

A Comprehensive Analysis of the Groundwater Legislation in India: The Problems, Case Studies, Existing Legislation And Constructive Criticism

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Abstract: Regulating Groundwater resources has always posed a major challenge to the Indian Government and Judiciary due to the contradicting jurisprudence and legal loopholes that prevent the creation of effective Legislation. This paper aims at studying this jurisprudence and providing constructive suggestions towards effectuating a sensible means of regulation. The First Section of this paper introduces the importance of groundwater resources. The Second Section aims at analysing the issues with relation to the enforceability of groundwater rights within the Indian Framework. The Third Section of this Paper aims at studying the longstanding debate between a policy and a legislation and aims at reinforcing the importance of creating a groundwater legislation instead of a mere policy. The Fourth Section of this paper studies and analyses the issues with current systems of regulation in India. The next Section of the Paper provides an independent analysis and comprehensive criticism of the Model Bill for Groundwater Legislation floated by the Central Government in 2011. Through the Paper, constructive suggestions are provided towards instituting a systematic regulatory process within the nation, and provides constructive steps to its development, with the Conclusion summarising the applicability and steps this paper suggests.

INTRODUCTION

An agrarian economy, as promulgated since times unknown, the Republic of India has been dependent upon the groundwater resources for the mere survival of one of the most important industries that have helped the country in its development bottoms-up. However, obtaining this greatly important resource in recent times has been a problem that has neither been met with an efficient solution nor an efficient alternative. With a continuously exploding population and complicated demand patterns, coupled with the issues of variations in the monsoon seasons, and the changing climate, the availability of water resources stands an unresolved question in current times. The scarcity of water resources essentially leads to a question of finding alternative sources of water, apart from readily available surface-level water and the same has led to the indiscriminate use of underground water. Control and systematic regulation of underground water resources is the need of the hour. The scarcity of groundwater is particularly aggravated and complex due to causal factors such as

- Inadequate recharge of groundwater due to insufficient and uncertain rainfall, coupled with successive years of drought; and
- Electricity subsidies and fixed electricity tariffs for farmers which reduce the marginal cost of extraction of groundwater to nearly zero, and hence encourage them to maximise their current revenue by using and even trading in groundwater
- Development and wide acceptance of deep rock drilling technology and proliferation of drilling contractor
- Increasing commercialisation of agriculture (cultivation of sugar cane, banana, fruit and vegetables, cotton etc.) based on groundwater in these regions endowed with good soils and habited by skilled peasantry.¹

Access to groundwater is obtained by drilling holes from land over which private rights are exercised by individuals. While groundwater itself may be considered to be a common pool of resources, the manner in which it is accessed may grant private individuals unrestrained rights to exploit the groundwater accessible through his land. Landowners were deemed to have unfettered right to groundwater under their lands and these rights were limited only to the extent that they should not in any way affect similar rights of other individuals.² One of the major issues caused by

¹ *A Decade of the Maharashtra Groundwater Legislation: Analysis of the Implementation Process*, 2 Law, Environment and Development Journal (2006), 67, available at <http://www.lead-journal.org/content/06067.pdf>.

² *Ibid.*

the regulation of underground water is the governance issues that are faced by the regulating authority. As per the Indian Easements Act, 1882, the person who owns a piece of land, also owns the whole of the underground resources available under the piece of land owned by the person. This means that third party governance of underground water resources would cause the interference of a third party into a privately-owned body, also considered to be trespass under all other paradigms.

The 12th five-year plan³ in India took note of the demand for water in the future and noted that the demand for water would rise by 50% higher than the day by the year 2031. The solution proposed would be able to bridge close to 20% of the said increase in demand by the processes of additional storage and retention of underground water.⁴ The Green Revolution, beginning in the 1960s, was largely based on the construction of mechanisms that could be used to pump underground water onto the surface. India, currently hosts the largest consumption of underground water, with close to almost thirty million structures being put to use in order to pump groundwater to the surface.⁵ Greater than half the agricultural produce within the country depends on underground water for irrigation purposes.⁶ The requirements of the agricultural sector, secondary industries, and the urbanization process added extreme amounts of stress on an already inefficiently managed groundwater system.⁷ While it is of commendation that India achieved the target “*access to water from improved sources*” goal under the Millennium Development Goals⁸, a large number of people still continue to face the insurmountable problems with relation to groundwater supply due to inadequate infrastructure and unreliable technology. In the year 2011, the Planning Commission realized that close to 85% of the people living in rural areas were dependants on wells as their sole source of water.⁹ Close to 50% of the urban dwellers also rely on a well as the sole source of water in the country.¹⁰ The already deteriorating conditions of groundwater are further intensified by issues such as climate change, which increase the unpredictability of the estimation of groundwater, and reduce the groundwater recharge potential.

