

AN OVERVIEW OF WATER LAWS IN INDIA WITH SPECIAL EMPHASIS ON GROUNDWATER LAWS

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Abstract

Water is life. In present time, the world is facing water crisis and India is not an exception to this. Water is facing number of challenges that includes pollution related challenges, scarcity of p [potable water, shortage of water for irrigation etc. The situation regarding surface and groundwater is in paradox. Against this backdrop, the present article undertakes an overview of water laws in India with special focus on groundwater laws. The author highlights in this article, how traditional right to water have developed into English Common Law. Accordingly, the article examines the evolution of water law and policy in India in dealing with various types of challenges relating to water, outlining pre colonial and post colonial laws. The researcher reaches to the conclusion that water laws and policy in India is patchy and is overlapping with contradictory rights and this is applicable to surface as well as groundwater.

Keywords: Water, Water Laws, Groundwater laws, Traditional Right, Pre and Post Colonial Laws.

INTRODUCTION

India is surrounded by Arabian Sea in the west, Indian Ocean in the south and Bay of Bengal in the east and Himalayas in the North. India is criss-crossed by twelve major river systems. About eighty five percent of the available water is used for agricultural purposes, eight per cent for domestic purposes and five per cent for industry.¹Rivers in India are much more than a large flowing water body; it is religious faith and also a lifeline to many people. However, the situation regarding the availability of water is in paradox as many problems are associated with water such as scarcity of potable water, safe drinking water, shortage water for irrigation and water pollution.² Of the present water usage in India, ninety two per cent is devoted to agriculture; around three per cent is used by industries and only 5 percent for domestic purposes like drinking water and sanitation.³

MAJOR CHALLENGES ASSOCIATED WITH WATER

The main water challenges may be classified in the following categories:

Pollution Related water Challenges

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1. Dellapenna&Joyeeta Gupta, EVOLUTION OF WATER LAW AND POLICY IN INDIA, 159 (2009).

²*Ibid.*

³Eibe Riedel & Peter Rothen (eds.), THE RIGHT TO WATER: AN OVERVIEW OF INDIAN LEGAL REGIME 65-81 (2006).

A water pollutant is a physical, chemical, or biological element that has an aesthetic or negative impact on aquatic life and individuals who drink water. The majorities of water pollutants are chemical pollutants that remain dissolved or suspended in water and produce an often disagreeable environmental response.⁴ Causes of water pollution in India include haphazard urbanisation, industrial disposal, and disposal of toxic chemicals, religious and social practices.⁵ Water (Prevention & control of pollution) Act, defines pollution as which refers to any contamination of water, alteration of its physical, chemical, or biological properties, or discharge of any sewage, trade effluent, or any liquid, gaseous, or solid substance into water (directly or indirectly) that may, or is likely to, cause a nuisance or render such water harmful or injurious to public health or safety, or to the life and health of humans.⁶

In recent times, the water crisis in India has become very critical, affecting millions of people across India and much of the water crisis in India is caused not by natural disasters, but rather because of severe mismanagement of water resources, poor governance, and apathy about the magnitude of the crisis.⁷ The water problem of India has many facets. Global warming is considered as one of the reasons as it has altered the rainfall pattern in India dramatically.⁸ Construction of dams, other hydroelectric projects, and water diversion for irrigation has led to systematically destroying large river ecosystems.⁹

Groundwater and Challenges Associated with Groundwater

Groundwater accounts for ninety percent of the drinking water requirements in rural India and nearly fifty percent in urban areas.¹⁰ India's depleting groundwater reserves also impact our drinking water and excessive extraction has caused contamination.¹¹ Some facts about India's water and problems associated with it are:

- (i) India's farmers rely mainly on tube wells to extract groundwater for their crops;
- (ii) Despite India's large dams and canal systems groundwater accounts for sixty three percent of water used for irrigation by farmers and canals account for only twenty six percent;

⁴Shyam Diwan, ENVIRONMENTAL LAW AND POLICY IN INDIA 40-41(2001).

⁵ Meenakshi K. Changte, *Water Pollution in India: Causes and Remedies*, 4 IJSR 130-31(2015).

⁶ Water (Prevention and Control of Pollution) Act, 1974 Sec.2 (e).

