resulting in contradictory legal provisions. However, these legal contradictions *per se* are not addressed by the judiciary, which restricts itself to the question of the legal competence of the authority making that law, as per the constitutional guideline. Because maintaining harmony between the units of governance is important. In some cases, the conflict arises between the law made by the centre and the law made by the provincial state, on the same subject-matter, whilst both have the legal competence to make that law. To settle the dispute, the Supreme Court of India exercises its original jurisdiction.[16]

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[10] S Chokkakula, 'The Political Geographies of Interstate Water Disputes in India', 2015 (A dissertation submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy, University of Washington) 102.

[11] Government of India, *The States Reorganisation Act, 1956* (Act No. 37 of 1956).

[12] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Seventh Schedule, State List: Entry-17.

[13] ibid Art 248, 249 and 254.

[14] MVV Ramana, *Inter-State River Water Disputes in India* (Orient Blackswan Pvt Ltd., 2009) 25.

[15] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Schedule Seven, State List.

[16] ibid Art 245; See also, JN Pandey, *The Constitutional Law of India* (45th ed. Central Law Agency, 2008) 606-09.

In so doing, the Court broadly decides the legislative competence of the concerned parties, by interpreting the lists mentioned in Seventh Schedule, which indicate if the law-making body is authorised by the constitution to legislate on the matter at hand, or conversely, if the body involved has overstepped its limits making the act *ultra vires*. However, this interpretation is done keeping the object of distribution of power and the constitutional philosophy in mind.

If the issue remains unsettled, then the court will try to explore the possibility of coexistence for the laws by implying the *doctrine of severability.*[17] In which case, if the law made by the provincial state on the same subject matter is inconsistent with the law made by the centre, then the law made by the provincial state is repudiated by the legislature to the extent of such inconsistency.[18] However, if the omission of the part is substantial to the statute and without it, the statute loses its impact, then the existence of the statute is open for reconsideration.

The issue mentioned above is only a part of the problem. Perhaps, the legal question concerning the conflict of law/legal provisions among the applicable law itself rests unanswered, and possibly outside of the judicial mandate. This creates hindrance in the regulation of the resource, or at times, reduces the impact of the law and policy created for the cause.[19] The resolution of both these issues is paramount to the success of the holistic regulation of the resource, and for the resolution of Inter-State Water Disputes within the country.

A definitive terminology which defines the principles, theories and doctrines acceptable within the territory of the federal-state of India, for the regulation of the freshwater resource does not exist.[20] Additionally, the manner territorial integrity is understood and applied within the domestic jurisdiction when exercised by the federal and the provincial states is not distinctly made clear. Therefore, strict implication of the theory in principle raises concerns, concerning the transboundary nature of the problems

[17] ibid Pandey 68.
[18] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 254.
[19] MS Vani, 'Community Engagement in Water Governance' in RR Iyer (eds.), *Water and the Laws in India* (2nd ed. Sage Publication 2012) 209.
[20] SR Maria, 'Strategic Analysis of Water Institutions in India: Application of a New Research Paradigm', (2004) 79 Research Report, International Water Management Institute (Sri Lanka) 26.

which arises from dealing with the natural resources within the limited territorial jurisdiction. A clear distinction of the attributes of the theory of territorial integrity is required to be made while dealing with sovereign rights of the state in environmental matters. This is despite the fact that the holistic regulation of the resource depends on such matters and their effective resolution. This too remains a foundational flaw in the resolution of the Inter-State Water Disputes and these flaws are investigated in sections that follows. The investigation in the section below proceeds with the examination of the constitutional provisions which deal with the regulation of the water resource in India.

3. Constitutional Layout

The federal structure of the Indian constitution has a strong centre similar to that of the Canadian federal constitution. The constitutional need to have a strong union also reflects something more than the provision of mere distributive power to legislate. It means that the states are self-sufficient and autonomous units of governance, but that they are not exclusively allowed to distort the common fabric of the constitution. Thus, the centre reserves some powers to regulate the activities of states, in case of need, and by reserving certain provisions it also ensures the effective separation of powers in line with the theory of checks and balances.[21]

As per the Indian Constitution, the delegation of the law-making powers to the union and the states is directed according to the Seventh Schedule. The constitution provides an elaborate list of subject matters for legislative competence in Schedule Seven, which comprises three lists.[22] The *State List*: where the provincial states are authorised to make law; the *Union list*: where the union/centre is authorised to make law; and the *Concurrent list*: where the provincial and the federal state both are authorised to make law. According to the State List, the provincial states are exclusively and primarily authorised to formulate the laws for the subject matters concerned, within their own territories and within the constitutional framework. The Union List empowers the union to make laws in the national interest. In practice however, the union can be seen to be very cautious in using its provisions, such as Entry 56 for the regulation of the water

[21] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018).
[22] ibid, Seventh Schedule.

resource in national interest, out of concern that this might interfere with the primary legislative authority of the provincial states. For matters enumerated in Concurrent Lists, both parties can make law, but the law made by the union prevails.[23]

The constitution provides a framework for distributing power among the units of governance, which directs them to conduct their businesses by being within the parameters of the constitution, and, in accordance with constitutional philosophy. However, it does not provide detailed guidelines on how to execute these tasks. It is beyond the competence of constitution to provide this type of descriptive guidelines to satisfy the aspirations for all the organs of the government in a dynamically changing world. Unfortunately, this has been a significant grey-area which does not certainly inspire the law-making bodies to push the limits of sophistication; given the change in climatic conditions, the nature and quantum of resource available, and the modern understanding of the resource.[24] Consequently, it not only creates the issue of a multiplicity of laws, but the existence of contradictory laws creates functional dead-locks which in turn are translated into political friction between the bodies involved.

As an example of contradiction - Entry 17 of the state list makes water the primary concern of the state, and Entry 56 of the union list makes it a subject matter of the union/centre. Whilst these entries are listed in different capacities, they might nonetheless induce interference a conflict between the jurisdictions of the state and the union. In a deliberate attempt to secure the interests of the legislature over the water resource, the constitutional provision enumerated in Article 262, expressly bars judicial intervention in the matter of the Inter-State River Water Disputes.[25] The abovementioned provisions are the key provisions that deal with the water resource in India and are discussed further and in detail in the following section.

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[23] ibid Art 256.

[24] Vishwa Mohan, 'Centre, states not on same page when it comes to water rule book', (The Times of India, 16 June 2017) < https://timesofindia.indiatimes.com/india/centre-states-not-on-same-page-when-it-comes-to-water-rule-book/articleshow/59170265.cms> accessed on 20 Nov 2018.

[25] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 262.

3.1. The Analysis of Article 262

Article 262 of the Indian Constitution is dedicated to the resolution of 'disputes relating to water'. This article is inspired by the Government of India Act, 1935, which consisted of very elaborate procedures to preserve the discretion of the then Governor-General of India,[26] over the final judgement regarding the Inter-State Water Dispute, by explicitly excluding the involvement of all other authorities. It again represents the intent of colonial laws, which were made mainly to strengthen and justify the administration's control over the resource and the territory, by an instrument of law drafted in its favour.[27] Therefore, while drafting the Indian Constitution, the then chairman of the drafting committee – Dr BR Ambedkar, proposed the amendment to this article because of the flaw in the existing provision.[28] The change so proposed, using an amendment, led to the creation of a permanent body to deal with the water disputes arising in future, while utilisation of the resource will be at its full strength due to the construction of dams and canals to further the states objectives.[29] The proposed amendment aims to ensure equitable distribution of the resource whilst preventing whichever body holds a dominant position in each case (geographically or politically) from exploiting this position.

The amendment influenced parliament to enact the Inter-State Water Dispute Act in 1956.[30] However, Article 262 principally advocates negotiation between the parties involved as the primary means to resolve the Inter-State Water Disputes. When negotiation fails, the central government is obliged to constitute the tribunal for that purpose, at the request of the state, based on the provisions of the statute. The central government must however be of the opinion that the tribunal is required, and that all efforts at negotiation have been exhausted.[31] In case the central government is not of the opinion that the tribunal is required, and the matter is brought before the judiciary, then the judiciary can order the constitution of such tribunal by issuing the writ of *mandamus.*[32]

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[26] Government of India by the Crown, *Government of India Act, 1935 (26 Geo. 5. CH. 2)* Section 130 (3).
[27] A Anghie, *Imperialism, Sovereignty and International Law* (CUP 2005) 208.
[28] DD Basu, *Commentary of the Constitution of India* (8th rev ed. LexisNexis Butterworths, Wadhwa Publications, 2012) 9112.
[29] ibid.
[30] Government of India, *The Inter-State River Water Dispute Act, 1956* (Act No. 33 of 1956).
[31] ibid Sec. 4 (1).
[32] Supreme Court of India, *T N Cauvery Sangam v. UOI* AIR 1990 SC 1317.

The Inter-State water sharing agreement at the time of these developments was made possible by means of the project's design, which was to harness water using technical or engineering advances such as the hydropower plants; construction of dams and reservoirs; and the system of canals built for irrigation. As a result, all the tribunals created to date are somehow restricted to deal with disputes arising from such shared projects, and other means of sharing of the water resource is neither considered nor included. Thus, the scope of the Article 262 as understood in this Act has been streamlined and narrow. In addition to the Inter-State Water Dispute Act, the parliament also enacted the River Board Act 1956, by applying the powers entrusted to it via Entry 56,[33] with the purpose to foster relationships and develop cooperative relationships among the parties involved.[34] This act has so far remained 'dead letter' as no river board has yet been appointed.[35] Both the acts have not lived up to their initial intention, one being restricted due to the object it was created for, and the other because it never came into existence.

> *"262. Adjudication of disputes relating to waters of inter-State rivers or river valleys*
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> *Parliament may by law provide for the adjudication of any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any inter-State river or river valley*
>
> *Notwithstanding anything in this Constitution, Parliament may by law provide that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint as is referred to in clause (1) Co-ordination between States."*

An intense reading of sub-clause (1) of this article suggests that it specifically restricts the jurisdictional authority to that of the Inter-State Rivers or River Valley.[36] And the tribunals made for the purpose till date have restricted themselves to the technical/engineering structures designed to regulate the resource and not with holistic regulation of the resource. However, this Article, along with the constitution itself, was drafted in 1949, when the understandings about the freshwater cycle and the connection

[33] Government of India, *River Boards Act, 1956* (ACT NO. 49 OF 1956).
[34] DD Basu, *Commentary of the Constitution of India* (8th rev ed. LexisNexis Butterworths, Wadhwa Publications, 2012) 9113.
[35] This institution never came into existence and the purpose for the creation of the statute remained unsatisfied.
[36] Valley: (Physical Geography) a long depression in the land surface, usually containing a river, formed by erosion or by movements in the earth's crust.

of river water with the other constituents of freshwater were undeveloped or even absent.[37] Ever since the Article has not been upgraded to accommodate modern understandings of the hydrological cycle and therefore, it is neither competent to deal with the complex issues arising from the shared freshwater resources, nor, it works in accordance with the environmental law principles.[38] Perhaps the practice of dealing with one of the components of nature in vacuum and within the strict statutory boundary has failed the humankind in last century and is against the principles of international environmental and watercourse law.[39] Therefore, the utility of the Article and the Interstate River Water Dispute Act 1956 in contemporary times, is dubious.

Article 262 empowers parliament to adjudicate disputes about Inter-State Rivers or River Valleys,[40] whereas Entry 56 of the list I,[41] and Entry 17 of list II,[42] classify the subject-matter for the legislative competence of the union and the state, respectively.