³Twelfth Five Year Plan (Planning Commission of India) (2011).

⁴Twelfth Five Year Plan (2012– 2017): Faster, More Inclusive and Sustainable Growth (Government of India) (2013).

⁵ Tushaar Shah, *Taming the Anarchy: Groundwater Governance in South Asia* (Routledge) (2009)

⁶*ibid*

⁷*ibid*

⁸ Progress on Drinking Water and Sanitation: 2012 Update: Joint Monitoring Programme for Water Supply and Sanitation (WHO/UNICEF) (2012)

⁹ Report of the Working Group on Sustainable Groundwater Management as input to 12th Plan (Planning Commission: Government of India) (2011)

¹⁰ Dipankar Chakraborti et al., *Examining India's Groundwater Quality Management*, 45 Environmental Science & Technology, 27-33 (2011) 2011.

ENFORCEABILITY OF GROUNDWATER RIGHTS

The rights relating to groundwater are *prima facie* attached to land rights, due to the provisions under the Indian Easements Act, 1882.¹¹ Therefore, groundwater is a private good, and all rights attached to the same are private rights. The Indian Legal System does not recognise the State Ownership principles of groundwater. However, in contrast to the provisions mentioned in the Indian Easements Act 1882, through the jurisprudence of the Court as can be seen in various cases, outlook is that all water resources are held by the state in the form of “public trust”. Under this doctrine, the state acts as a trustee for all public goods and takes upon itself the maintenance and the well-being of the public goods. This means that the State is also restricted from allotting any private rights to the water body, as the State also must protect the public’s access to the said goods.

This doctrine’s application was first seen in the country through the course of the case of *M.C. Mehta v. Kamal Nath*¹² wherein the Court observed that the all institutions, social or otherwise, must be informed of the laws of nature and the ecosystems, and therefore, in the regulation of water resources, the authorities must pay attention to the hydrological cycles. Originally, according to this doctrine, the state only had control over the flowing water, and not over underground water.¹³ However, in a judgement dated 2004, the Supreme Court, although only at a very preliminary stage, mentioned in the case of *State of West Bengal v. Kerosam Industries*¹⁴ that the State controlled “*deep underground water*” as an extension to the Public Trust Doctrine, thereby making the state accountable for the protection and maintenance of the quality of groundwater, as well as protecting the aspect of public access to the groundwater facilities.

The governance of groundwater resources concerns all the stakeholders involved when a single decision involving groundwater is taken. In order to minimise the negative consequences on all the stakeholders, and to consider the best possible decision after carefully evolving all possible alternatives, the Indian judiciary has endeavoured to push all the boundaries regarding the governance of underground water resources. Apart from introducing the public trust doctrine, the Supreme Court has also set up the Central Ground Water Authority and has vested with it, far-reaching powers and capabilities. One of the most landmark judgements given by the Supreme

¹¹ Indian Easement Act (Government of India) (1882).

¹² *M.C. Mehta v. Kamal Nath*, (1997)1 SCC 388.

¹³ *Ibid.*

¹⁴ *State of West Bengal v. Kesoram Industries*, Appeal (Civil) 1532 of 1993.

Court with relation to the management of groundwater resources is the judgement given by the Supreme Court in what is famously referred to as the Plachimada Case which will be discussed further in the paper.