⁷Sujit Chaudhury, *Causes and Solutions to the Water Crisis in India*, available at: <https://aidindia.org/causes-and-solutions-to-the-water-crisis-in-india/> (last visited on May 10, 2022).

⁸*Id.*

⁹*Id.*

¹⁰ Arpit Jian and Reshma Anand, *Ten Things You Need to Know about the Water Crisis in India* (2020) available at: <https://idronline.org/10-things-you-need-to-know-about-the-water-crisis-in-india/> (last visited on May 10, 2022).

¹¹*Id.*

(iii) India draws nearly twenty five percent of the world's groundwater. That's more groundwater than China and the United States combined.

(iv) Sixty percent of India's districts have been declared critical on groundwater.¹²

Groundwater in India is also subject to pollution. Organic and inorganic pollutants have been routinely detected at unsafe levels in groundwater rendering this important drinking water resource practically unusable.¹³ Land use practices such as urban residential development, septic tanks and agricultural practices can impact groundwater quality.¹⁴ Urban areas compared to the non-urban areas contribute more pollutants to groundwater.¹⁵ There is no doubt that our country has to sort out all these conspicuous and some inconspicuous changes associated with water be it surface water or groundwater.

EVOLUTION OF WATER LAWS IN INDIA

Despite being a populous country with a diverse geography and climate India does not have a comprehensive water policy. There are no proper guidelines available for usage of surface water and groundwater by different sectors and different states.

Glimpse of Ancient Indian Period

In ancient India laws relating to water evolved slowly from custom, religion and written codes. The Laws of Manu provide indications of the water law of the time. In ancient India destruction of embankments was illegal. The law encouraged the use of water bodies as boundaries between villages to ensure that as many villages as possible had access to water.¹⁶ A manuscript-*Arthashastra* also provides a detailed account of governance of water. The *Arthashastra* declares the use of water for the development of water works, irrigation, and transport, specifying that all water belonged to the king and that users were to pay a water tax to withdraw water from irrigation systems installed by the king.¹⁷ Islamic law principles include that water is a gift of God, that no individual or ruler can own water and that everyone should have access to water. These principles include a right of thirst which gives humans and animals the right to quench their thirst from any available water point.¹⁸

¹²*Id.*

¹³ Sudarshan Kurwadkar, *Emerging Trends in Groundwater Pollution and Quality* 86, Water Environment Research, 1677-1691 at 1677(2014).

¹⁴*Id.* at 1678.

¹⁵*Id.*

¹⁶*Supra* note 1, Joseph W. Dellapenna & Joyeeta Gupta at 161.

¹⁷*Id.* at 162.

¹⁸ *Id.* at 162-63.

British Regime Period

The British regime introduced the concept of government control over surface waters. British colonial water law had two main strands which include, control over water and rights to water were regulated through the progressive introduction of common law principles emphasizing the rights of landowners to access water.¹⁹ For surface waters, riparian rights allow a landowner the right to take a reasonable portion of the flow of a watercourse and for groundwater landowners had a virtually unlimited right to access water under their holdings.²⁰ Common law principles, enshrined in the easements act evolved over time but have substantially survived until the present day. Second, a series of regulatory statutes were enacted including laws to protect and maintain embankments, to acquire land for embankments, and to entrust the controller for implementing such laws.²¹ Other laws regulated canals for navigation purposes and levying taxes on the users, river conservation, and rules on ferries and fisheries²². Regulations recognizing local practices and rules in villages were also enacted.²³ Madhya Pradesh Irrigation Act, 1931 is another example of this period. The Act provided that: ‘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’.²⁴ Colonial legislation also introduced the division of responsibilities between the centre and the states with regard to water. The Government of India Act, 1935 empowered the provinces to take decisions on water supply, irrigation, canals, drainage and embankments, water storage and hydropower.²⁵

Post-colonial Water Laws and Policies

Water law in the post-colonial period is shaped by the legacy of colonial times, constitutional and federal developments, specific rules on surface and groundwater irrigation, human rights, social and environmental issues, issue about dams, and questions of water cooperation with neighbouring countries.²⁶

¹⁹*Id.* at163.

²⁰*Id.*

²¹ Embankment Regulation 1829, Bengal Embankment Act 1855.