> *"Entry 56 of the Union List: Regulation and Development of inter-state rivers and river valleys to the extent to which such regulation and development under the control of the union are declared by the parliament by law to be expedient in public interest."*

> *"Entry 17 of the State List: Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provision of entry 56 of list 1."*

Entry 56 again speaks of the regulation and development of the Inter-State Rivers and River Valleys. The jurisdictional similarity and scope of Entry 56 is similar to that of Article 262. Although, Article 262 initially reflects its determination to adjudicate the Inter-State Water Disputes using a methodical approach to keep the regulation of the resource un-interrupted by providing with an alternative means of judicial adjudication without judicial intervention. Whereas, the jurisdiction of Entry 17 of the state list is broader as it refers to waters in general, which includes surface and groundwater both, this could also

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[37] Salman MA Salman, 'Inter-states Water Disputes in India: An Analysis of the Settlement Process', 4 Water Policy (2002) 223.
[38] ibid.
[39] E Brown Weiss, 'Environmental Equity and International Law' in S Lin and L Kurikulasuriya (eds.), *UNEP's New Way Forward: Environmental Law and Sustainable Development* (1995) 7, 16-17.
[40] River Valley: An area of lower land between two lines of hills or mountains, usually with a river flowing through it.
[41] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Schedule Seven, Entry 56 of the Union List.
[42] ibid Schedule Seven, State List: Entry 17.

mean freshwater in general. It also reflects what 'water' in this entry means: water in its natural form and all other forms used, regulated, harnessed or stored by the state. Thus, overall authority over the waters as per the provisions discussed above, lies with the state.[43] Although, the exclusive law-making authority given to states for that purpose is often compromised due to the transboundary environmental impacts, and the absence of basic legal standards to ensure coherence among such laws made by the adjoining states.[44] Nonetheless, their legislative competence is undeniable, but its utility in present times is questionable.

The problem so arising seems to have its origin in the federal distribution of power itself. This again highlights the importance of holistic regulation of the water resource for the state. However, the political benefits associated with the regulation and management of the resource is mainly rooted in the mechanism of internal authority given to the state for day to day regulation and governance. Which is why, in the following section, the federal regulation of water resource is explored, regarding sovereign powers granted to the federal -states and the provincial states within the nation, both individually and collectively.

4. Impact of Autonomous Authority on the Regulation of Water Resource

Sovereignty plays a foundational and at times controversial role regarding the applicability of the international law on states. To an extent, the meaning of the notion of territoriality, absolute independence to regulate the natural resources, and the principle of non-intervention and self-determination associated with the sovereign power has lost its importance when applied in the context of *global commons*.[45] Moreover, strict and absolute implementation of these principles are vested in the state and state enjoys sovereign right and dominant position while dealing with the natural resources within its territory. However, this attitude of state towards natural resource might prove contrary

[43] ibid; P Cullet and S Koonan, *Water Law in India: An Introduction to Legal Instruments* (OUP, 2011) 51.
[44] K Uperty and Salman MA Salman, 'Legal Aspects of Sharing and Management of Transboundary Waters in South Asia: Preventing Conflicts and Promoting Cooperation', (2011) 56 (4) Hydrological Sciences Journal 641, 656.
[45] Commission on Global Governance, *Our Global Neighbourhood* (OUP 1995).

to the principles of modern international environmental law and the customary principles of international law.[46]

Globalisation in the last century has made the interdependence and cooperation among the states inevitable and mandatory. It drove the change in global attitude, and the role played by the states in such a globalised world. Although the states are primary subjects of international law, humankind and the environment as such are the primary objects, rather than the subjects, of international law.[47] Therefore, the collective agreement between and among the states is often inspired by the shared objectives and common purpose which led to the creation of a collective sovereign will.[48] Is this then an apt technique to tackle the issues that are of *Common Concern to Humankind/global commons*?

Likewise, within the domestic federal set-up in a country like India, the strict implementation of the notions of territorial sovereignty when applied to natural resources becomes problematic in the nationalistic federal set-up. However, the constitutional provisions apply equally on all the federal units of the country except for the state of Jammu and Kashmir.[49] But as discussed elsewhere in this thesis the issues of regulation of water resource is based on separation of power directed by the Schedule Seven of the Constitution of India, which gives autonomy and legitimacy to the provincial state governments to regulate and legislate for the concerned matters. So as is the case with the regulation of water. And it is in this scope, the autonomous authority of the units of federal state will be investigated.

It had been the conventional practice of the central government not to interfere with such a matter of day to day governance of the provincial units of the states. Additionally, in the absence of the higher legal authority or legal parameters which can ensure coherence and sustainability in terms of laws and policies promulgated by the

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[46] AD Terlock, 'One River, Three Sovereigns: Indian and Interstate Water Rights' (1987) 22 (2) Land and Water Law Rev. 631.

[47] N Shrikver, *Sovereignty Over Natural Resources: Balancing Rights and Duties* (CUP 1997) 390.

[48] S Besson, 'Sovereignty in Conflict', in C Warbrick and S Tierney (eds.), *Towards an International Legal Community: The Sovereignty of States and the Sovereignty of International Law* (British Institute of International and Comparative Law 2006) 131.

[49] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 370.

provincial states, it is difficult to hold federal units of governance accountable for non-efficient or poor governance of the resource.[50] Therefore, the change in the concept of statehood, governance and responsibility of the state from international law is studied in context, to learn and improve the accountability mechanism of the domestic governance of the states as well as its federal units.

The concern in terms of accountability, governance and the implication of the principles which confers power to the state differs in a domestic set-up from that of the international domain. In domestic context all the units of federal state and the state itself is equally bound by the provisions of the Constitution of India. However, duality in the application of authority for the governance of water resource in federal-state and its provincial units of governance is what has given rise to the tension between the centre and the provincial units of the state. Therefore, this study investigates the impact of responsibility of state in governance or the regulation using the development of international law in this field with an aim to learn from and imply that learning for the holistic regulation in domestic context.[51]

4.1. Sovereignty as Responsibility in Governance

Governance or good governance, as the responsibility of the sovereign state, is discussed in international law but contested as to its extent.[52] States are expected to ensure good governance in their territory, so as to ensure the wellbeing of the state and the people in it, and it is this feature which brings the state legitimacy. Good governance is also defined as the state building process, which includes the parameters for the development of the state, and the establishment of its institutional and political power.[53] That said, the true extent of this responsibility is not precisely defined, and is therefore subject to interpretation in case by case basis.[54] In nationalistic set-up, the matter in hand

[50] SC Mccaffery and KJ Neville, 'The Politics of Sharing Water: International Law, Sovereignty and Transboundary Rivers and Aquifer', in K Wegerich and J Warner (eds.), *The Politics of Water* (Routledge 2010) 18, 37.

[51] G Fitzmaurice, 'The Future of Public International Law and of the International Legal System in the Circumstances of Today' (1973) 55 Annuaire de l'Institut de Droit International 197, 249.

[52] G Nolte, 'Sovereignty as Responsibility', (2005) 99 American Society of International Law Proceeding 389, 392.

[53] J Allouche, 'The Multi-Level Governance of Water and State-building Processes: A Longue Duree Perspective' in Wegerich (note 50) 45.

[54] D Argyriades, 'Values for Public Service: Lessons Learned from Recent Trends and the Millennium Summit', 2003 69 (4) International Review of Administrative Sciences 521.

deals with the concept of sovereign like authority of federal units of state to regulate for the subject matter of competence between the provincial states and the union government mainly on two grounds. Firstly, due to the authority of provincial states to act as the independent unit to legislate for the matters delegated to it because of the internal autonomy. Secondly, due to strict adherence to its territory.[55] As discussed in the previous section, the provincial states possess the first claim over matters exclusively allotted to it, and the union holds a secondary claim on the same matters, so has the responsibility to regulate or govern the resource. Primary responsibility for the holistic regulation of water resource within the territory lies with the provincial state/s, but the overall primary responsibility which is inclusive of all the provincial states and the Union Territories lies with the union. Thus, the union government and the states' together share this responsibility.[56]

To strengthen the means and mechanism of governance, the autonomy was guaranteed to the provincial states and backed with legislative powers. With power follows the responsibility which is classified into two categories: individual and collective.[57] Individual responsibilities are the ones understood as the primary obligation of the provincial states, such as the maintenance of law and order; allocation of basic public services for all, such as health, education, etc.; and the holistic regulation of the resource within its territory.[58] Conversely, the collective responsibilities of provincial states are the ones which translate as their contribution to the accomplishment of national political goals. As the obligations arising from a national or international commitment by the federal-state, such as the obligation to fulfil the economic, social and

[55] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Schedule Seven, List II.
[56] UN, *A More Secure World: Our Shared Responsibility, Report of the High-Level Panel on Threats, Challenges and Change*, (Doc A/59/565, 2005).
[57] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Part XI: Relations between the Centre and the State.
[58] Yu Keping, 'Governance and Good Governance: A New Framework for Political Analysis' (2018) 11 (1) Fudan Journal of the Humanities and Social Sciences 1.

cultural rights arising from the Covenant,[59] and the obligation to work towards the fulfilment of sustainable development goals, etc.[60]

The shift in the concept of sovereignty has manifested sovereignty as a responsibility of state and not as the control exercised by the state.[61] Likewise, the individual and collective responsibilities of the states concerning the water resource is expressed as the primary responsibility of the state towards the resource, because it is obliged to manage and regulate the resource in the best manner possible for the benefit of people, as well as for the state.[62] The primary collective responsibility of the provincial state arises from this individual responsibility. However, due to the transboundary impact of the act or omission by the state within its territory and its overall impact on the resource; it is beyond the competence of provincial units of state to fulfil their collective responsibility in absence of the legal parameters or guidelines which are equally applicable and binding on all the provincial states. Which is why, this is the responsibility and the primary duty of the union government. The constitution has entrusted the union with the power to regulate any matter in the national interest,[63] and in this case, fulfilment of this obligation by the union will also facilitate the states to fulfil their collective responsibilities in that regard.

The primary collective responsibility of the union in this regard is complex and demands positive efforts. The governance of water is a multi-disciplinary issue; it includes things such as framing the policy, and the task to harmonise laws and policies; it also requires the institutes to foster cooperation among them for better results, etc.[64] To ensure implementation and accountability, along with keeping a close eye on the states regarding the manner they exercise their responsibility to holistically regulate the

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[59] United Nations, *International Covenant on Economic, Social and Cultural Rights,* 16 December 1966, GA Res 2200A (XXI) (entered into force 3 January 1976) [ICESCR].

[60] UN, *Sustainable Development Goals: 17 Goals to Transform our World, 2030,* < http://www.un.org/sustainabledevelopment/> accessed 20 Nov 2018.

[61] G Evans and Others, *The Responsibility to Protect: Report of the International Commission on Intervention and State Sovereignty* (International Development Research Centre, Ottawa, 2001) 17.

[62] D Argyriades, 'Values for Public Service: Lessons Learned from Recent Trends and the Millennium Summit' (2003) 69 (4) International Review of Administrative Sciences 521, 26.

[63] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Seventh Schedule, Union List: Entry 56, Art 254.

[64] J Newton, 'A Brief History of Global Water Governance', in A Rieu-Clarke, A Allan and S Hendry (eds.), *Routledge Handbook of Water Law and Policy* (Routledge, 2017) 352.

resource, an institute is of prime importance. Therefore, the legal framework required to accomplish the task of water governance is understood as the inter-woven web typology of governance, which functions at multiple levels.[65] All this constitutes the responsibility of the federal-state/union for efficient water governance, the implementation of which in federal set-up is conventional and effective.[66] And by doing so, the state gain legitimacy and commences the state-building process which revolves around the management of water resource, this is now up to the state to decide in which direction it wishes to lead the resource management. As a frame of reference, the global water governance prescribes four levels: international, regional, national and local.[67] The governance at the national and the local level are on a par with the sovereign power of the federal-state, and this is very important because it plays a critical role in the making of international law and policy.[68]

Transboundary cooperation and harm associated with the freshwater resource, along with its management and governance, are most likely to attack the sovereign rights of the states, which again raises the issue of state responsibility, thus creating a political crisis.[69] The responsibility of the state in this context equates with the state's accountability, due to the democratic nature of the decentralised government existing in the country. Alternatively, one can argue in favour of duplication of the articles of the law of responsibility of states, by one provincial state against another, concerning the manner of regulation of freshwater resource, within the country.[70] Irrespective of the manner in which we understand and acknowledge the existence of the responsibility, it is difficult to legally exercise it without creating the institution for the cause, which is competent to

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[65] R James, 'The Governance of Fragmentation: Neither A World Republic nor A Global Interstate System', 2000 Studia Diplomatica LIII 5.