GROUNDWATER POLICY v. GROUNDWATER LEGISLATION

One of the major requirements in the policies relating to groundwater is the essence and the requirement of accountability; that needs to be well-established into the system from the very beginning. The basic tenets of accountability can only establish itself in a system wherein there are rights that are given to the people and the same imposes an array of sound obligations on the administrating body. In order to make the process of governance effective, it becomes imperative to convert policy decisions into the aforementioned system of rights and corresponding obligations.¹⁵ The process of governance in the field of underground water cannot be a direct approach at a binding legislation that affects all the stakeholders present in a system. An ideal policy of the same must begin with a non-binding policy that has been adapted from various other national and international conventions, treaties and agreements. This same non-binding policy needs to be brought down to the roots of the governance mechanism i.e. the localised level of governance from the most basic and primary authority governing the water resource. Consultation with the public and the general citizens needs to be undertaken, especially in consideration with the novelty of the policy that the regulation of groundwater would entail. It is only after effectuating public discussion and participation can there be a legal policy put into place, followed by amending the policy to achieve the most efficient outcome of providing justification to the sudden governance of groundwater- what was previously considered to be private property.

One important aspect of such legislation needs to be in the justification and proving the legitimacy of the very need and existence of such policy. Policies and principles in such legislations need to be firmly laid down and there needs to be effective communication of such principles to the general public and the administrative authority. One of the primary ways leading to the demise of the legitimacy of a policy is by not giving the policy the status of legislation. It is argued that through the span of the past two decades, the policies governing the water resources have been non-binding, rather than protecting interests through the format of a legitimate legislation.¹⁶ There have been concerns regarding the fact that the principles of democracy may be by-passed, and instead

¹⁵ Mechlem K., *Groundwater Governance: A Global Framework for Country Action*, Thematic Paper 6: Legal and Institutional Frameworks, Rome (2012).

¹⁶ Cullet P., *Is Water Policy the New Water Law? Rethinking the Place of Law in Water Sector Reforms*, Institute of Development Studies Bulletin, 67 (2012).

reliance may be placed upon reduced procedures of transparency in the course of law making.¹⁷ However, it needs to be noted that, although policy plays a true precedent to law, adoption of mere regulations without the existence of laws is in fact, a truer definition to the loss of the same democratic principles that are being fought for in the aforementioned argument.¹⁸

This is because, even though a policy may have all the requisite ideologies and mechanisms to deal with effective governance, an issue arises with the legitimacy of such a policy. Enactment of a legislation has a two-fold advantage: Firstly, there begins a set of rights and obligations that are given to the all the stakeholders involved, and the same is bound by the averments of recourse in the law. Secondly, there exists an obligation on the implementing authority to implement the legislation conclusively and comprehensively. Both the above-mentioned advantages cannot be held true to the ambit of a simple policy. Policymakers cannot be held responsible for a lack of implementation of the said policy and therefore, the basic beliefs in the concepts of transparency, democracy and integrity stands abandoned. Further, policies do not stand any legitimacy in the eyes of the parliament, especially during the times of budget allocations, and a conspicuous absence of conscious decision making in the implementation of the same. On the contrary, in a legitimate legislation, the same would be a process that would follow on its own merit.

A resource that is invisible to the humankind, effectively controlling the groundwater resources can turn out to be a taxing process. The regulation of groundwater through a law first, and then adopting rules and subsequently implementing the said rules can cause high transaction costs in the market. In the case of India, similar to those of the Nations of Mexico and China, the sheer reliance placed on the groundwater resources by the agricultural sector causes great difficulty in the management and further, the regulation of groundwater resources in the country.¹⁹ The large number of users causes the implementation procedures to spiral into great complexity, and coupled with outdated scientific as well as technical and financial capabilities, there are many factors creating the domino effect into causing ineffective implementation of the law in itself.²⁰ Effective implementation can be achieved only through the process of capacity building. Insufficient amounts of capacity- i.e. the lack of human resources, technological resources, and administrative resources in effect cause majority of the difficulty in any form of regulation, and the case is the same in the situation of underground water resources.

¹⁷*Ibid.*

¹⁸*Ibid.*

¹⁹ Jenny Grönwall, *Groundwater Governance in India: Stumbling Blocks for Law and Compliance* (Stockholm International Water Institute) (2013).