²² Northern India Ferries Act 1878, Indian Fisheries Act 1897.

²³ One of the most important enactments was the Northern India Canal and Drainage Act, 1873, which regulated irrigation, navigation and drainage. While this Act did not directly assert the state’s ownership over surface waters, it recognized the right of the Government to ‘use and control for public purposes the water of all rivers and streams flowing in natural channels, and of all lakes’ (Preamble). This led to the progressive strengthening of state control over surface water and the concomitant weakening of people’s customary rights. This tendency was progressively strengthened.

²⁴*Supra* note 1.

²⁵*Supra* note 18.

²⁶*Id.*

Constitution of India and Water

Under the Constitution the water and water based resources are divided between the Union and States of which major part lies with the latter. In fact the Constitution makes water a state subject in express terms while only certain aspects are dealt with by the Union. All these arrangements can be seen in the three lists (i.e. Union, state and concurrent lists) of Seventh Schedule of the Constitution. The general policies and principles for management of natural resources including water resources are incorporated in part III and IV. These guarantee fundamental rights to free access and use of water to citizens.²⁷ The right to life also extends to water and imposes duties on the state for equitable distribution of the resource ensuring ecological and environmental improvements and preservation.²⁸ To this effect the Constitution imposes fundamental duties on citizens too for protection and improvement of natural environment.²⁹ For adjudication of disputes between states on interstate rivers or river valleys the constitution empowers the Parliament to make laws, which may oust the jurisdiction of Supreme Court and High Courts in this respect.³⁰ Under this provision the Inter-State Water Disputes Acts, 1956 has been passed, and the substantive legal domain concerning water resources is supplemented by principles laid down by High Courts and the Supreme Court by way of interpretation of such provisions in various litigations involving water issues.³¹

Water and Environment: Post Constitutional Legislations

The statutory attempts to control pollution can be traced to the days of formulation of laws on local self-government. One of the traditional responsibilities of the local body was to ensure cleanliness of the concerned territories under its jurisdiction. Local bodies exercised all such powers as were necessary for the suitable disposal of waste. They exercised regulatory control to prevent and abate nuisance from water pools which adversely affected agriculture. Contaminated water supply, noxious vegetation, harmful dust and smoke of unsanitary conditions of buildings were the main concerns for the local bodies and sanctions were imposed against persons who violated the regulations.³² The Water (Prevention and Control of Pollution) Act, 1974 and the Environment

²⁷*Id.*

²⁸ The Constitution of India, Art.21, Art 39(b) (c) and 48(A).

²⁹ The Constitution of India, Art. 51-A (g).

³⁰ The Constitution of India, Art.226.

³¹ *Rural Litigation and Entitlement Kendra v.State of U.P.*, 2 SCALE 790 (1987); *Ktujanlakugytl Sang. Samiti v. State of Gujarat*, AIR 1987 SC 532; *M. C Mehta v. Union of India*, AIR 1988 SC 1115 cited in Dellapenna&Joyeeta Gupta (eds.), *THE EVOLUTION OF WATERLAW AND POLICY IN INDIA*159-174 (2009).

³²P. Leelakrishnan, *ENVIRONMENTAL LAW IN INDIA* 131(2016).

Protection Act, 1986 are the most significant of the central legislations concerning water pollution. It was for the first time that separate legislative measures were taken at the national level. Prior to these laws the related matters were dealt with in different central and local laws like the Factories Act, 1948, the Madras River Conservancy Act, 1884 which is applicable also to Orissa,³³ Indian Penal Code.³⁴ Under Code of Criminal Procedure, 1973, the magistrate is empowered to remove public nuisances and he may also issue an order prohibiting the discharge of hazardous effluents into the river that could endanger the health of those who have a right to utilise it.³⁵ Water (Prevention & Control of Pollution) Act, 1974 is a comprehensive legislation that regulates agencies responsible for checking on water pollution and ambit of pollution control boards both at the centre and states. An Act provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water and with a view to carrying out the prevention and control of water pollution the act provides for the establishment of Boards and for conferring on and assigning to such Boards powers and functions relating thereto.³⁶

