Volume 15, Issue 1, Jan-March – 2025 Special Issue 2



Impact Factor: 7.665, Peer Reviewed and UGC CARE I

GROUND WATER AND LEGAL FRAMEWORK IN INDIA

Dr. Shaikh Anisur Rahaman, Associate Professor, S. S. R. A. Law College, Beed.

ABSTRACT

Groundwater is the essential source for drinking water of humans and agriculture is totally based on groundwater resource. This paper divided into three parts. First part is discussing with importance of groundwater, major causes for the pollution of groundwater and challenges for groundwater resource. Legislative framework for controlling groundwater extraction, Constitutional provisions for making groundwater laws and functional bodies working under the enactments are examined under the second part of the paper. Final part of the paper discourses the judicial approach on regulation of groundwater with suggestions.

Keywords: Groundwater, Resource, groundwater laws, judicial approach

INTRODUCTION

Water is a life and without water no creature is survive on the earth. Ground water is a main resource for human beings that creates huge portion of world's fresh water. Ground water has progressively appeared as the backbone of India's agriculture and drinking water security. Contribution of ground water is nearly 62% in irrigation, 85% in rural water supply and 50% in urban water supply. This precious resource sustainability caused great concern due to the following reasons.

Importance of groundwater

Groundwater is a vital natural resource. It is the primary source of water for the majority rural population who do not access water from a municipal water. Farmers for irrigation and industrial growth heavily depend up on groundwater. During drought conditions there is more demand for clean drinking water, groundwater is only source to meet the demand. It is also assessed that 43 percentage of total irrigation of the world use the groundwater. Groundwater is the great salvation for environmental safety. It supports to maintain the water level in ponds, streams, springs, rivers, and bays – especially during months when there is little rainfall. Protecting these water bodies refilled is essential for wildlife and sea species².

Groundwater pollution is caused by the unwelcome materials into the groundwater. These substances can be chemicals, germs, bacteria, heavy metals, and bleaches. The following are the some causes of groundwater pollution.

Main sources of groundwater pollution

- ➤ Chemical spills from industrial operations, transportation, or illegal waste dumping can contaminate groundwater.
- > Urban overflow like penetration from urban excess can contaminate groundwater
- ➤ Road salts and de-icing chemicals can contaminate groundwater

Journal of East-West Thought

ISSN: 2168-2259 (online) (https://jetjournal.us/)

Volume 15, Issue 1, Jan-March – 2025 Special Issue 2



Impact Factor: 7.665, Peer Reviewed and UGC CARE I

- ➤ Atmospheric pollution from rain, snow, and dry atmospheric fallout can contaminate groundwater
- Excessive use of fertilizers and pesticides on agricultural land can contaminate groundwater
- > Industrial waste like wastewater also contaminate groundwater
- ➤ Wrong landfill practices can cause contaminate groundwater
- ➤ Wastage from septic systems can contaminate groundwater
- > Leaky tanks or pipelines containing petroleum products can contaminate groundwater
- ➤ Wastage from livestock can contaminate groundwater
 Groundwater pollution³ can make water unsafe for human consumption and can cause diseases and life threat.

Major challenges for ground water resource

- ➤ The declining water levels resulting from ground water extraction exceeding its annual refill rate have become alarm in various regions of India.
- ➤ The unchecked development in certain parts of the country threatens the long-term sustainability of precious resource.
- ➤ The increasing demands for water have spurred excessive extraction of ground water in various regions.
- ➤ Overexploitation ⁴of excessive pumping of groundwater for irrigation and domestic use can deplete aquifers, causing issues like saltwater interruption in coastal areas.
- ➤ Pollution and contamination of groundwater can become contaminated by industrial waste, agricultural chemicals, landfills, and improper waste disposal, posing a threat to human health.
- ➤ Data deficiencies i.e. incomplete information about groundwater availability and recharge rates makes effective management difficult.
- ➤ Climate changes that impact changing weather patterns can disrupt groundwater recharge, leading to potential water scarcity in certain regions.
- ➤ Competing demands required balancing water needs for domestic, agricultural, and industrial uses can be challenging, especially in densely populated areas.
- ➤ Lack of governance, regulations, weak policies and inadequate enforcement mechanisms can obstruct sustainable groundwater management.
- ➤ Socio-economic factors like access to clean water, particularly in rural areas, can be limited due to economic constraints and lack of infrastructure.

LEGAL FRAMEWORK FOR GROUNDWATER MANAGEMENT

Groundwater is the most important source for drinking water. Access of groundwater is related with fundamental right to water. It is also a main source for cultivation. Uncontrolled and unchecked use of groundwater will have great impact on life, living and economy. Sustainability and controlling should be the main aim for the legislation of groundwater⁵.