²⁰ *Ibid.*

There have been various investigated into in the search of an efficient underground water regulation system. The concepts of water markets or conditions wherein water rights are transferable have also been investigated. One of the highly propagated models of underground water regulation is that of the local laws. Hydro geological conditions vary from one place to another, and therefore, regulations would be met with varied levels of compliance form different regions based upon the said conditions.²¹ Another theory of regulation that has been promulgated, relied on the fact that there needs to be an extremely nuanced approach with relation to understanding the physical, social, biological, and economic conditions, and the regulations that would ultimately be suitable for the local arena.²²This would lead to a procedure of law making known as contextualised law making wherein it is taken into consideration, the large number of stakeholders, and their different needs while inducing a legal solution into a situation. Even though the process of Contextualised Law-making is comparatively time consuming and is a relatively more complicated process, the advantages to the same, at least from a purely theoretical perspective are large in number. As in the case of the Contextualised Law-making, there exists a need to integrate all the localised policies in order to be able to address the issue of underground water on a bigger national platform. By integrating all the localised needs, all the interests of all the people can be better accommodated in the law-making process. As stated by the World Bank Report in the year 2010, the over-exploitation of underground water resources is the culmination of several decisions on an individualistic level, each seemingly rational at that individualistic level.²³

CURRENT SYSTEM OF REGULATION IN INDIA

Few countries in the world today do not recognize the fact that all rights pertaining to the groundwater are vested with the State or the Government. Some of these jurisdictions, other than India include the nations of Pakistan and the state of Texas in the United States of America.²⁴ These jurisdictions believe in the “*rule of capture*” i.e. a system that allows one landowner to pump underground water from his land, even if there is a depletion of underground water in the surrounding lands, as a direct result of the landowner pumping the water out of his own land. One other important aspect to consider is the fact that all legislative capacity with relation to water is left with the individual states within the jurisdiction of India, as the entry for water falls under the

²¹Cohen, A., and K. Bakker, *Groundwater Governance: Explaining Regulatory Non-compliance*, International Journal of Water 246 (2010).

²²Meinzen-Dick, R., *Beyond Panaceas in Water Institutions*, Proceedings of the National Academy of Science, (2007).

²³ *Deep Wells and Prudence: Towards Pragmatic Action for Addressing Groundwater Overexploitation in India* (World Bank) (2010)

²⁴*Supra*, Note 8.

State List to the VII Schedule of the Constitution.²⁵ The 12th Five-Year Plan, for the years 2012-2017 saw various working committees and groups being set up in order focus on the minimising of aquifer depletion, and on controlling the quality of the groundwater regulations in India.

India as a nation follows a pluralistic system of laws, and therefore there is more than one authority and governance body that co-exist in the country. Further, the legal system of India lays its origins in a large number of sources. Hence, there exists a complex structure wherein there is equal weightage given to court precedents, and they have to be in application alongside the large number of legislations already in place. This pushes the entire system into an acute cycle of interpreting the laws given by the various overlapping authorities; along with the loopholes that are inherent in the system, before successful implementation of the law can even begin.

The Central Government therefore needs to unite all the existing authorities and channelize the efforts into a uniform direction for such legislation to have fruitful effects. The major water crisis that is looming over the country is the sole reason that is motivating the policy-makers, legislators and the various authorities to function in tandem to actually move towards legislating a law specifically for the purpose of underground water regulation.²⁶ In the year 2013, Dr. Mihir Shah, then a member of the Planning Commission, and leading the groups studying water resources and rural development raised concerns stating that the policy-makers should in fact be motivated to lay down such a water policy that focuses on the creating a radical change in the strategies used to manage and regulate water resources, and that they should be based on the conceptual pillars of managements and not on the facets of engineering.²⁷ This statement was made after various reports from the National Water Mission of the year 2011, and the National Water Policy were followed.

Therefore, there needs to be the promotion what in economics, is known as the “*supply chain management*” rather than the “*demand side management*”. The voice and the policy that the Central Government wished to follow hereon is therefore, pretty clear. It wants to promote reforms at an institutional level, such that there can be enough room for manoeuvrability and adaptation at the local level based on local needs.²⁸

STREAMLINING THE PROCESS OF REGULATION

²⁵INDIAN CONSTITUTION. Schedule VII.