Laws Relating to Inter- State Water Disputes

The River Boards Act, 1956 and the Inter-State Water Disputes act, 1956 were the first laws to be passed by the Union in the post-constitutional times. The River Boards Act, 1956 empowers the central government to establish a river board for regulation and development of inter-state rivers and river valleys. Under the act the Board is constituted that may be empowered to perform all or any of the following functions viz,

- Advising the government on any matter concerning the regulation or development of any specified Inter-state River or river valley within its area of operation and in particular;
- advising them in relation to the coordination of activities with a view to resolve conflicts in the inter-State river or river valley for the purpose of conservation;
- control and optimum utilisation of water resources of the inter- State river;
- promotion and operation of schemes for irrigation, water supply or drainage;
- promotion and operation of schemes for the development of hydro-electric power;
- promotion and operation of schemes for flood control;

³³Iqbal Ahmed Siddiqui, HISTORY OF WATER LAWS IN INDIA, 309, available at [New%20folder/History%20of%20Water%20Laws%20in%20India.pdf](#) (last visited on May 2, 2022).

³⁴Indian Penal Code 1860, Sec. 277.

³⁵ The Code of Criminal Procedure, 1873, Sec.133 & 144.

³⁶ Water (Prevention and Control of Pollution) Act, 1974.

- promotion and control of navigation;
- promotion of afforestation and control of soil erosion;
- prevention of pollution of the waters of inter-State river;
- such other matters as may be prescribed.³⁷

The River Boards Act provide for the constitution of river boards for distribution of water resources between the states out of a storage common to both. But as a matter of fact it remains totally on paper and no Board has been constituted so far. The other enactment on this subject is Betwa River Board Act 1956, and the Brahmaputra River Boards Act, 1980, but they too have suffered the same fate.³⁸The Inter-State Water Disputes Act, 1956, has, however, been operating somewhat successfully. It provides for the adjudication of disputes relating to waters of inter-State rivers and river valleys. One of the peculiar feature of this act is that it provides for setting up of a tribunal to adjudicate in case of a dispute on water of inter- state river or river valley.³⁹ The case of the Narmada Dispute etc. is the example of activities of the Tribunals constituted in these respective cases.

The Inter-State River Water Disputes (Amendment) Bill, 2019

The Inter-State River Water Disputes (Amendment) Bill, 2019 seeks to streamline the adjudication of inter-State river water disputes and make the present legal and institutional architecture robust. The bill proposes to introduce a mechanism to resolve the water dispute amicably by negotiations through a disputes resolution committee, to be established by the central government consisting of experts from relevant fields, before such dispute is referred to the tribunal.⁴⁰ The time period for adjudication of a water dispute by the tribunal has been fixed at a maximum of four and half years. The decision of bench of the tribunal shall be final and binding on the states concerned, with no requirement of its publication in the official gazette. It also seeks to provide for out of court settlement of disputes by the party States during the adjudication process in the tribunal.⁴¹

Overview of Laws Relating to Territorial and Inland Waters

The maintenance development and operation of inland water ways is central subject. The National Waterways Act, 1982 makes provisions for the development of inland water transport in public

³⁷ Water (Prevention and Control of Pollution) Act, 1974, Sec. 14 (1).

³⁸ *Supranote* 33, Iqbal Ahmed, at 308.

³⁹ Water (Prevention and Control of Pollution) Act, 1974, Sec. 4.

⁴⁰ Inter-State River Water Disputes (Amendment) Bill, 2019, statement, object and reasons.

⁴¹ *Id.*

interest and their regulation in Ganga-Bhagirathi-Hoogly system. In carrying out its responsibilities the central government is empowered under the Act to undertake a number of functions, like to clear, widen, deepen, divert or otherwise improve channels, control removal of materials from the bed of natural water ways or appurtenant lands, remove or alter any obstruction or impediment which may impede safe navigation or otherwise endanger infrastructural facilities or conservancy measures. The Waterways Act saves application of Major Ports Act, 1963 and the Inland Vessels Act, 1917 dealing with their respective subjects. The National Water Ways Authority Act, 1985 has constituted a corporate authority and provides for development and regulation of all national waterways. The Damodar Valley Corporation Act, 1948 also makes provisions for regulation of navigation in Damodar River in addition to water supply for irrigation.⁴²The territorial Waters, Continental Shelf, Exclusive Economic Zone, and Maritime Zone Act, 1976, defines the limits of Indian Territorial Waters.⁴³