[66] Pahl-Wostl and Others, 'Governance and the Global Water System: A Theoretical Exploration', 2008 Global Governance 14.

[67] A Schulz, 'Sustainable Development Goals and Water' in A Rieu-Clarke, A Allan and S Hendry (eds.), *Routledge Handbook of Water Law and Policy* (Routledge 2017) 373.

[68] ibid.

[69] A Earle and MJ Neal, 'Inclusive Transboundary Water Governance' in Karar E (eds.), *Freshwater Governance for the 21st Century,* 6 Global Issues in Water Policy (Springer, 2016) 145.

[70] UN, *Responsibility of States for Internationally Wrongful Acts, 2001* (U.N. 2005: Text adopted by the Commission at its fifty-third session, in 2001, and submitted to the General Assembly as a part of the Commission's report covering the work of that session. The report, which also contains commentaries on the draft articles appears in Yearbook of the International Law Commission (2001) Vol. II (Part Two). Text reproduced as it appears in the annex to General Assembly resolution 56/83 of 12 December 2001 and corrected by document A/56/49(Vol. I)/Corr.4.).

outline the responsibility of respective branch of governance, and to determine the object, principles, doctrines and all other foundational aspects associated with it. The existence of such an institute is desirable to regulate the conduct of the provincial states concerning the regulation of the resource in a holistic sense. Moreover, it can play a prominent role in refining the basic principles associated with the concept of sovereignty among the states to ease and facilitate the governance of the shared resource. Sovereign rights of the state in the contemporary world are understood to carry with it the obligation to work for the welfare of its populace, and further, to meet their obligations towards the international community.[71]

4.2. Sovereignty as Obligation in Governance

The protection of fundamental rights for all is one of the primary obligations of the federal-state, and for its fulfilment, efficient governance of the resource plays a prominent role. The government at the union and provincial level in India are obliged to fulfil their duties to the best of their abilities.[72] The concept of sovereignty when understood as an obligation includes both the duty to protect and, to prevent.[73] For the protection of the *right to water* as a fundamental right, the protection is from the negative interference in the enjoyment of the rights, and the prevention is from the situations which can act as the hurdle in the enjoyment of the right. Additionally, ensuring efficient governance of the resource is to facilitate the progressive realisation of the *right to water* so guaranteed.[74] Therefore, this obligation primarily lies with the state within whose territory the resource physically resides, and the collective responsibility lies with both: the union and the states.

The emphasis on the shared/collective obligation is because of the nature of freshwater cycle, as well as the judicial assertion of the public trust doctrine: which states

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[71] A Etzioni, 'Defining Down Sovereignty: The Rights and Responsibilities of Nations', (Ethics International Affairs, 10 March 2016) <https://www.cambridge.org/core/journals/ethics-and-international-affairs/article/defining-down-sovereignty-the-rights-and-responsibilities-of-nations/79A09560168F9C3DFB425 CFADE3A83C0> accessed 20 Nov 2018.

[72] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Part III.

[73] A Etzioni, 'Sovereignty as Responsibility' (2006) 50 (1) Orbis: Foreign Policy Research Institute 71, 76.

[74] *Resolution on a Human Rights-Based Approach to Natural Resources Governance' (2012)* by African Commission on Human and Peoples' Rights, (African Commission accepted in its Resolution 224, at its 51st Ordinary Session held from 18 April to 2 May 2012 in Banjul, The Gambia).

that the natural resources must be held in trust by the state.[75] It reassures the classification of freshwater as the natural resource within Indian territory, besides emphasising the application of the principle of stewardship by the state for their regulation, management and governance.[76] This counteracts the *principle of absolute territorial integrity*, which by the way is the unwritten rule and conventional state practice. Moreover, the assertion of the public trust doctrine and the principle of stewardship is confirmed by the judicial pronouncement, therefore, act as the precedent and the law of the land. The acceptance of these norms suggests the consideration of the principle of *inter-generational and intra-generational obligations* arising from the state practice as well, which is very much in line with the international trend.[77] This possesses the potential to work wonders within the federal-state for the fulfilment of the collective obligations, especially when directed towards an object.[78]

The federal organs of the state execute political power within the common framework of the Constitution of India, the existence of which assures that they are the component of the federation.[79] Sovereignty and territorial integrity are foundational ideologies for the existence of the state, but they are not exercised in the same way within the federal-state as in the context of international law. However, the clarification as to what these principles mean in a federal set-up, and what could be the plausible manner and extent of their implications needs re-evaluation, which need not be construed as the subjugation of their autonomy but regulation for better governance of natural resource in the light of the development of environmental law.[80] The sovereign authority is crucial for governance, but like every other authority, it is prone to certain limitations. In the domestic set up, limitations imposed on the internal sovereignty of the states is through constitutional provisions and then by legal provisions. The constitutional limitation is in place although they require revision to keep up with the tone of the time, but the categorical limitation based on sound principles of watercourse law and the modern

[75] Supreme Court of India, *MC Mehta v. Kama Nath* (1997) SSC 540.
[76] T Burrowes, 'The Public Interest as Stewardship of Natural Resource' (1992) 1 (2) Maine Policy Review 51.
[77] California Natural Resource Management, 'The Future of Natural Resource Management: The White Paper and Action Plan' (2010) California Natural Resources Agency 1, 8.
[78] P Babie, 'Sovereignty as Governance: An Organising Theme for Australian Property Law' (2013) 36 (3) UNSW Law Journal 1075, 1105.
[79] MN Shaw, *International Law* (7th ed. CUP 2014)158.
[80] J Crawford, *State Responsibility: The General Part* (CUP 2013) 66.

understanding of the freshwater cycle is not explicit at all, and at present, they remain fragmented and not in comprehensive or in concrete form.[81]

The lack of this kind of super-ordinate legal framework leaves room for the application of the internal sovereign authority in any form, without being oriented and limited to the set dimensions principally or otherwise: which frustrates state/s effort. All these complexities are discussed in the subsequent section using Cauvery Water Dispute as an example of a long-lasting Inter-State Water Dispute.

5. Cauvery Water Dispute

The Cauvery dispute started in 1892, and the sharing of Cauvery's water remains a prominent cause of dispute between the states that are involved.[82] Cauvery flows in the south-western part of the Indian sub-continent, originating from the state of Maharashtra, then travelling mainly through the state of Karnataka, Tamil Nadu, and it eventually empties into the Bay of Bengal. Though the Cauvery dispute involves four states, this chapter mainly concerns the two principle contending parties: the state of Karnataka and Tamil Nadu. The dispute has become more intense with the change in climatic conditions and growing demand for the resource. However, the means for resolution of the disputes have not transformed much over this time. This section will highlight these issues, investigate the existing techniques and test their feasibility to tackle contemporary issues. While addressing the dispute and the relative concern the competence of the Inter-State Tribunal is subjected to investigation in the light of tribunals' award of 2007.[83]

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[81] P Cullet, 'Water Law in a Globalised World: The Need for a New Conceptual Framework' (2011) 23 (2) Journal of Environmental Law 233.

[82] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 20 Nov 2018.

[83] Government of India, *The Report of the Cauvery Water Disputes Tribunal with the Decision: Volume II-Agreements of 1892 and 1924* (Ministry of Water Resources, River Development and Ganga Rejuvenation, 2007).

5.1. ISSUE 1: Demand, Distribution and Sharing

The genesis of the dispute lies in the Inter-State agreements signed between the states in 1892 and 1924,[84] before independence. At the time those agreements were concluded the prime concern for sharing the Inter-State River Water was for irrigation and other domestic use. Also, the resource was not as scarce as it is nowadays. Although, the issues concerning the legality of the agreements signed between the parties of different capabilities: where the British enjoyed the position of dominance, was put to rest by the subsequent decisions of the tribunal.[85] As a consequence, this issue need not be discussed.

With a growing population and rapid economic development across India, the demand for the resource has increased many folds, and increasing pollution adds further to the burden. However, the primary concern in this dispute revolves around the physical availability of the resource, and the right of the states to proportionally distribute the resource for different purposes, such as irrigation, agricultural and domestic uses; along with the generation of hydro-electric power. The solution, therefore, can no longer just be inclined towards the distribution of the resource based on demand, rather it must be holistic, which balances the equation on both sides: demand and supply.[86]

During colonial rule in India, the territory which belongs to the state of Karnataka at present belonged to the Maharaja/king and was known as the princely kingdom of Mysore.[87] The territory belonging to the State of Tamil Nadu at present was under British precedency rule: popularly known as the Madras Presidency. The State of Karnataka at that time was forbidden to build reservoirs or to cause any obstruction to the Cauvery water, without prior consultation with the Madras Presidency as it might adversely affect

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[84] ibid.
[85] ibid.
[86] RR Iyer, 'Water Resource Planning: Large Dams and Development' (Association for India's Development, Chennai, 1999).
[87] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 20 Nov 2018., Volume I, Chapter 2: Background of Dispute and Framing of Issues: Agreement between the Mysore and Madras Governments, in regard to the Construction of a Dam and Reservoir at Krishna-Rajasagar, 18th Feb 1924, 34.

their interests.[88] Soon after independence, the state of Karnataka wanted to harness the resource to the best of its abilities, to bring prosperity to the state. For that purpose, the construction of dams for power generation and the development of canals for irrigation was planned on the tributaries of Cauvery.[89] This later became the cause of dispute between the two riparian states. Karnataka maintained its position by challenging the validity of the agreements signed in 1892 and 1924. Conversely, Tamil Nadu insisted upon them and claimed their historical right to the waters of Cauvery. Karnataka wilfully violated the terms of the agreement and proceeded with the construction of the dams, without the prior consultation with the State of Tamil Nadu, as well as, in the absence of the Clarence which is required by the state of Karnataka to proceed with the project from the government of India.[90]

It is one of the classic problems when considering the issue of the shared natural resource among the states. The parties to the dispute often insist on the proportional distribution of the resource with reference to whichever available statute, theory, principle or legal agreement signed between the parties' works in their favour. Consequently, each party demands a certain quantity of the resource or establish their authority over it based on the rights or claims favourable to them.

As of now, the tribunals order and the judgement of the Supreme Court for the concerned matter mainly dealt with the amount of water to be released from the dam and reservoir by the State of Karnataka.[91] While deciding the amount of water for distribution among the riparian states, the authorities considered the overall availability of water in the river, and its tributaries, along with the other available water sources, in addition to the dynamics and extremes of the monsoon.[92] Regardless, neither the overall availability of the freshwater resource nor the impact on the ecosystem, which ensures the health and quantum of the resource, were taken into account. These factors are responsible for ensuring the availability of the resource and are the most competent to

[88] ibid, Madras-Mysore Agreement of 1892, 29.
[89] ibid, Chapter 1: Four reservoirs were formed by construction of dams across the tributaries of Cauvery namely: Harangi; Kabani; Hemavati; and Suvarnavathy 7.
[90] ibid, Violation of the Interstate Agreements of 1892 and 1924 by Karnataka, 7.
[91] ibid, Volume V- Apportionment of the Waters of the interstate Cauvery: Final Order and Decision of the Cauvery Water Disputes Tribunal - Clause V, 238.
[92] ibid, Clause VII and XIV, 239, 242.

balance the supply side of the equation, but remain discredited in the analysis. Perhaps, the inclusive modelling of freshwater of the region by combining the surface and groundwater could have been the preferable solution, which would not only resolve the distribution of the resource among the riparian states but also foster the cooperative mechanism to enhance the freshwater cycle.