²⁶ Background and Rationale Draft Model Bill for the Conservation, Protection and Regulation of Groundwater (Planning Commission: Government of India) (2011)

²⁷Shah M., *Water: Towards a Paradigm Shift in the Twelfth Plan*, XIVII Economic and Political Weekly (2013)

²⁸*Supra*, Note 8.

India, having a quasi-federal system of government, divides the legislation powers between the Central Government and the State Government. The concept of water appears as Entry 17 in the State List under Schedule VII of the Constitution²⁹. In the year 2011, there was a move to shift the Entry of water from the State List to the Union List or to the Concurrent List. The same was met with fierce opposition.³⁰ Even though the Centre essentially cannot interfere in the legislation with relation to water resources, the Supreme Court empowered the Central Government to deal with water related legislation by allowing it to set up an authority, named as the Central Ground Water Authority. The same was effectuated in the judgement of the case *M.C. Mehta v. Union of India*³¹, by applying the principles laid down in the Environmental Protection Act 1986,³² read with Article 253 of the Constitution of India³³. The same is controlled by the Ministry of Water Resources. With the help of close to sixteen thousand observation wells throughout the country, one of the primary functions of the Central Ground Water Authority is to monitor the levels of underground water, and help pinpoint the quality of the same. The administration of the same is divided into smaller localised areas in order to maintain and analyse the findings of the Authority. Under the Provisions of the Environmental Protection Act 1986, the Central Ground Water Authority has the authority and the powers to notify the areas wherein there is over-exploitation of underground water resources. The Central Ground Water Authority also has the powers to issue regulations and create penal provisions to prevent the over-exploitation of resources. In specific areas that are notified by the Central Ground Water Authority, any water-intensive industries must avail a No-Objection Certificate from the Authority itself. In as much as the ground level regulation of the Authority's exercise occurs, the Authority can take the help of the State Pollution Control Boards. The issue in this system occurs when there exist notified areas in states that have no statutory provisions to deal with the exploitation of water resources. Therefore, there are major loopholes in the functioning of the Authority due to the lack of capability of the Central Government in legislating laws with relation to groundwater resources.

THE PLACHIMADA CASE- THE FIRST CASE OF UNREGULATED GROUNDWATER ACCESS

²⁹ *Supra*, Note 25.

³⁰ Iyer R. R. *Should Water be Moved to Concurrent List?* The Hindu, June 18, 2011

³¹ *M.C. Mehta v. Union of India*, (1997) 2 SCC 353

³² Environment Protection Act 1986.

³³ INDIAN CONSTITUTION. Art 253

The Plachimada case began as a case against the Coca-Cola Indian subsidiary, Hindustan Coca-Cola Ltd. The issue arose when the large bottling plant was drawing close to twenty-lakh litres of underground water everyday using its six borewells and two ponds within its campus. The Perumatty Panchayat Board, which had originally offered the company, a license to set up a factory at the location filed a petition in the Kerala High Court citing the depletion of water levels in the area and the contamination of the surrounding water bodies. The first judgement in the case, given by a single judge rightfully invoked the principle of the public trust doctrine and adjudicated that the company stop production at the factory based in Plachimada.³⁴ However, a division bench of the same court reversed the Judgement and asked that the license offered by the Perumatty Gram Panchayat be reinstated. In this case, the polarised diaspora dividing the case for underground water resources is clearly visible. On one side, there was the Perumatty Panchayat that was asserting their right to clean and continuous supply of underground water, whereas, the company was asserting its Easementary right of drawing underground water from the land that is owned by it. The effects of the water depletion and the botte cleaning processes undertaken by the company were felt far and wide. It was noted that several villagers in the surrounding areas were taken ill and that the agricultural produce had taken a direct hit as a result of the excessive pollution and the excessive drawing of underground water caused by the factory.³⁵ The judge in the 2003 judgement³⁶ also rightly pointed out the fact that the inaction of the government to try and stop the excessive drawing of water would in fact amount to a fundamental rights violation under Article 21 of the Constitution of India³⁷. However, the Supreme Court in its final order in the year 2017, while overturning the 2005 judgement³⁸ chose not to entertain any of these issues overturned in the 2005 judgement ³⁹In the 2005 judgement, the Division bench of the High Court held that the panchayat did not have the right or the *locus standi* to file the case or cancel the license.⁴⁰ However, the 73rd amendment to the Constitution⁴¹ gave local governing bodies such as the gram panchayats a constitutional status. According to Article 243 of the Constitution of India⁴² the local governing bodies have a duty to manage and regulate the natural resources in their surroundings and therefore the judgement of the Division bench, in one opinion, could even be held to be erroneous and *ultra vires* the Constitution of India itself. Further, the cancelation of a license by the

³⁴ Perumatty Grama Panchayat vs State of Kerala 2004 (1) KLT 731.