GROUND WATER GOVERNANCE AND LAWS RELATING TO GROUNDWATER

Access to and control over groundwater is the prerogative of the owner of the land above which the water is found. This is the principle of English common law which was confirmed in the Indian Easement Act, 1882, reproduced in the section titled 'Principle and Concept of Water Law'; in Chapter 3; and more and less consequently upheld to date.⁴⁴ At the national level, several initiatives have been taken to manage groundwater. The constitution of the Central Groundwater Authority is the first of its kind to regulate, manage and develop groundwater.⁴⁵The Central Groundwater Authority was constituted in 1997 under the Environment (Protection) Act, 1986 following the directives of the supreme court in *M.C Mehta v. Union of India*⁴⁶ wherein the supreme court issued directive that the central government in the Ministry of Environment and Forests shall constitute the Central Groundwater Board as an Authority under section 3(3) of the Act.⁴⁷ However, a decision was taken by the concerned ministry to designate the Central Ground Water Board, a pre-existing scientific and technical body under the ministry of water resources, was designated as CGWA

⁴²*Supra* note 38.

⁴³*Id.*

⁴⁴P.Cullet, *Groundwater Law in India: Towards a Framework Ensuring Equitable Access and Aquifer Protection* 26 *Journal of Environmental Law* 55(2014).

⁴⁵ Philippe Cullet & Sujith Koonan, *Water Law in India: An Introduction to Legal Instrument* 343 (2017).

⁴⁶ AIR 1997 SCC 312.

⁴⁷*Id.* Para 9.

under section 3(3) of the Environment (Protection) Act, 1986.⁴⁸The main functions of CGWA include the identification of critical/over-exploited areas and giving directions to the concerned state governments and local authorities to take appropriate measures for the regulation and development of groundwater.⁴⁹ CGWA has developed guidelines setting parameters for evaluating proposals for groundwater withdrawal that have been revised over time.⁵⁰

Model Groundwater (Sustainable Management) Act, 2016: Overview

An Act provides to achieve sustainable management of groundwater by restoring and ensuring groundwater security through availability of sufficient quantity and appropriate quality of groundwater to all stakeholders in rural and urban areas.⁵¹ The objectives of the act are to ensure that groundwater is protected, conserved, regulated and managed in a sustainable manner so as to:

- (i)Ensure the realisation of fundamental right to life through the provision of water for life;
- (ii)Meet the basic human needs, food security, livelihoods, livestock and ecosystem life needs;
- (iii)Promote sustainable groundwater use in the public interest, based on the long-term protection of available resources;
- (iv)Ensure that the protection, conservation, regulation and management of groundwater is integrated with the protection, conservation, regulation and management of surface water to ensure conjunctive use;
- (v)Ensure the implementation of principle of subsidiarity;
- (vi)Protect ecosystems and their biological diversity;
- (vii)Reduce and prevent pollution and degradation of groundwater;
- (viii)Ensure that present and future generations have access to sufficient quantity and quality of groundwater for life;⁵²

⁴⁸*Supra* note 45, Philippe Cullet & Sujith Koonan, at 345.

⁴⁹*Id.*

⁵⁰ Central Ground Water Authority, Guidelines/Criteria for Evaluation of Proposals/Requests for Ground Water Abstraction, 2015.

⁵¹ Model Groundwater (Sustainable Management) Act, 2016, object and reasons.

⁵²*Supra* note 45,Philippe Cullet & Sujith Koonan at 362.