The demand-based insistence for adjudication of the Inter-State Water Dispute is not unique to this dispute in India but is the prevalent practice in almost all Inter-State Water Disputes,[93] nationally and internationally.[94] This might be the reason for the non-compliance of the order passed by the tribunal,[95] as it does contemplate the need of the states nor does it prioritise the distribution of the resource except for the necessities such as drinking, washing etc. Rather, the decision is based by deciding which party is at fault or, in violation of the legal obligations based on the facts and legal provisions arising from the existing agreements. This position was taken and argued by the state of Karnataka at various stage of the order: interim order, final judgement, etc. The state of Karnataka argued that it does not have sufficient storage of water due to poorly developed irrigation canals and reservoirs for storage of Cauvery water. Thus, the state finds it inappropriate to be forced to share a certain amount of water with the state of Tamil Nadu, along with other states (Kerala and Pondicherry), especially when it does not have enough water to satisfy its own need.

The example above is precisely why water as a subject-matter is deliberately excluded from the purview of the court's jurisdiction and intended to be dealt with using political or other means.[96] The technical concerns in the dispute were resolved with

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[93] Government of India, *Ravi and Beas Waters Tribunal's Award* (Ministry of Water Resource, River Development and Ganga Rejuvenation), <http://www.wrmin.nic.in/forms/list.aspx?lid=368> accessed 20 Nov 2018.

[94] Government of India, *Indus Waters Treaty, 1960* (Treaty Between the Government of India and the Government of Pakistan Concerning the most Complete and Satisfactory Utilisation of the Waters of the Indus System of Rivers, Ministry of External Affairs), <http://mea.gov.in/bilater al-documents.htm?dtl/6439/Indus> accessed 20 Nov 2018.

[95] Priyanka Mittal, 'Cauvery dispute: Karnataka fails to fully comply with orders, Tamil Nadu tells SC', (LiveMint, E-Paper, 16th Sep 2017), <http://www.livemint.com/Politics/XykLQP4hQHYqTFQlw4AOIK/Cauvery-water-dispute-SC-allows-Tamil-Nadu-to-file-plea-aga.html>; See also, V Shivshankar, 'Supreme Court Pulls up Karnataka for Disobeying Orders to Release Water to Tamil Nadu', (The Wire, 30th Nov 2017), < https://thewire.in/70183/sc-pulls-karnataka-disobeying-orders-release-water-tn/> accessed 20 Nov 2018.

[96] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018) Art 262.

expertise because the matters primarily concern with the technical and infrastructural instruments such as the dams and canals. However, the manner of adjudication was similar to that of judicial adjudication mainly emphasising the legal issues raised.[97] Since it was intended for out of court settlement, the tribunal could have been empowered to resolve the dispute through initiatives which promote cooperation and the equitable sharing of the resource. The solution could have been more inclined towards efficient governance of the resource while prioritising the importance of the resource due to its inherent value, and its value for the states sharing the resource.

Another weakness of the tribunal's approach was that they did not recognise other entities as a party to the dispute except for states.[98] Given the history of Inter-State Water Disputes,' the sole purpose of segregating the Inter-State Water Disputes from judicial intervention does not seem to have materialised appropriately. This occurred because of the narrow-sightedness about the possible prospects to arise from the sharing of river water by the states, and the limited knowledge about the multifaceted influence of the resource management in other sectors of life.

5.2. ISSUE 2: Legal Competency of the Adjudicating Institutions

The Tribunal for the Adjudication of the Inter-State Water Dispute was created to be the final authority for the disposal of all disputes arising from the sharing of water between two or more states. The general theme of discussion in this chapter, as well as the Cauvery case under investigation, suggest dissatisfaction and raises concerns regarding the legal competence of the tribunal. As evident by the Cauvery dispute, in which the states as parties to the dispute have been observed using other mechanisms such as the writ jurisdiction;[99] special leave petition,[100] or the advisory opinion available at the disposal of the higher judiciary for the resolution of the concerns arising from the dispute at different stages. The states have appealed to the Supreme Court of India as a

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[97] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 22 Nov 2018.

[98] RR Iyer, 'Cauvery Dispute: A Lament and a Proposal' (2013) 48 (13) Economic and Political Weekly 49.

[99] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 32.

[100] ibid Art 136.

last resort for the administration of justice, and at times for the clarification of the order passed by the tribunal.[101] These alternative paths discovered by the states to take the matter before the higher judiciary raises two prominent issues concerning the legal competence of both the bodies involved - the tribunal and the higher judiciary.

1) The criticism or scrutiny of the tribunal is mainly due to its limited ability for the resolution of the Inter-State Water Disputes;[102]

2) The authority of the involvement of the higher judiciary is questioned due to the explicit prohibition mentioned in Article 262 of the Indian Constitution.[103]

Both of these institutions are subject to scrutiny in this section, against this background. The origin of the Tribunals Act has its genesis from Article 262 of the constitution thus, has the same jurisdictional problem as discussed in Section Three of this Chapter. Therefore, unless the Article 262 and the Tribunals Act are amended to clarify their jurisdiction, and to embrace shared freshwater among the states as their area of competence and interest; their competence is dubious. The narrow interpretation of the constitutional provision has limited the possibilities for the tribunal in a way that it does not seem apt to deal with the complex problems of this century.

The disputes dealt with by the tribunal mainly revolve around the use and management of the resource due to the engineered infrastructure created to harness the resource: but is not confined to it. The issues of development; and the rights of the people affected by these joint projects, such as the problem of displacement, resettlement, relocation, loss of ecology etc., are inevitably connected, especially when these considerations are associated with the rights of an individual.[104] Moreover, the question arising from the sovereign rights and responsibility of the state(s) party to the dispute and other cross-cutting issues arising from the context, is beyond the mandate of the tribunal's competence. These concerns are multifaceted, thus, their resolution must also

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[101] Supreme Court of India, *State of Tamil Nadu. Etc. v State of Karnataka and Others* 1991; 1991 SCR (2) 501.
[102] Supreme Court of India, *In the Matter of: Cauvery Water v Unknown* 1991; AIR 1992 SC 522, at para 16.
[103] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art. 262 (2).
[104] S Narula, 'The Story of Narmada Bachao Andolan: Human Rights in the Global Economy and the Struggle against the World Bank (2008)', in DR Huewitz and others, (eds.), *Human Rights Advocacy Stories* (Research Paper No. 08-62: Public Law, NYU School of Law, 2009).

not confine itself to the adjudication of the legal dispute and distribution of the resource, ignoring all other relative concerns. The disputes involving the sharing of water can no longer be confined to the physical characteristics of water, but rather, must be addressed through the lens of sustainability. Continuance of the former approach is no longer acceptable, but unfortunately, remains in practice.[105]

The states in the past had approached the Supreme Court in most of the Inter-State Water Disputes adjudicated by the tribunal. However, due to the bar restricting the direct intervention of the judiciary, the states have to find alternative means to approach the judiciary, which raises complexity and prolongs the administration of justice.[106] This additionally, leads to the contestation of the judicial order, in case the judiciary intervenes at the request of the disputed parties or the request made by the central government or President of India, which undermines the overall institutional authority and destabilises their credibility. Nevertheless, keeping the matter separate from a judicial intervention for the sake of separating the judicial and administrative functions is one thing, but obstructing the inherent power of the judiciary is another.[107] The tribunal in the consideration or any other institute except for the judiciary could never be able to deal with the concerns raised above.[108] It is the prerogative of the higher-judiciary and is the only body competent to tackle such issues. While exposed to these situations, both the institution, the tribunal and the judiciary suffer from the issue of competence in one way or the other.

The Supreme Court has the original jurisdiction to entertain all the Inter-State Disputes[109] and the resolution of the issues concerning the fundamental rights.[110] The Inter-State Water Disputes fall within both the categories, especially after the judgement clarifying the *right to water* as arising from the fundamental right of *right to life.*[111] It is no

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[105] Supreme Court of India*, State of Tamil Nadu v. State of Karnataka and others* I.A. No.12, 15, 16 and 18/2016 in Civil Appeal No(s). 2456/2007.
[106] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018) Art 136.
[107] ibid Art 136 and 142; See also, Government of India, *Code of Civil Procedure, 1908* (Act No. V of 1908) Section 151.
[108] ibid Part - XIVA: Tribunals – Art 323 A and B.
[109] ibid Art 131.
[110] ibid Art 32.
[111] Supreme Court of India, *MC Mehta v. Kama Nath* (1997) SSC 540.

longer considered wise to adjudicate the dispute concerning water in isolation while disregarding all other aspects such as social, economic, ecological and cultural; or without contemplating the positive obligations associated with the governance of the resource for the progressive realisation of the *right to water*. These issues provided the basis of the claim that the constitutional provision which obstructs justice, needs to be amended to provide legislative clarity. Nevertheless, the constitutional provision restricting the judicial intervention itself is not at fault. However, it is not keeping up with the tone and the complexity of the problem.

5.3. ISSUE 3: Politically Influenced Sovereign Authority

The sovereign federal-state and all its provincial units possess a degree of inherent sovereignty to execute the functions of governance. The sovereign authority symbolises control over the territory, and everything encompassed within the territory including the natural resources such as freshwater. However, as we have discussed in Section Four, the concept has changed and is now understood as the responsibility and obligation of governance by the state. Therefore, the investigation must continue in this direction.

In this case, the state of Karnataka has misused its legislative authority to legislate the ordinance while the dispute was ongoing before the tribunal;[112] to establish its supremacy over the resource and to refute as illegal the claims raised by the state of Tamil Nadu. Later, the ordinance was replaced by the Act No. 27 of 1991. The legislation was challenged before the court, because of the *mala-fide* intention of the state behind promulgation of such a statute. To seek an advisory opinion, the President of India has referred the matter to the Supreme Court, to determine the constitutional validity and the competence of the state concerning the promulgation of such act/ordinance.[113] The court declared such act as *ultra vires* to the Constitution.[114] When the state uses the

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[112] State Government of Karnataka (India), *Karnataka Cauvery Basin Irrigation Protraction Ordinance, 1991* (the ordinance was passed by the then Governor of Karnataka, Mr. Khurshed Alam Khan, under the clause (1) of the Art 213 of the Constitution of India).

[113] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 143 (1); See also, Supreme Court of India, *In the Matter of: Cauvery Water v Unknown* 1991; AIR 1992 SC 522, at Para 23 (5).

[114] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 22 Nov 2018.

sovereign right in an abovementioned manner, it further complicates the matter and prolongs the administration of justice.

The politically induced sovereign rights exercised by the state, in this case, made this issue politically sensitive. These issues play a significant role in winning the election and making of government for the respective political parties in both the states: Karnataka and Tamil Nadu.[115] Due to this, the governments of the respective states do not wish to lose control of the water resource while considering the requirements of another state. Additionally, when it comes to the control of the natural resource, especially the river and water resource; the states represent a typically self-centred attitude which concerns itself with the taming or establishing the control over the resource as a showcase of their sovereign rights over the territory. This paradigm is evident from most of the irrigation projects started before, and after the independence, the overall attitude towards the resource has not changed much, and the same is apparent from India's National Water Policy of 1987 and the one in 2002.[116] However, one could argue that these political motives exist and benefit the state only because of the absence of legal procedures which could re-align these activities and question their authority or legality. Perhaps, if such legal parameters did exist, the same behaviour of states that brought them benefits, would instead be harmful to them, as it would project the state as an entity which does not respect the law.

Factual representation implies the execution of legislative authority by the state is coloured due to political motives which represent an abuse of sovereign legislative power. Therefore, the shortcomings observed reaffirm the claim that the existing legal and constitutional provisions are obsolete and unable to address, competently, the growing freshwater crisis, or to regulate the behaviour of the state. Alternatively, the change in legal practices and reorientation of law as per the modern understanding of water law could peacefully obliterate such political tactics and reduce the probable scenario for politicisation over the resource.[117] Furthermore, the concern discussed in this segment of

[115] PB Anand, 'Water and Identity: An Analysis of the Cauvery River Water Dispute', (2004b) 3 BCID Research Paper, University of Bradford UK.
[116] Government of India*, National Water Policy of 1987 and 2002* (Ministry of Water Resources).
[117] PB Anand, 'Capability, Sustainability, and Collective Action: An Examination of a River Water Dispute' (2007) 8 (1) Journal of Human Development 109, 127.

the chapter is outside of the jurisdictional competence of the tribunal and is broadly an issue of governance. In the following section, the politicisation of the Inter-State Water Dispute is analysed from a different viewpoint.