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ Article 21, Constitution of India, (Government of India) (1950).

³⁸ Hindustan Coca-Cola Beverages vs Perumatty Grama Panchayat 2005 (2) KLT 554.

³⁹ *Ibid.*

⁴⁰ *Ibid.*

⁴¹ INDIAN CONSTITUTION (Seventy-Third Amendment) Act (Government of India), (1992).

⁴² INDIAN CONSTITUTION. Art 243

Perumatty Gram Panchayat was also a well justified action, as the community property in the village area belongs to the gram panchayat itself, as vested with it according to the Kerala Panchayats Act, 1994⁴³. The Supreme Court's order to shut down the case after Hindustan Coca-Cola Ltd. informed the Supreme Court that they had no intention of restarting the plant at Plachimada after it was shut in the year 2004, used the contexts of the Polluter Pays Principle as well. The industry has had to compensate the victims for the losses suffered. In the year 2011, a bill was introduced in the Kerala Legislature known as the Plachimada Coca-Cola Victims' Relief and Compensation Claims Special Tribunal Bill, and the same was adopted by the legislature; however, it was returned by the president without his assent because of the lack of "*legislative competence*". However, post the Order of the Supreme Court in the year 2017, the Speaker of the 14th Kerala Legislative Assembly remarked that the bill could be reintroduced after requisite changes were made to the same.

DRAFT MODEL BILL FOR CONSERVATION, PROTECTION AND REGULATION OF GROUNDWATER- AN ANALYSIS AND CRITIQUE OF THE FIRST ATTEMPT

The previous sections of this paper dealt with the importance and justification of the existence of a legislation pertaining to the conservation and management of Groundwater resources. This section of the paper analyses the Draft Bill published by the government in the year 2011 for the states to imbibe into their legal frameworks. Though the bill has not been passed in many states yet, this Bill is worth analysing due to the significance and importance it has in the field of groundwater conservation.

The Bill lays down the basic objectives of the Act are summarily based on the outlets of the Environmental Protection Act, 1986.⁴⁴ They include the need of regulation of water resources to⁴⁵:

1. Protect livestock and satisfy basic needs of human beings;⁴⁶
2. Sustainably utilise the groundwater resources for better long-term advantages;⁴⁷
3. Integrate the protection of groundwater to the principles of protection of the surface-water resources;⁴⁸

⁴³ Kerala Panchayats Act 1994.

⁴⁴*Supra*, Note 44.

⁴⁵Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 2.

⁴⁶*Ibid*, § 2(a).

⁴⁷*Ibid*, § 2(b.)

⁴⁸*Ibid*, §2(c).

4. Application of the principle of subsidiarity,⁴⁹ i.e. the implementation of the principle that a certain body should only have subsidiary functions- therefore helping achieve the goal of a more localised process of problem-solving.
5. Protection of the biodiversity in the country, and protecting the ecosystems in existence;⁵⁰
6. Prevent the groundwater from declining in quality through curbing pollution;⁵¹
7. Ensure Sustainable Development and Intergenerational Equity;⁵²
8. Curb inequalities and discrimination in all forms in people's access to water;⁵³

As can be noted, the Objectives of the act seemingly cover all the needs and requisites as to why the groundwater resources need to be protected. However, one aspect that seems to be conspicuously missing from these objectives is the fact of conversion of groundwater resources from a private good, to a public good. In the case that this cannot be achieved by the Act, then the whole process of regulation would not be possible. One of the major issues of groundwater protection is the fact that there exists a private right of ownership of all the groundwater that a person can pump out from beneath his land irrespective of the size of the actual water table underneath the land.