(ix) Ensure protection against gender discrimination and past inequalities in access to groundwater.⁵³

It contains twelve Chapters and has forty five sections and contains provisions, relating to right to water for life⁵⁴ which says that every person has a right to sufficient quantity of safe water for life within easy reach of the household regardless of, among others, caste, creed, religion, community, class, gender, age, disability, economic status, land ownership and place of residence.⁵⁵ This section further provides that no one should use groundwater in such a way that it adversely impacts the realization of any other person's fundamental right to safe water for life.⁵⁶ One of the peculiar feature of this act is that it says that the state responsibility for ensuring every person's right to safe water for life shall remain even when water service provisions is delegated to a private agency and in case of such handing over, the right of citizens to safe water for life and the duty of the state to provide the same shall remain in force.⁵⁷ Chapter III contains basic principles such as non discrimination and equity,⁵⁸ subsidiarity and decentralisation,⁵⁹ which provides that conservation, use and regulation of groundwater shall be based on the principle of subsidiarity,⁶⁰ protection, precaution and prior assessment,⁶¹ which further states that groundwater resources (aquifers) shall be protected from such activities that impact the equity of access and sustainability of the resources.⁶² This section also highlights the precautionary steps which shall be taken by the appropriate government at all levels and by every user of groundwater to protect it from depletion, deterioration, biological and chemical pollution, as well as to prevent and /or reduce adverse impacts on the environment, especially river flows due to use of groundwater.⁶³ The other principle under the act are about integrated approach which highlight that the protection, conservation, regulation and management of groundwater shall be undertaken in such a way that it is integrated with the protection,

⁵³*Id.* at 363.

⁵⁴ Model Groundwater (Sustainable Management) Act, 2016.

⁵⁵ Model Groundwater (Sustainable Management) Act, 2016, Sec. Sec.4 (1).

⁵⁶ Model Groundwater (Sustainable Management) Act, 2016, Sec. 4(2).

⁵⁷ Model Groundwater (Sustainable Management) Act, 2016, Sec.4 (5).

⁵⁸ Model Groundwater (Sustainable Management) Act, 2016, Sec. 5.

⁵⁹ Model Groundwater (Sustainable Management) Act, 2016, Sec. 6.

⁶⁰ Model Groundwater (Sustainable Management) Act, 2016, Sec. 6(1).

⁶¹ Model Groundwater (Sustainable Management) Act, 2016, Sec. 7.

⁶² Model Groundwater (Sustainable Management) Act, 2016, Sec.7(1).

⁶³ Model Groundwater (Sustainable Management) Act, 2016, Sec. 7 (2).

conservation, regulation and management of surface water resources.⁶⁴ Chapter IV of the act is about legal status and groundwater use.⁶⁵ As per section 9 of the act, groundwater is the common heritage of the people held in public trust, for the use of all, subject to reasonable restrictions to protect the fundamental right to water for life.⁶⁶ Provisions under Chapter V are about demarcation of groundwater protection Zones and groundwater security plan based on a dynamic resource assessment.⁶⁷ Under Chapter VI of the act institutional framework shall be constituted at gram panchayat level,⁶⁸ block level⁶⁹ etc. Duties of groundwater users, water harvesting, recharge, recycling and reuse and prevention of water logging are given.⁷⁰ The other important provisions of the act are groundwater for livelihood and irrigation,⁷¹ Chapter-IX talks about authorisation for groundwater abstraction, pricing and regulation of mining.⁷² Chapter-XI of the act deals with offences, penalties and liability.⁷³ If there arises any dispute then as per the act, shall be referred to be settled by mediation or conciliation at the appropriate level.⁷⁴

POLICIES FOR WATER CONSERVATION AND APPROACH ADOPTED FOR ACHIEVING SUSTAINABLE DEVELOPMENT GOALS IN THE POLICIES

The increasing depletion of water resources, in particular groundwater, has led to the realisation that existing rules concerning the use of groundwater were unadapted to a situation of scarcity.⁷⁵ *At present* both the quantity and quality of the available water become the critical aspect to handle the present and future water problems and challenges associated with it.⁷⁶ Water legislation at national level is aimed only at preventing pollution of water and its various resources. Current legislations don't cover the area of conservation of water as a resource and its usage in an efficient and sustainable manner. No comprehensive or framework law is at

⁶⁴ Model Groundwater (Sustainable Management) Act, 2016, Sec. 8.

⁶⁵ Model Groundwater (Sustainable Management) Act, 2016, Sec. 9'10.

⁶⁶ Model Groundwater (Sustainable Management) Act, 2016, Sec. 9 (1).

⁶⁷ Model Groundwater (Sustainable Management) Act, 2016, chapter IV, sec. 11-14.

⁶⁸ Model Groundwater (Sustainable Management) Act, 2016, sec. 15.