5.4. ISSUE 4: Politicization of the Inter-State Water Dispute

In accordance with the existing constitutional provision for the resolution of Inter-State Water Disputes, the relationship between the centre and the states has the potential to unduly prolong or influence the dispute. As per the provisions of the Inter-State Water Dispute Act, it is the responsibility of the central government to create a tribunal at the request of the state. For instance, in the Cauvery dispute, the State of Tamil Nadu made the formal request for the formation of the tribunal to the central government in the year of 1970.[118] However, the tribunal only came into existence in 1991, after the intervention of the Supreme Court.[119] In between, the central government facilitated the fact-finding commission, and the joint meetings of states, to negotiate the matter in hand.[120] Despite this, no reliable mechanism exists to hold them accountable for not constituting the tribunal for twenty years. Alternatively, the delay could also be the result of favouritism or a biased attitude of the central government towards the states, either due to political relations or otherwise. This delay could facilitate the completion of the projects undertaken by the state government, or it could also be understood as the undue advantage granted to the state by the centre. In either case, the stakes are high, and it is very likely that the dispute will be politicised; as evidenced by the public outrage and protests in the year 2016 after the courts' decision.[121] It surely is not a pleasant situation, for the states sharing the resource, or for the resource itself. It causes loss of public property and creates anarchy, which disrupts the life of the states, further damaging relations among the disputed parties.[122] These are viable possibilities behind the political

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[118] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 20 Nov 2018., Report Vol. 1 P 10 (letter No.79558/D/69 -36 dated 17-02-70).

[119] ibid 121.

[120] ibid 14.

[121] S Pokharel, 'Two dead in Water Riots in India's Silicon Valley', (CNN, 14 Sep 2016), <http ://edition.cnn.com/2016/09/13/asia/india-water-dispute/index.html> accesses 20 Nov 2018.

[122] The Indian Express, "Cauvery dispute: After violent protests, Karnataka govt says ready to release water Siddharamaih, after coming out of the all-party meet, said that his government will abide by Supreme Court's order and water will be released to Tamil Nadu" (September 7 2016), <http://indianexpress.com

decisions of the government, especially in the presence of the immunity granted from the judicial intervention which could have unravelled the sovereign veil.[123]

Another possibility, which might lead to politicisation over the shared water resource, is postulated by the 'doctrine of permanent sovereignty over a natural resource (PSNR)'.[124] Concerning the freshwater resource, or broadly with the environmental concerns, the states can no longer take the position to argue in favour of absolute territorial sovereignty; and this is also widely discredited by the scholars of international law and by judges worldwide.[125] Nevertheless, in the absence of the contrary binding legal provisions, the territorial sovereignty is exercised as the default position by the state. The states adopted this position at a different time in this dispute, and in other disputes of the same nature.[126] That being said, the doctrine of limited territorial sovereignty or the state responsibility in that regard is difficult to execute in the absence of the viable legal instruments and institutions acting in their favour within the federal-state.

In the absence of strict norms to rely upon, the states, when in conflict, use different principles and theories to justify their acts.[127] For example, the state of Karnataka insisted on the theory of absolute territorial integrity over the resource within its jurisdiction and utilised its geographical position of being the upper riparian state to sabotage the interest of its lower riparian state (the Harmon doctrine). Conversely, the state of Tamil Nadu insisted on the historical rights to utilise the resource as it had the exclusive right over the resource. Ultimately, neither party was willing to share the resource equitably and was simply interested in securing maximum utilisation of the resource in their favour. However, the states could take those positions because the understanding about the resource in the political or the domain of governance is not

/article/india/india-news-india/cauvery-water-dispute-all-party-meet-ends-karnataka-cm-says-will-abide-by-sc-order/> accesses 20 Nov 2018.

[123] EB Weiss, *The International Law for the Water Scarce World* (The Monogram Published by The Hague Academy of International Law, 2013) 126.

[124] UN, *Permanent Sovereignty over Natural Resources,* GA Res. 1803-XVII of 14 Dec 1962.

[125] S McCaffrey, *The Law of International Watercourses* (2nd ed. OUP, 2007) 76.

[126] Government of India, *Ravi and Beas Waters Tribunal's Award* (Ministry of Water Resource, River Development and Ganga Rejuvenation), <http://www.wrmin.nic.in/forms/list.aspx?lid=368> accessed 20 Nov 2018.

[127] RR Iyer, 'Water Resource Planning: Large Dams and Development' (Association for India's Development, Chennai, 1999) 51.

updated as per the modern scientific or legal understanding of the resource.[128] The same stands true for the principles and theories governing them.

The nature of problems discussed above result in a continuum of the practices even if they disregard the customary norms or the basic principles of the watercourse law, which must apply to the states. Moreover, when the matter comes before the judiciary it gets further complicated and the decisions get prolonged. It is not because the judiciary is incompetent, but because a lot of time is wasted debating on the existence and legal validity of the acts or reasoning proposed and finding the appropriate place for such norms to fit within the applicable constitutional and legal framework.[129] Successive tribunals have also been engaged in such proceedings on record, and are akin to the discussions involving legal disputes.[130] Additionally, in water disputes, when they are resolved using political diplomacy or tribunals created for that purpose, and in the absence of the settled norms or well - established legal parameters, the similar claims are often approached by different means, and they reach different conclusions. This gives rise to multiple and often contradictory norms, making room for rampant politicisation over the resource. On that note, the developments relating to Cauvery dispute and the tribunal in the last two years are recorded below.

6. Recent developments in Cauvery Water Dispute

The issues discussed in the previous section were in accordance with the Award of the Tribunal passed in the year 2007. However, the unsatisfied state parties had filed a civil appeal before the Supreme Court of India on different questions of fact and law. As a result, on 13th February 2018 Supreme Court of India passed an order curtailing the share of Cauvery water for the state of Tamil Nadu.[131] In this decision and the one that follows

[128] N Krisch and Benedict Kingsbury, 'Introduction: Global Governance and Global Administrative Law in the International Legal Order' (2006) 17 (1) European Journal of International Law 1.

[129] Government of India, *Awards of the Tribunal: Godavari Water Disputes Tribunal (In April 1969); Narmada Water Disputes Tribunal (October 1969).* At various time have discussed the justiciability of different principles and theories while adjudicating the disputes (Ministry of Water Resources, River Development & Ganga Rejuvenation) <http://www.wrmin.nic.in/> accessed 20 Nov 2018.

[130] RR Iyer, 'Indian Federalism and Water Resources' (1994) 10 (2) Water Resources Development 191, 196.

[131] Supreme Court of India, Civil Appellate Jurisdiction – *Civil Appeal No. 2453 OF 2007, The State of Karnataka by its Chief Secretary vs State of Tamil Nadu by its Chief Secretary & Ors.; Civil Appeal No. 2454 of 2007 State of Kerala through the Chief Secretary vs State of Tamil Nadu through the Chief Secretary to Government and others; Civil Appeal No. 2456 OF 2007 State of Tamil Nadu through the Secretary Public*

on 18th May 2018, the court seems to have departed from the conventional practice giving rise to an interesting turn of events. Likewise, the ministry had proposed a set of amendments to the existing tribunal with the hope to increase its efficiency. Both these developments are briefly analysed below.

6.1. The Supreme Court's Verdict

A special bench consisting the Chief Justice of India – Justice Deepak Mishra upheld the tribunals decision of 2007 while declaring Cauvery as a national asset. Further declaring that Karnataka will now supply 177.25 tmc instead of 192 tmc - a reduction of 14.75 tmc, from its Billigundlu site to Mettur dam in Tamil Nadu. The judgement was reasoned stating that the Karnataka was entitled to marginal relief because the demand for the drinking water has increased many folds in the expanding city of Bengaluru and the need for drinking water is top-most priority, while deciding the fair share of distribution of water resources among various stakeholders across competing uses.[132] In terms of allocation proposed by the tribunal the court was of the opinion that the tribunal did not consider the growing demand of Bengaluru and thought the availability of 60% groundwater is enough to satisfy the demand of the city, unfortunately, the resource had dried-up and is no longer sufficient to satisfy the growing need. The court also considered 20 tmc of groundwater in Tamil Nadu before readjusting the quantity of the resource to be shared among the riparian.[133] After careful analysis of all the alternative resource available in the vicinity of the states, the apex court has readjusted the quantity of water to be shared among the states using the principle of *equitable utilisation.*[134]

The court went on clarifying that, the constitution confers equal status to all the states and no state can claim full right on the part of river flowing through its territory. Thus, declaring the Cauvery a national asset and refuting the notion of absolute right over

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Works Department vs State of Karnataka by its Chief Secretary, Government of Karnataka & Ors. (Judgement on 16 Feb 2018).

[132] ibid Para 375 and 376.

[133] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 20 Nov 2018., Point X, Sub-head 2, 3 and 6.

[134] AT Wolf, 'Criteria for Equitable Allocations: The Heart of International Water Conflict' (2009) 23 (1) United Nations Sustainable Development Journal 3.

the resource within the territorial boundaries of the state. Moreover, the court upheld the tribunals' scheme of distribution of water stating that it was based on the principle of *equitable distribution* and *reasonableness*.[135] In addition, the honourable court responded to the centre's claim refusing the jurisdiction of the Supreme Court in the said matter and in recognition of the tribunals' award as final. *'Stating that Article 136 (special leave petition) is the constitutional remedy which cannot be abrogated by legislation much less by invoking the principle of election or estoppel (emphasis added)'.*[136]

As per the judgement passed by the apex court on 16th February 2018, the court asked the Centre to formulate a Cauvery Management Scheme including the creation of the Cauvery Management Board, for release of water from Karnataka to Tamil Nadu, Kerala and Puducherry.[137] In pursuance of the order, the centre had submitted the draft scheme to the apex court for its opinion and received an approval for the same on Friday 18th May 2018 for distribution of water.[138] Section 6A of the Tribunals Act provides for the formulation of the board for the implementation of the Tribunals Award. Therefore, the court's order and its jurisdiction to order the making of the board was again challenged by the states while interpreting article 6A of the Tribunals Act. To which the apex court came to the conclusion that the intent of this provision of the Act was to ensure the implementation of the tribunals order by the states in good faith and therefore, the order of the court for creation of the scheme for the distribution of water directed to the centre government is in accordance with the norm so created.[139]

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[135] *The Report of the Cauvery Water Disputes Tribunal with the Decision in the Matter of Water Disputes Regarding the Inter-State River Cauvery and the River Valley* Inter-State River Water Tribunals Award, <http://mowr.gov.in/acts-tribunals/current-inter-state-river-water-disputes-tribunals/cauvery-water-disputes> Ministry of Water Resources, River Development and Ganga Rejuvenation, accessed on 20 Nov 2018. Point X 4.

[136] ibid.

[137] Outlook, 'SC Approves Centre's Amended Draft Cauvery Management Scheme: The court dismissed Tamil Nadu's plea seeking initiation of contempt against Centre for non-finalisation of Cauvery scheme until now', (18 May 2018) <https://www.outlookindia.com/website/story/sc-approves-centres-amended-draft-cauvery-management-scheme/311998> accessed 20 Nov 2018.

[138] Hindustan times, 'Supreme Court Approves Centre's Draft Scheme for Cauvery Water Distribution: The Supreme Court also dismissed Tamil Nadu's plea seeking initiation of contempt against the Centre for non-finalisation of the Cauvery scheme' (18 May 2018) <https://www.hindustantimes.com/india-news/supreme-court-approves-centre-s-draft-scheme-for-cauvery-water-distribution/story-X3ebM7UlQoj6dul iuBLQgM.html> accessed 20 Nov 2018; See also: Cauvery Water Management Authority (CWMA), 'Cauvery Water Management Scheme, 2018', (Ministry of Water Resources, River Development & Ganga Rejuvenation, India).