Journal of East-West Thought

ISSN: 2168-2259 (online) (https://jetjournal.us/)

Volume 15, Issue 1, Jan-March – 2025 Special Issue 2



Impact Factor: 7.665, Peer Reviewed and UGC CARE I

The Indian Easements Act, 1882⁶ is the first law that provide indirect the unrestricted right on owner of the property over groundwater. Section 7 stated that, the right of every owner of land to collect and dispose of all water within his own limits under the land which does not go throw in a particular canal. The unrestricted right of a landowner over groundwater cannot be conquered by prescription. Hence, the landowners have an uncontrolled right to extract groundwater. Transfer of Property Act, 1882 and the Land Acquisition Act 1894 also discussed the easement provisions. An easement is a right which the owner or occupier of any land possesses as such for the beneficial enjoyment of that land, Ownership of ground water accrues to the owner of the land above. Ownership of ground water is transferred along with the transfer of ownership of land. Thus, ground water is viewed as an appendage to land.

Constitutional Provisions on groundwater

The VII schedule Entry 17, List II of the Constitution designates Water is a State subject and stated that, water that includes water supplies, irrigation, channel, drainage and dams, water storing and water power projects subject to conditions of entry 56 of the Union List. Under this power the State is permitted to make the water law and frame its policies. Entry 56 of Central list refers as regulation and development of interstate rivers and river valleys to the extent to which such regulation and development under the control of the central, is notified by parliament by law to be convenient for the public importance.

Under the 73rd and 74th Amendments⁷ to the Indian Constitution, states are empowered to transfer powers and responsibilities on minor irrigation, watershed development, and water supply for domestic, industrial, and commercial purposes to rural panchayati raj institutions and urban municipal bodies.

Article 262 of the Constitution defines, Parliament may by law (1) Provide for the settlement on any dispute or grievance with respect to the use, distribution or control of the waters of or in any interstate river or river valley and (2) Neither the Supreme Court or any other Court shall use power in respect of any dispute or grievance referred to in clause (1).

Article 38 of the Constitution of India stated that, the State is to verify a social request for the advancement of the welfare of the individuals in which legal, societal, economic, and political benefits will illuminate about the organizations of national life. Further, the State is under a duty to specifically make arrangements towards verifying that the possession and control of material assets and the monetary framework activity don't bring about the group of riches and means of formation to the regular obstruction.

Article 48A⁸ of the Constitutional interpretation includes

- > The state should work for protection and improvement of environment
- ➤ The state should work to ensure that the environment is free of pollution
- > The state should work for protection the nation's forests and wildlife
- ➤ The state should work to ensure that 35% of the country's land is covered by forests or trees
- Article 48A is a constitutional duty for the state to protect the environment
- > The Residents have right to live in a clean and healthy environment.

ISSN: 2168-2259 (online) (https://jetjournal.us/)

Volume 15, Issue 1, Jan-March – 2025 Special Issue 2



Impact Factor: 7.665, Peer Reviewed and UGC CARE I

➤ Article 48A should be considered when any matter related to ecological maintenance comes before a court

Article 51A (g)⁹ of the Constitution highlight that the State and the residents are under the vital duty to protect and improve the environment. It covers the following.

- > Article 51A (g) is one of the Fundamental Duties of citizens of India.
- > It comprises the duty to protect and develop forests, lakes, rivers, and wildlife.
- > It also contains the duty to have kindness for existing creatures.
- > The duty to protect and develop the natural environment is a duty of the state, as specified in Article 48-A.

Article 21 of the Constitution describes right to life includes right to pollution free water.

Article 372 of the Constitution of India states that laws in effect before the Constitution came into force will remain in effect until they are repealed, amended, or altered. The President can also modify these laws to make them consistent with the Constitution. It specified that all laws in effect in India before the Constitution came into force will remain in effect. The president can make modifications and adaptations to laws to make them consistent with the Constitution¹⁰. It should be assumed that ground water laws enacted by the Parliament asserted the rights given under common law tradition¹¹. For example the Easement Act 1882, Transfer of Property Act, 1882, the Land Acquisition Act, 1894 common laws indicated that ground water is considered an Easement associated with the land and the Government of India Act 1935 subject of water was given to provincial governments.

Legislative enactments applicable to water¹²

The following are the National and State¹³ level legislations which are enacted to deals with groundwater management and development in India.

- ➤ The Water Pollution Regulation and Prevention Act, 1974.
- ➤ The Air pollution Regulation and Control Act, 1977.
- ➤ Environment Protection Act 1986
- The Forest Conservation Act. 1980 and amended in 1988
- ➤ Public Liability Insurance Act 1991
- Environment Assessment Development of Projects, 1994
- Model Groundwater (Sustainable Management) Act, 2016
- ➤ The Model Bill to Regulate and Control the Development and Management of Ground Water was planned in 1970 for implementation by different states. This bill has been reviewed in 1992, 1996, and 2005, but the basic structure approved in 1970 has untouched.
- ➤ The Andhra Pradesh Water, Soil and Trees Act, 2002.
- ➤ The Andhra Pradesh Groundwater (Regulation for Drinking Water Purposes) Act, 1996.
- ➤ Bihar Groundwater (Regulation and Control of Development and Management) Act, 2006 Chhattisgarh Ground Water (Regulation and Control of Development and Management) Bill, 2012
- > Delhi Groundwater Regulation Direction, 2010
- ➤ The Goa Groundwater Regulation Act, 2002.