⁶⁹ Model Groundwater (Sustainable Management) Act, 2016, sec. 16.

⁷⁰ Model Groundwater (Sustainable Management) Act, 2016, chapter VII, sec. 21-25.

⁷¹ Model Groundwater (Sustainable Management) Act, 2016, sec. 25.

⁷² Model Groundwater (Sustainable Management) Act, 2016, sec. 26-32.

⁷³ Model Groundwater (Sustainable Management) Act, 2016, sec. 33-36.

⁷⁴ Model Groundwater (Sustainable Management) Act, 2016, sec. 37.

⁷⁵ Philippe Cullet, "Water Law in India Overview of Existing Framework and Proposed Reforms" *International Environmental Law Centre, Geneva* 11(2007).

⁷⁶ K.R. Gupta (ed.), *Water Crisis in India* 66 (Atlantic Publishers, New Delhi, 2008).

national level that deals with the issue of water use efficiency.⁷⁷ However, Andhra Pradesh is one of the states which enacted Water, Land and Trees Act, 2002 and is extolled as one of the most comprehensive pieces of legislation on water conservation and green cover implemented by any State. Along with this, main steps taken by the Central Government to control water depletion and promote rain water harvesting and conservation include:

- (i) National Water Policy (2012) advocates rainwater harvesting and conservation of water and highlights the need for augmenting the availability of water through direct use of rainfall. It also inter-alia, advocates conservation of river, river bodies and infrastructure should be undertaken in a scientifically planned manner through community participation.⁷⁸
- (ii) Central Ground Water Authority (CGWA) has been constituted under Section 3 (3) of the Environment (Protection) Act, 1986 for the purpose of regulation and control of ground water development and management in the Country. CGWA has advised States, Union Territories to take measures to promote, adopts artificial recharge to ground water and rain water harvesting.⁷⁹

The Water Conservation Authority of India Bill, 2016

The Bill which has yet, to become a law but is considered to be an important bill introduced in Parliament in 2016 to provide for the establishment of a Water Conservation Authority for the conservation of water of the rivers, ground and rainwater through traditional means of ponds, wells, canals, trenches, etc. and by building reservoirs, bunds and check dams, reviving dried rivers, making trenches in riverbeds, building recharge shafts, depending and widening canals and ponds, building permanent water conservation structures by means of rainwater harvesting to recharge the groundwater, encouraging people to participate in water conservation movement and plantation of trees in a big way and for matters connected therewith and incidental thereto.⁸⁰

⁷⁷ Shilpa Chauhan, “Legal Provisions on Water Conservation and Water Use Efficiency-International and National Perspective” available at: <https://cdn.cseindia.org/userfiles/Shilpa-Legal-provision-with-regards-to-water-conservation.pdf>, (Visited on 24th July, 2022).

⁷⁸ Available at: http://jalshakti-dowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Feb2021.pdf, (Visited on 24th July, 2022).

⁷⁹ Available at: http://jalshakti-dowr.gov.in/sites/default/files/Steps_to_control_water_depletion_Feb2021.pdf, (Visited on 24th July, 2022).

⁸⁰ The Water Conservation Authority of India Bill, XXXVII of 2016.

The various laws on water rarely adopt an approach on sustainable development and achieving Sustainable Development goals, also known as global goals. Sustainable development goals are blueprint to achieve a better and more sustainable future for all.⁸¹ Goal 6 and goal 14 are the two goals out of 17 sustainable development goals that bear a mention about water. Goal 6 has 11 indicators and 8 targets which will be used to track the progress in attaining the goals. Most of them are to be achieved by 2030.⁸² Goal 14 obligates the countries around the world to adopt an integrated and holistic approach to fulfill a global duty and responsibility-the conservation of our oceans and the lives below it.⁸³ As far as regarding the question that how far our legislations are addressing targets mentioned in the Sustainable Development goals, it is submitted that though there is mention of sustainable development in few laws relating to water but its achievement will not be an easy task. For that a comprehensive policy is required.