[139] ibid, Cauvery Management Scheme.

The judgement confirms some of the essential features of the international watercourses law and the customary principle of international law. It resembles Article 10 of the Watercourse Convention while prioritising the need of distribution of water resource and it broadly confirms the principle of *equitable utilisation* (art 5 of the watercourse convention) for the management of the resource. The declaration of the Cauvery River as the national asset could be interpreted as a declaration of the river as the *common resource* for shared use and responsibilities and rejection of the idea of supremacy over the resource based on territorial authority of the states (emphasis added).[140] It represents the determination of the court to ease the governance of the resource despite the existing flaws in the legal set-up and the manner the powers are distributed between the centre and the state for the governance of the resource.[141] These developments and the refusal of the unrestricted application of the bar conferred on court's jurisdiction by the Article 262 of the constitution is very much in line with the analysis and arguments conducted in this chapter. However, in the absence of the legislative input which could clarify such overlapping jurisdictional issues it remains a problem despite the enthusiastic judicial activism.

The following section analyses the competence and the utility of the tribunal in the light of the Amendment Bill proposed by the Ministry of Water Resources, River Development and Ganga Rejuvenation for the improvement of the Tribunal Act. The examination of the proposal is set against the shortcomings observed in this chapter regarding the tribunal's ability to adjudicate the Inter-State Water Disputes in India.

6.2. Evaluation of the Inter-State River Water Dispute Tribunal Amendment Bill

The observation so far indicates that there is a scope for improvement in the tribunal using the constitutional amendment provision,[142] as well as through the provisions of the Inter-State Water Tribunal Act. Likewise, the Ministry of Water Resources, River Development and Ganga Rejuvenation had observed some of the deficiencies and proposed an Amendment Bill in the lower house of the parliament for the upgradation of

[140] PK Parhi and RN Shukla, 'Beyond the Transboundary River: Issues of Riparian Responsibilities', 2013 94 (4) Journal of The Institution of Engineers (India): Series A (2013) 257.

[141] M Suri, 'Indian Water Dispute Settled After 200 Years', (CNN, 16 February 2018), <https://edition.cnn.com/2018/02/16/asia/india-river-dispute-intl/index.html> accessed 22 Jun. 18.

[142] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Art 368.

the existing tribunal.[143] However this proposal might not contribute to the improvement of the tribunal immensely, due to the reasons outlined below.

Firstly, the proposal is silent regarding any change in the jurisdiction of the tribunal. This implies that the tribunal will again be limited to dealing only with the issue of shared river water among provincial states, and not the issue of shared freshwaters. This is problematic because river water constitutes the part of the freshwater cycle, therefore, limiting the jurisdiction to it implies the same substantial jurisdictional limitations to the tribunal as observed in previous sections of this chapter.

Secondly, the Bill proposes in favour of the formation of the permanent tribunal for the resolution of the Inter-State River Water Dispute.[144] This would obliterate the possibility of delay in the creation of the tribunal for the adjudication of the Inter-State Water Disputes and its fate will no longer be reliant on the discretion of the central government, which has so far been the case.[145] Furthermore, this would reduce the extent of politicisation that occurs due to differences of opinion between the centre and the state, especially regarding the means by which to resolve the dispute, and the institution chosen to adjudicate it. The amendment also proposes a time-limit of three years for the adjudication of the dispute, which might help speed up the process of resolution of the dispute.[146] This is a sensible suggestion, which might make the tribunal more effective.

Thirdly, the bill insists on the status of the tribunal in the adjudication of the Inter-State Water Dispute, as final and binding.[147] An alternative explanation implies that the scope of the tribunal remains unchanged and bound by the Article 262 of the Constitution, which makes the tribunal the final authority in the concerned matter and prohibits judicial intervention of any kind. As previously discussed, there is currently only limited jurisdiction provided by the Tribunals Act and no direct means to appeal against the order

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[143] Government of India, *Inter-State River Water Disputes (Amendment) Bill, 2017* (Press Information Bureau, Ministry of Water Resources 14 March 2017) <http://pib.nic.in/newsite/PrintRelease.aspx?relid =159201> accessed 20 Nov 2018 (Proposal of the bill by the Ministry).

[144] ibid < http://www.prsindia.org/billtrack/the-inter-state-river-water-disputes-amendment-bill-2017-4671/> accessed 20 Nov 2018 (first draft of pending bill in parliament).

[145] Government of India, *The Inter-State River Water Dispute Act, 1956* (Act No. 33 of 1956), Section 4.

[146] Government of India, *Inter-State River Water Disputes (Amendment) Bill, 2017* (Press Information Bureau, Ministry of Water Resources 14 March 2017) <http://pib.nic.in/newsite/PrintR elease.aspx?relid =159201> accessed 20 Nov 2018 (Proposal of the bill by the Ministry).

[147] ibid.

of the tribunal to the Supreme Court of India. Which means that the states have to continue exploring other mechanisms to approach the Supreme Court for matters concerning the rights-based discourse, or broadly to address the issues concerning social justice and equity. In turn, this will result in multiple litigations, and once again raises questions about the legal competence of the involvement of higher judiciary. Therefore, to increase transparency and credibility of the institution and to widen the horizons of issues, the tribunal could broaden its jurisdiction by allowing individuals, groups, public-spirited persons and civil society by providing them legal standing to bring the case to the tribunal. Along with this, the clarification as to the scope and legal competence of the institutions involved in the adjudication of the dispute is quintessentially important. And success of the imposed time limit for the adjudication of the dispute on the tribunal depends heavily on this clarification.

Fourthly, it is proposed that there be scope for the advancement of other means of negotiation and conciliation before or simultaneous to the judicial adjudication of the dispute by the tribunal.[148] At present, as intended by the primary Inter-State River Water Dispute Tribunal Act, 1956, it is preferred by the central government to resolve the Inter-State Dispute by mediation and other means of negotiation.[149] The proposed Bill, however, would replace this provision and require the central government to set up a 'Disputes Resolution Committee (DRC)' to resolve any Inter-State Water Dispute amicably.[150] The means adopted by the committee would be the primary means, and in the event of failure of these means, the dispute would be referred to the tribunal. However, the amendment fails to specify what means of dispute resolution should be followed by the committee, but nonetheless encourages their development and channelisation as the full-fledged working options through the DRC. Despite there being scope for this under the current legislation, however, the central government has not actively encouraged the advancement of such means previously. Therefore, the additional push suggested by the proposed amendment is to be welcomed, although it is advisable that while exploring the possibilities in this area, the prospects arising from the global

[148] ibid.
[149] Government of India, *The Inter-State River Water Dispute Act, 1956* (Act No. 33 of 1956), Section 4 (1).
[150] ibid.

techniques of 'water conflict management' and 'hydro-diplomacy' must also be considered.[151]

Finally, new legislation proposes the creation of a robust institutional architecture to enhance the tribunals ability to achieve its objectives, although, it lacks any means to achieve that goal.[152] However, the present draft is very much appreciated and is a step in the right direction, although, it would require revision based on the concerns raised above. It is to be hoped that the collective impact of all these initiatives could set the optimal conditions for the efficient working of the tribunal and following are the suggestions.

7. Conclusion

The shortcomings inter-state water dispute tribunal exhibits are more than an issue of structural and institutional incompetence. Rather, they stem from the constitutional arrangement and the underlying philosophy of the constitution which dictates the separation of power among different units of governance. The responsibility to govern the resource was distributed among different organs at a different level of governance, in accordance with the spatial and temporal ideology of the constitution, as well as the limited information available about the resource. However, concerning constitutional provisions have not evolved in the course of time, thus instead of facilitating the governance, they have become hindrance themselves.

It has been evident from the discussion in this Chapter that the existing constitutional provisions and the practices concerning Inter-State water regulation, management and governance are outdated and need to be revised to accommodate the change in circumstances.[153] The central government seems to have been in the back seat on this issue so far and is seems to be wilfully avoiding the requirement to intervene in Inter-State Water Disputes. It is high time that the central government stop behaving in a politically correct manner and take a proactive interest realising its responsibility as a

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[151] UNDP, 'Conflict Resolution and Negotiation Skills for Integrated Water Integrated Water Resources Management', (Cap-Net: International Network for Capacity Building in Integrated Water Resources Management, Training Manual, 2008).

[152] Government of India, *The Inter-State River Water Dispute Act, 1956* (Act No. 33 of 1956).

[153] RR Iyer, 'Water Resource Planning: Large Dams and Development', (Association for India's Development, Chennai, 1999).

sovereign state in creating, or developing, a mechanism to resolve these ongoing disputes speedily and systematically.

Based on the analysis conducted in this chapter, it is recommended to the parliament that it must upgrade the constitutional understanding about the water resource in the light of new scientific information available and then to reassess and realign the power to govern the resource. The continuation of the practice of dealing with one of the components of the freshwater resource in isolation and without respecting its tendency to have an inevitable transboundary impact on the other components of freshwater and on the ecology, is against the spirit of the general principles and customary principles of international environmental law, as well as, the international watercourses law.[154] Therefore, the provisions of Schedule Seven (entry 56 of the union list and entry 17 of the state list) of the Constitution and the jurisdictional ambit of the Article 262 of the Constitution of India requires revision in the light of the arguments made above. Thus, the author advocates for the clarification of the term water resource and what it encompasses (the surface and the groundwater) with respect to the governance and holistic regulation of the resource as per the constitutional framework in India. Whilst, maintaining the position and arguing in favour of not shifting the entry related with water resource in the concurrent list of Schedule Seven of the Constitution of India.

As far as the adjudication of Inter-State Water Disputes from within the existing institution is concerned, the tribunal prefers the adjudication of a dispute using diplomatic or political tools, for which the prospects arising from hydro-diplomacy, negotiation and another non-judicial tool for water conflict management look promising, as a means of preliminary adjudication of the Inter-State Water Dispute.[155] It is oriented towards creating a wider dialogue among the stakeholders on either side of the state.[156] In author's

[154] UN, 'Convention on the Law of the Non-navigational Uses of International Watercourses, 1997', (Adopted by the General Assembly of the United Nations on 21 May 1997. Entered into force on 17 August 2014. See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49)).

[155] UNESCO, 'Hydro-diplomacy, Legal and Institutional Aspects of Water Resource Governance: From the International to the Domestic Perspective', (Training Manual by the International Hydrological Programme, UNESCO, 2016).

[156] RR Iyer, 'Water Resource Planning: Large Dams and Development', (Association for India's Development, Chennai, 1999) Section 4 (1).

view, this is the most sensible strategy.[157] Diplomacy being the political tool will be in line with the constitutional philosophy, which remains rightly determined to separate the issue of governance from that of judicial intervention.[158]

To improve the adjudication of the Inter-State Water Dispute by the tribunal, it is important to clarify tribunals' jurisdiction by the explicit mention that it is competent to deal with the sharing of freshwater among provincial states and not just the river water. Moreover, it must also be empowered to deal with the issue of water governance holistically, instead of confining itself to technical projects and distribution of river water among the states sharing the resource, as it has been the case. In addition to this, a clear mandate is desirable which allows the appeal against the tribunals order to the Supreme Court of India for the matters concerning rights-based discourse or broader issues of equity and social justice.[159] It will require amendment of both the Constitution and the Tribunals Act. Moreover, the reassessment of Article 262 and Entry 56 of the union list will have an impact on the jurisdictional ambit and the existence of the tribunal as these provisions collectively forms the authority for the creation of the statute which gives rise to the tribunal in the first place. Therefore, they must all be dealt with simultaneously.