Journal of East-West Thought

ISSN: 2168-2259 (online) (https://jetjournal.us/)

Volume 15, Issue 1, Jan-March – 2025 Special Issue 2



Impact Factor: 7.665, Peer Reviewed and UGC CARE I

- ➤ The Punjab Protection of Subsoil Water Act, 2009.
- ➤ The Haryana Protection of Subsoil Water Act, 2009.
- ➤ The Haryana Groundwater Management and Regulation Bill, 2008.
- ➤ The Tamil Nadu Groundwater (Growth and Administration) Act, 2003 and Chennai Metropolitan Zone Groundwater (Regulation) Act, 1987.
- ➤ The Kerala Groundwater Regulation Act, 2002.
- ➤ The Karnataka Groundwater Regulation of Development and Management Act, 2011 and the Karnataka Groundwater (Regulation for Protection of Sources of Drinking Water) Act, 1999.
- ➤ The West Bengal Groundwater Resources Management and Control Act, 2005.
- ➤ The Himachal Pradesh Groundwater Control of Development and Management Act, 2005.
- > The Lakshadweep Groundwater (Development and Control) Regulation, 2001.
- ➤ The Pondicherry Groundwater Regulation Act, 2002.
- ➤ The Maharashtra Groundwater (Growth and Management) Bill, 2009) and the Maharashtra Groundwater (Regulation for Drinking Water Purposes) Act, 1993.

Functional bodies for Groundwater control

The following are the functional organizations which are frames the policies for regulation and development of groundwater under Central government¹⁴.

- 1. The National Water Resources Cell
- 2. The National Water Board
- 3. The Ministry of Water Resources
- 4. The Central Water Commission
- 5. The Central Ground Water Board
- 6. The Central Ground Water Authority
- 7. River Basin Organisations
- 8. Water Dispute Tribunal

JUDICIAL APPROACH ON GROUNDWATER

In 1843 *Acton v. Blundell*¹⁵ an English Court held that groundwater below a land belongs to the landlord and he can extract it at his free will and pleasure. Even in such cases it causes reduction of groundwater in an adjacent land, no legal action can be taken. The Supreme Court upheld the public trust doctrine on groundwater in 2004¹⁶ and observed that the government as a trustee for resource and has a responsibility to keep groundwater for the enjoyment of the general public, not for usage of private ownership or profitable purposes. Permission for the construction of bore wells around the two lakes were denied by the Court in Intellectual forum *Tirupathi vs. State of A.P and Ors*¹⁷. Right to live¹⁸includes right to clean water and a clean pollution free environment guaranteed by the Constitution under Article 21 of the Constitution. The *Plachimada Coca-Cola* case¹⁹ was a legal battle over the environmental damage caused by a Coca-Cola bottling plant in Plachimada village Kerala. The case related to violation of human rights, pollution control laws and the right to life.

Volume 15, Issue 1, Jan-March – 2025 Special Issue 2



Impact Factor: 7.665, Peer Reviewed and UGC CARE I

CONCLUSION AND SUGGESTIONS

The current legislations on groundwater have deficiencies in execution and protection of important natural resource in India, which need to be rectified for effective groundwater development and management.

- ➤ Adoption of uniform law on groundwater regulation for effective coordination between Central and State governments.
- ➤ Monitoring bodies like CWC, CGWB, CGWA and CPCB must have adequate mechanism for controlling over extraction of groundwater.
- ➤ Community engagement through education create awareness on importance of water conservation, rainwater harvesting and controlling pollution of groundwater.

--)(--

Endnote & References

¹ National Compilation on Dynamic Ground Water Resources of India, 2023, Published by Central Ground

Water Board, available at https://cgwa-noc.gov.in/

Social-Legal Review, Vol 12, Issue 2, 2022.

https://publications.iwmi.org/

²10 Potential Sources of Groundwater Pollution, available at https://www.springwellwater.com/

³ Generative AI is experimental, https://www.google.com/

⁴Generative AI is experimental, https://www.google.com/

⁵ Sujith K Revamping the Groundwater Legal Regime in India: Towards Ensuring Equity and Sustainability,

⁶ Ibid 5

⁷ Regulating Groundwater in India, India Update, ELR Vol 4 Issue 4, Oct-Dec 2013.

⁸ Art 48 A narrated by Generative AI is experimental, https://www.google.com/

⁹ Art 51(A) g narrated by Generative AI is experimental, https://www.google.com/

¹⁰ Art 372 narrated by Generative AI is experimental, https://www.google.com/

Supra 5 page 50

¹² Mohd S S, WATER POLICIES AND LEGAL FRAMEWORK IN INDIA, Page no.11 available at

¹³ Legal Framework for protection of groundwater available at https://cdn.cseindia.org/

¹⁴ Supra 12

¹⁵ Supra no 5

¹⁶ State of West Bengal Vs. Kesoram Industries 10 SCC 201 Supreme Court 2004.

¹⁷ AIR 2006 SC1350.

¹⁸ M.C Mehta Vs. Union of India (1996), Subhash Kumar v State of Bihar 1991 SCR (1) 5

¹⁹ 2004(1)KLT731.