CONCLUSION

Water law framework in India is made of number of different principles, rules and acts adopted over many decades. These include common law principles and irrigation acts from the colonial period as well as more recent regulation of water quality and the judicial recognition of a human right to water.⁸⁴ However, there is lack of umbrella legislation on water laws. The emergence of water law reveals that it is intricately linked with social, religious, and economic developments of our country. Right to water, penalties and monitoring systems can be found in ancient Hindu water law as well as in all subsequent bodies of law. Within these key concepts however there remains a difference regarding who has ownership, and how rights are acquired, but the basic subject matter of water law has remained relatively constant.⁸⁵ The human right to water is increasingly recognized not only at the constitutional level but also in water resources legislations.⁸⁶ Use of the groundwater for drinking, industrial as well as irrigation purposes has increased during the last two

⁸¹Nishtha Jaswal, S.S. Jaswal, et. al. (eds.), *Expectations of Mankind and Sustainable Development Goals* 115 (Mohan Law House, New Delhi 2022).

⁸² *Id.*, at 237

⁸³ *Ibid.*

⁸⁴ Philippe Cullet, *Water Law in India: Overview of Existing Framework and Proposed Reforms*, 27th May 2009, available at <http://www.ielrc.org/content/w0701.pdf> (last visited on May 2, 2022).

⁸⁵ Joseph W. Dellapenna & Joyeeta Gupta (eds.), *EVOLUTION OF WATER LAW AND POLICY IN INDIA* 172 (2009), available at <http://www.ielrc.org/content/a0901.pdf> (last visited on May 2, 2022).

⁸⁶ Kerstin Mechlem, *Groundwater Governance: The Role of Legal Frameworks at the Local and National Level Established Practice and Emerging Trends*, (8)8 MDPI (2016), available at <http://creativecommons.org/licenses/by/4.0/> (last visited on May 2, 2022).

decades. Haphazard withdrawal of groundwater poses the risk of aquifers going dry in various parts of the country.⁸⁷ There is a strong trend to treat groundwater as a public and no longer as private good attached to land rights. Even the groundwater Act, 2011 treat water as public good. Environmental concerns and principles continue to gain importance in (ground)water legislation.⁸⁸ Model groundwater (Sustainable Management) Act, 2016 also addresses the environmental concern of groundwater wherein the act says that it ensures to prevent pollution and degradation of groundwater and provides for sustainable management of groundwater. Even under Environment Protection Act, Central Ground Water Authority has been constituted to regulate and control the development and management of groundwater resources.⁸⁹ It also regulates the withdrawal of groundwater by industries and projects.⁹⁰ The division of responsibilities between the states and the union initiated in the colonial era gives states primary control over water. Nevertheless, unifying efforts have taken place within national water and environmental policy. In the past decades a new trend promotes the use of government legislation to strengthen control over water use while strengthening the position of private actors.⁹¹ The Centre recently presented three Bills in Parliament: River Basin Management Bill, 2019, proposing 13 river basin authorities for various river basins; River Water Disputes Bill, 2019, proposing a dispute resolution committee (DRC); and Dam Safety Authority Bill, 2019, which shifts the states' rights and authority over rivers to the Centre. It is unlikely that either ongoing water law reforms or the interlinking of rivers will provide comprehensive solutions to existing water problems which include safe drinking water, irrigation, industrial, regarding interlinking and the new reservoirs that it seeks to create, the negative consequences of large dams have already been shown over the past decades. Neither reform strategy is likely to provide an effective answer to existing problems. Further law and policy reforms will thus be required in the future.⁹² The aim of any policy framework should be on developing an environment where water is available for all and is utilized in a sustainable manner so that safe drinking water is available for sustenance requirements, including agriculture, industrial usage and most importantly for ecosystem services. Further, it is important that adequate measures for water should be adopted which include strict adherence to the laws and most importantly

⁸⁷Nawneet Vibhaw, *Environmental Law* 111 (Lexis Nexis, 2016).

⁸⁸*Supra* note 77.

⁸⁹ See Environment Protection Act, 1986, sec.3 (3).

⁹⁰*Id.*

⁹¹*Supra* note 75.

⁹²*Ibid.*

community participation is must.⁹³ It is equally important that a comprehensive legislation on water laws and its conservation is required which should be in consonance with sustainable development. Along with this, their implementation is equally important.

⁹³*Supra* note 78, Nawneet Vibhaw at 112.