Unless an umbrella legal framework is put in place the task of harmonisation of the existing provisions regarding law and policies among the states is a distant dream to achieve.[160] The well defined legal parameters are the legitimate means to align the state activities and the manner they govern their resources, as well as, how they react to their neighbouring states sharing the resource. Therefore, it is recommended that such a statute must take the inspiration from the advanced provisions of the watercourses law (for detail please refer to chapter two). It will also project the governments' effort to improvise the means and standard of water governance using power to legislate. Moreover, it will act as the legal tool at the disposal of the state to curb the politicisation

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[157] AT Wolf, 'Hydro-politics Along the Jorden River: Scarce Water and its Impact on the Arab-Israeli Conflict' (UN University Press, 1995)181.

[158] Government of India, Ministry of law and Justice Legislative Department*, the Constitution of India, 1949* (as on 31st July 2018) Art 262 (2).

[159] RK Gupta, 'Human Rights Dimension of Regional Water Transfer: Experience of the Sardar Sarovar Project' (2010) 17 (1) International Journal of Water Resources Development 125.

[160] RR Iyer, P Culllet, KJ Joy and others, *The Draft National Water Framework: An Explanatory Note,* (Prepared by the Sub-Group on a National Water Framework Law set up by the Planning Commission's Working Group on Water Governance for the Twelfth Plan).

of the water disputes, or the disputes arising due to sharing of the common resource among the federal units of the state, to a certain extent.[161] Therefore, it is recommended to the state to consider the arguments proposed in this chapter as they together possess the ability to reduce the possibilities of politicisation over the resource, to enhance the competence and utility of the tribunal and to improve overall governance of the resource.

[161] FM Platjouw, 'The Need to Recognize a Coherent Legal System as an Important Element of the Ecosystem Approach' in C Vogit (eds.), *Rule of Law for Nature: New Dimensions and Ideas in Environmental Law* (CUP 2013) 158.

Conclusion

1. The Argument in Brief

In this thesis, some of the major impediments for the governance of the freshwater resource in terms of law and policy were subject to investigation. The aim of this was to address them in a way that would develop better ways to ensure the efficient and good governance of the resource. The main thrust of this thesis is that some of the legal instruments responsible for the governance of the freshwater resource are obsolete. This extends not just to the instruments but to their underlying governing principles, which require updating or reconfiguring.

In the absence of a set of legal principles that can ensure the sustainable and coherent governance of the water resource, the distribution of power to legislate and administer the natural resource among the units of the federal state suffers greatly. As per the current constitutional status, the potential of the said provisions and the institutions created for the purpose is undermined. Because the underlying considerations for the separation of powers were based of the philosophy of segregation and administration, which was rooted on the notions of territoriality and sovereign statehood. That is diametrically opposite to the modern approach of holistic and sustainable governance of the water resource. Additionally, the foundational principles governing the resource have undergone significant change in recent years. This is due to advancements in scientific understanding regarding the resource and the transboundary nature of environmental problems. These changes have influenced international law and global practices involving governance of the resource. Consequently, the constitutional arrangements concerned with the governance of the freshwater resource have been subject to direct and indirect challenges. The means of distributing power among the appropriate units of governance has also been challenged and has been found in its current state to be unsuitable to address the crisis.

The water sector raises another concern regarding its governance, in addition to those described above. This is related to the inter-disciplinary nature of the resource. As widely understood, the foundational requirement for the success of any law and policy for the governance of the freshwater resource depends on a whole set of interconnected

practices and competencies. It depends on the correct scientific understanding of the resource. And the integration and consideration of all these overarching concerns into the planning the governance of the resource. However, this could be facilitated with the help of reliable data on which the decisions for policy considerations depends to an extent.[1] The water sector constantly relies on credible data for efficient working. This requirement is particularly challenging and outside the conventional legal jurisdiction. Therefore, it requires adjustments in practice, and innovation in strategies, because the efficient management and governance of the resource strongly relies on this and is it also essential for progressive realisation of the *right to water* for all.

With reference to the above points, this thesis argues that the state must be sensible to the changing needs of the society and amend or change its practices accordingly to ensure the good governance of the resource. This being the moral, ethical and the legal responsibility of the democratic state, and the law is an instrument at the disposal of the state to serve its purpose in the most equitable manner possible. Whilst the legal regime to govern freshwater exists, it needs to unequivocally respond to inevitable changes in the supply and demand of water, and the changing social, cultural, economic, political and ecological considerations of the respective localities. And upgrade itself in a manner it could survive the pressure due to change in climatic conditions. If adopted, the changes and actions proposed in this thesis would strengthen the system from within. They also possess the potential to address the profound and systemic drawbacks observed in the governance of the resource in the Indian jurisdiction.

The arguments made above are substantiated in this thesis by:

1) Showing the missing link between science and policy and emphasising that it is the foundational requirement for the success of any law and policy made for the governance of the water resource.

[1] S Gallaher and T Heikkila, 'Challenges and Opportunities for Collecting and Sharing Data on Water Governance Institutions' (2014) 153 Journal of Contemporary Water Research & Education 66.

2) Illustrating the differences among the existing legal and constitutional rights applicable to the water resource in India, and examining the theories and doctrines concerning the governance of the resource within Indian jurisdiction.

3) Examining the legal validity and the utility of the existing legal practices applicable for the governance of the freshwater resource in contemporary times. By comparing them with the development of international water law and the best practices used for the management and the governance of the resource at a global level.

4) Emphasising the role of the state and the state's responsibility towards the governance of the resource, whilst dealing with the investments in water sector or by delegating the duty to govern the resource to other entities.

5) Providing an analysis which recognises the importance of the legal and judicial recognition of *the right to water* in domestic jurisdiction of the state, and identifying the missing link between the legal recognition of the right and cause for its progressive realisation.

6) By exploring the potential of the rights-based discourse in improving the governance of the resource.

7) Examining the institutional capacity of the National Green Tribunal and the Inter-State River Dispute Tribunal, and highlighting their shortcomings towards attaining sustainable management of the resource, or broadly ensuring the *access to environmental justice* for all. Additionally, there will be an evaluation of the competence of these tribunals and the extent of their contribution to efficient governance of the resource.

2. The Issues Summoned

To substantiate the above-mentioned claims, the following section considers the main challenges in formulating the kind of effective governance that is required.

2.1. Harmonisation of Law and Policy – The Responsibility of the State

By virtue of its statehood, the state is obliged to manage the natural resource in the best possible manner. The most common and persistent problem that can be observed in the governance of the freshwater resource in India is the lack of coherent laws and policies among the units of the federal state in India. To address this issue, a

debate in favour of having a national freshwater framework statute has been in the legal domain for some years now.[2] It has merits and is appreciated. Although, the author has reservations about this approach, because it is not mandatory, and is rather a recommendatory guideline for the provincial states to adopt. Recent decades have witnessed the emergence of the Model Water Bills and National Water Policies for the harmonisation of water law and policies in the public domain in India. However, formalisation of those proposed bills into a statute or adaptation of the National Water Policies in a strict sense by the provincial states is rarely achieved.

Thus, a mechanism is suggested from within the constitutional framework which could strengthen the cause and could add additional value to the freshwater framework statute or Model Water Bill, like the one recently proposed in parliament by the Ministry of Water Resources, River Development and Ganga Rejuvenation.[3] After examining all of the existing mechanisms or proposals from within the constitutional framework of India, a method of developing an environmental procedural code by the central government is suggested. This would mark the beginning of the new era of environmental and climate change litigation in India.[4] This proposal does not cause friction between the central and state government, neither does it disrupt the constitutional theory of the separation of powers between the units of governance. This is because the environment as a subject-matter is missing from the lists specified in the Seventh Schedule, which empowers the parliament to make law using the residuary powers vested in Article 248 of the Constitution of India. This is in contrast to, water which primarily falls within the jurisdiction of the provincial states. Additionally, the procedural code for the environment has a wider jurisdiction and could holistically address all of the components of the environment. It would be mandatory for the units of the federal state to comply with and would not cause a constitutional or political deadlock between the units of governance, nor would it require the constitutional amendment.

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[2] NR Madhava Menon, *Toward a National Framework Law on Water for India* (The World Bank Legal Review, Volume 5: Fostering Development through Opportunity, Inclusion, and Equity 2013).

[3] Government of India, Draft National Water Framework Bill, 2016 (Draft of 16 MAY 2016 Ministry of Water Resources, River Development and Ganga Rejuvenation).

[4] Government of India, Ministry of law and Justice Legislative Department, *the Constitution of India, 1949* (as on 31st July 2018) Schedule Seven, List III.

The legal framework for the governance of the water resource, and the environmental procedural code, together have the potential to comprehensively address the issue of incoherent and unsustainable laws and policies for the governance of the freshwater resource in India. Additionally, they could satisfy questions regarding the legal validity and sanctity of the norms, principles and doctrines governing environmental matters within the domestic jurisdiction. This is one of the suggested means; the state could use to fulfil its duty and to achieve in part its responsibility to efficiently govern the resource using the law as an instrument.

By reconfiguring the existing legal and the institutional structures such as the National Green Tribunal and the Inter-State River Water Tribunal, the state could substantially improve the governance of the resource. As per the analysis conducted in Part Four of this thesis, they have been found to suffer from systemic issues including a limited jurisdiction; a lack of integration of inter-disciplinary concerns; a half-hearted application of the principle of sustainable development; and the difficulty experienced by the tribunal while dealing with the cases in the application of the precautionary approach to the existing legal and institutional framework.[5] It is crucial to note that the orders passed by the tribunals do not constitute a precedent. As a consequence, instead of acting as the source of law, these orders possess jurisprudential value due to their ability to influence or direct environmental law making in the country.[6] At the same time, they act as the specialised institutions of competence. Therefore, the improvement of these institutions as per the suggestions mentioned in Part Four of this thesis are considered critical for the advancement of the environmental law-making in the country, and in ensuring access *to environmental justice for all.*

The discussion in this thesis suggests that the existing legal discipline, institutions and the tools available at the disposal of the state for the present and future governance of the freshwater resource cannot accommodate concerns arising due to environmental problems. This is because the discipline in question is profoundly and systemically

[5] S Rai, 'India's Tryst with Independent Tribunals and Regulatory Bodies and Role of the Judiciary' (April-June 2013) 55 (2) Journal of the Indian Law Institute 215.
[6] KC Joshi, 'Constitutional Status of Tribunals' (January-March 1999) 41 (1) Journal of the Indian Law Institute 116; Government of India, 'Law Commission Report No. 272: Assessment of Statutory Frameworks of Tribunals in India', (October 2017) 1.

different from other conventional legal branches. Therefore, the author suggests the development of the environmental law as an independent and autonomous legal discipline in the domestic context of a state with tailor-made procedural code, the rule of evidence and the institutions to impart *access to environmental justice* in the form of the court or the tribunal. It is quite plausible to argue that this proposal may be regarded as *lex ferenda* and the way forward for dealing with the magnitude and intensity of the emerging environmental and climate change litigation. However, seems like the appropriate choice and the step in right direction.

2.2. Contradictory Legal Provisions

The colonial laws which imparted ownership rights to the natural resource are still prevalent in the Indian legal system and this is one of the most pressing reasons for unsustainable management of the resource. The status of property rights associated with the groundwater resource and other overarching rights applicable to the water resource was investigated in this thesis, to determine their legal validity and settle their hierarchy. This is of the utmost importance because conflicting rights obstruct the governance of the resource and create bias in the outcomes of these conflicts. This investigation successfully negates the existence of the very principles or the source the law from which some of these rights derive their legitimacy. Moreover, the competence of these rights was compared against existing principles of environmental law within the state and in the light of the modern international watercourse law, to establish and support the case made here. It is found that the right to groundwater is an easement right that is limited and qualified, based on the strategy of the local government. Additionally, a strong case was made in favour of treating the freshwater resource from the set of the environmental laws of the land instead of from the group of land laws.

The capitalistic ideology brought to the Indian subcontinent by the British Empire had many ill effects. These ill effects have influenced the evolution of the applicable laws and policies governing the freshwater resource and other natural resources. In order to deal with these, the state government is required to clarify the status of the natural resource as a resource which is *res nullius*. This means that any property rights associated with the resource must be detached from the resource. To do this, in a way that avoids any contradictions and assigns legal validity to the pronouncement, the state needs to

amend and modify the appropriate legal statutes and the Constitution of India with retrospective effect. In addition to this, the legal status of the 'public trust doctrine' must also be clarified, as this is the working law of the land, and recognises and endorses the understanding of natural resources as the *common property resource* or as *commons* to be managed by the state in trust. Clarification of all these norms and doctrine is foundational for facilitating the efficient governance of the resource. As far as a hierarchy of rights in the Indian jurisdiction is concerned, *fundamental rights* attain the highest priority. *The right to water* is classified as one of these.

2.3. The Right to Water

The rights-based discourse associated with the *right to water* in India is investigated, in order to ascertain if the judicial recognition of *the right to water* is sufficient for its realisation. For the progressive realisation of the *right to water*, the state needs to fulfil its positive obligations, which translates into strict legal regulations to enhance the efficient management and governance of the resource, and the means and mechanisms to better govern the resource using policy and other administrative tools.

The right to water is interpreted and recognised as an indivisible part of the *right to life* (the fundamental right) by the judiciary, but does not claim the status of an explicit legal right in any statute with nation-wide jurisdiction. Moreover, the assertion of the *right to water* does not clarify whether it is the *right to drinking water* or the *right to water and sanitation*. Neither does it specify what this right entails. Therefore, the judicial interpretation partially brings the *right to water* within the framework of the fundamental rights in India, but its interpretation remains open to the judiciary and the legislature on a case-by-case basis.

The judicial recognition of the *right to water* had paved the way and now it is up to the legislature to confer the legal status to the right by means of a constitutional amendment. The legislature can either amend the constitution to create an independent *right to water* as a fundamental right, or it can explicitly declare that *the right to water* is recognized as a *fundamental right* by confirming judicial recognition arising from the *right to life*. However, to give effect to the newly declared *right to water* the state need to create corresponding duties in Part Four of the Constitution of India by drawing clear

linkage between the two, and that would be a clear indication for the state to undertake their positive obligations for the progressive realization of the *right to water*.

However, if the legislature chooses the second option i.e., the confirmation of the *right to water* as an indivisible component of the *right to life*, then due to collective bearing of the rights and the duties to give effect to the recognized right, the legislature can be directed to create a statute for the regulation of the freshwater resource. The proposed statute must explicitly recognise the *right to water* and clarifies its content. Moreover, it undertakes the responsibility in the form of consolidation of norms for the creation of coherent laws and policies for the efficient governance and management of the resource.

As far as the progressive realisation of *the right to water* is concerned, this depends on the efficient management of the resource. This thesis provides analysis of the extent to which the realisation of this right in practice depends on its recognition as a legal right, and the role efficient governance could play in the accomplishment of that goal. This thesis argues that these are two sides of the same coin, therefore a rights-based discourse must work simultaneously with the freshwater laws, for efficient governance, and for the progressive realisation of the *right to water*.

2.4. Investment and the Rights-based Discourse

The other half of the realisation of the *right to water* depends on the availability of the resource in sufficient quality and quantity. At its heart, the provision for safe water, or the states' ability to ensure water security, requires investment. Multi-sectoral collaboration and investments are on the rise in order to deal with the growing water scarcity. These investments are made to facilitate the fulfilment of the social, cultural and economic rights in the borrowing country. The result of such activities causes a significant impact on the *inter and intra-generational equity,* as well as interferes with the social justice in the country. Whilst interfering with the day-to-day governance of the state. Because of the importance associated with these investments they must not be regulated solely at the mercy of the market forces. Therefore, the author in this analysis identifies the differential need for investments in the social sector mainly when the financial

investments are oriented for the fulfilment of, or assisting in, the progressive realisation of the human rights of the individual.[7]

It is the primary responsibility of the borrowing state to honour and protect the rights of the people, as well as the ecology, in an equitable manner. As observed in this thesis, the conditions related to the investments are usually dictated by the investors or the investing institutions of the global north, and it is observed that the developing states of the south do not have the expertise or the strength to fairly negotiate the terms of the investment. Therefore, to tackle this situation, the borrowing states of the global south need to devise a mechanism that can assist in negotiating the terms of the investment in a manner that corresponds with the human rights and governance obligations of the state. This thesis does not resist the modernity in means of governance or investments made in the water sector, but the capitalistic conception of the economy and the economic structures it possesses.[8]

To combat the problems arising from investments in the social sector; the environment and the human rights interface provides a window of opportunity for the global south.[9] India and most of the countries in the global south have adopted a rights-based approach for the protection of the right of the people and the environment. This can be achieved by recognising and making rights such as the *right to water*,[10] the *right to a healthy environment*,[11] and the various rights for nature,[12] among others, a legal entitlement in the states' constitutions or by incorporating legislation to give effect to those rights, either by mentioning them explicitly or by the elaborate judicial

[7] C-de Albuquerque, report of the Independent Expert on the Issue of Human Rights Obligation related to Access to Safe Drinking Water and Sanitation, UN Doc. A/HRC/15/31, 2010, para 63.
[8] U Ozesmi, 'Water, Life? An Agent of Political Space and Protest? An Instrument of Hegemony?', in in LM Harris, JA Goldin and C Sneddon (eds), *Contemporary Water Governance in the Global South: Scarcity, Marketization and Participation* (Routledge 2013) 95, 97.
[9] CG Gonzalez, 'Food Justice: An Environmental Justice Critique of the Global Food System', in S Alam, S Atapattu, CG Gonzalez and others (eds), *International Environmental Law and the Global South* (CUP 2015) 401, 423.
[10] Supreme Court of India, *MC Mehta v. Kanam Nath* 1998 SSC 1.
[11] JH Knox, 'Framework Principles on Human Rights and the Environment: the main human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 2018' (United Nations Human Rights Special Procedures, Special Rapporteur, Independent Experts and Working Groups 2018).
[12] EO'Donnell, 'At the Intersection of the Sacred and the Legal: Rights for Nature in Uttarakhand, India' (2018) 30 (1) Journal of Environmental Law 135; See also: R Youatt, 'Personhood and the Rights of Nature: The New Subjects of Contemporary Earth Politics' (2017) 11 (1) International Political Sociology 39.

interpretation of the existing rights.[13] The recognition of these rights and by establishing the connection between the human right and the environment, it provides a concrete and legitimate ground for the state to negotiate the terms of the investment by sharing responsibilities and concerns with other actors. This interface could be beneficial if used intelligently by the state, as it possesses the ability to strengthen the governance of the resource along the line of legitimate ground rights-based discourse has to offer.

The rights-based discourse also acts as the agency for the communities and the people to protect their right to development and well-being by giving it a human face. It provides the states with a legal mechanism to fight against the injustice because environmental justice is basically rooted in human rights discourse and is supported by the UN Charter[14] and the international covenants of the rights.[15] It further supports the idea that investment in people and the environment is more important than an investment made purely for economic gain. India has recognized the *right to water* as the fundamental right derived from the *right to life*, therefore, emphasizing that the good governance of the resource is a binding legal obligation on the governments of the state.[16]

It is also believed that the inclusion of the environment right in the constitution elevates the status of sustainable development in the country.[17] Therefore, the environment and the human right interface is not only appreciated but celebrated as a means to enhance good governance of the natural resources and the environment. India chooses the rights-based aspect for the development of the means to ensure and strengthen environmental protection. This is because the existing legal situation is not sufficiently competent, which makes the policies and the avenue of policy making a strong

[13] OW Pedersen, 'The European Court of Human Rights and International Environmental Law' in JH Knox and R Pejan eds., *The Human Right to a Healthy Environment* (CUP 2018) 86.
[14] United Nations, Charter of the United Nations, 24 October 1945, 1 UNTS XVI.
[15] United Nations, International Covenant on Civil and Political Rights, 1966 (entered into force on 23rd March 1976, in accordance with article 49, for all provisions except those of article 41; 28 March 1979 for the provisions of article 41 (Human Rights Committee), in accordance with paragraph 2 of the said article 41.) UNTS Vol. 999, p. 171, as of July 2018 it has -74 Signatories and 171 Parties; United Nations, International Covenant on Economic, Social and Cultural Rights, 1966 (adopted by the General Assembly of the United Nations on 16 December 1966, entered into force on 3 January 1976, in accordance with article 27) UNTS Vol. 993, p. 3, as of July 2018 it has - 71 Signatories and 168 Parties.
[16] EB Weiss, International Law for a Water-scarce World (The Hague Academy of International Law 2013) 224.
[17] LJ Kotze and A-du Plessis, 'Some Brief Observations on Fifteen Years of Environmental Rights Jurisprudence in South Africa' (2011) 3 (1) Journal of Court Innovation 101, 115.

contender to regulate the environmental concerns in India. The policies in Indian jurisdiction are non-justifiable, meaning they can at times either be discredited or ignored. In contrast, the recognition of the environmental rights as constitutional or fundamental rights provides a guarantee for their protection by making them fundamentally justifiable. This further ensures that the state legally protects those rights, by directing that certain attributes be considered in day-to-day governance for the protection and progressive realisation of the right.[18]

3. Recommendations

The observation expounded above prompts the answer to both the questions: what can be done to reverse the situation, and what can be done to deal with the challenges ahead? It is to be hoped that the collective impact of these recommendations could set the optimal conditions for the efficient governance of the freshwater resource and act as the positive means for the progressive realization of the *right to water* in India.

To recapitulate the findings in this thesis, it can be said that a step prior to the harmonisation of the legal principles requires the reconfiguration of the modern understanding of the water resource as per the best scientific information available. Therefore, the suggestion is made to the state to reorient their governing practices based on the scientific understanding of the resource, and adjust the meaning, scope and the manner of distribution of power between various institutions, branch of democratic government working at different levels, accordingly. Following this, it is recommended to the state to categorise the resource and then develop the legal instrument in the form of environmental procedural code and rule of evidence based on such categorisation, to progress towards developing environment as a self-contained legal discipline. Both these suggestions are grounded on the inter-disciplinary nature of the problem and its transboundary nature.

It has been found that the rights-based discourse has evolved as one of the legal tools to deal with the growing freshwater crisis. However, mere recognition of the right or making it a legal entitlement within a states' jurisdiction and enforcing its realisation

[18] LJ Kotze, 'Human Rights, the Environment and the Global South' in S Alam. S Atapattu, C G, Gonzalez and others (eds), International Environmental Law and the Global South' (CUP 2015) 171, 190.

by using judicial means does not do justice to the potential of the rights-based discourse. The findings suggest that it could be regarded as the basis or non-derogable legal standard set by the state for themselves. The obligations arising from such rights are the primary obligations of the state, and by its virtue, the state can choose to create the standard of governance for the resource to give effect to the obligation self-imposed. It is plausible to argue that, the state at this juncture could explore the potential arising from the rights-based discourse and enhance the means of governance by redirecting its resources and shaping their ideology in a particular direction. This could lead to a fascinating range of options to be explored by the state as per their need and requirement. Furthermore, leading towards an inter-disciplinary avenue of research where rights-based discourse meets, and possibly pave a legitimate ground for governance.

The governance of the resource is considered as the basic responsibility of the state and based on the analysis conducted, it suggests the means to achieve that goal. As a matter of fact, it also proposes the manner for the execution of the suggestions made from within the existing legal and constitutional framework, thus making it easier for implementation. In addition to the recommendations made above, the evaluation of the utility of the legal instruments, and the institutions designed to guard the interest of justice and to monitor the governance of the resource in changing times is essential. A series of recommendations inclusive of, and in addition to, the change in ideology and the foundations on which these institutions were built upon are put forward and backed up with legitimate reasoning. This requires a change in constitutional and legal provisions and at times the philosophical change in the conception of the very idea of governance to survive the test of time. Together the means of governance will grow and progress towards the progressive realisation of the *right to water* for all.

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