The Bill further divides areas based on *groundwater protection zones*.⁵⁴ *Groundwater Protection Zone 1*⁵⁵ is an area that is classified to have aquifers that need specific attention, and need the help of artificial recharge in order to replenish the groundwater resources, and the Section further lays down that such areas shall not be compromised in any manner whatsoever, such that there are any means of harm that may be caused to the same.⁵⁶ *Groundwater Protection Zone 2*⁵⁷ is classified to be an area wherein there exist mechanisms to extract groundwater, and are regions where over-extraction might become a hazard, and there are assessments conducted from time to time in order to determine the condition.

Chapter II of the bill lays down the basic principles for the protection and the conservation of groundwater resources, including the principles of equity, non-discrimination, decentralisation,

⁴⁹ *Ibid*, §2(d).

⁵⁰ *Ibid*, §2(e).

⁵¹ *Ibid*, §2(f).

⁵² *Ibid*, §2(g).

⁵³ *Ibid*, §2(h).

⁵⁴ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 3.

⁵⁵ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 3(g).

⁵⁶ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 3(g); Explanation (i).

⁵⁷ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 3(h).

assessment and integration of surface and groundwater resources. Section 8⁵⁸ of the bill lays down the right to water to be given to every natural person.

Section 10 of the Bill lays down that the priority based on which groundwater should be used.⁵⁹ This section also lays down the Public Trust Doctrine principle directly by stating that, in deciding the priorities for the use of groundwater, the State acts as a trustee.⁶⁰ There is also division between Primary and Secondary groundwater uses.⁶¹ Section 10 also lays down that the use of groundwater for the purposes listed under secondary uses shall be only after conducting a Social and Environmental Impact Assessment.⁶²

Chapter IV of the Bill lays down the principles based on which the Groundwater Protection Zones are created, maintained and managed. Under Section 12⁶³ of the Bill, the Procedure to be followed during the demarcation of the Groundwater Protection Zones. It is herein that the Bill calls upon the State Groundwater Board. However, an important facet to be noted is the fact that no provision in the Bill states the constitution or formation, powers or functions of such board.

There is, however, the creation of a State Groundwater Council⁶⁴, an advisory body, arguable different from the State Groundwater Board. Sections 14-16⁶⁵ deal with the preparation, content and adoption of a Groundwater Security Plan. Such a plan needs to be prepared for every aquifer within the jurisdiction of such a state board.⁶⁶ The plan, apart from mentioning the customary rules and practices with relation to such aquifer⁶⁷ must also include the remedial measures for the protection and conservation of the said aquifer⁶⁸; some of the methods including incentives for stopping the production of water-intensive crops⁶⁹, and promotion of energy pumps that use lesser energy and are more cost-effective⁷⁰. Every Groundwater Security Plan would be binding for five years from the date of initiation.⁷¹

⁵⁸ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 8

⁵⁹Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 10

⁶⁰*ibid*

⁶¹*Ibid* § 10(4) and 10(5)

⁶²*Ibid* § 10(6)

⁶³Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 12

⁶⁴Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 25

⁶⁵Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 14,15,16

⁶⁶*Ibid*, §14(3)

⁶⁷*Ibid*, §15(3)

⁶⁸*Ibid*, §15(6)

⁶⁹*Ibid*, § 15(6)(a)

⁷⁰*Ibid*, § 15(6)(d)

⁷¹*Ibid*, §16(2)

The Bill also lays down a comprehensive institutional framework for the control and management of water resources.⁷² It first broadly divides the areas into rural and urban areas.⁷³ For the rural areas, the Bill mandates the setting up of a Gram Panchayat Groundwater Committee for the management of groundwater resources.⁷⁴ The Groundwater Security Plan is to be drafted and verified by the Committee, and must be presented to the Gram Sabha.⁷⁵ The implementation of the same is also meant to be taken care of by the Committee. There is also a mandate to form a Block Panchayat Groundwater Committee.⁷⁶ The Block Panchayat Groundwater Committee consolidates all the plans into one and coordinates the planning processes between the same.⁷⁷ The Block Panchayat Groundwater Committee is also vested with the power to grant permissions with relation to the provisions mentioned under Sections 37-40 of the Bill.⁷⁸ Under these Sections major or medium irrigation projects may be given permission for.⁷⁹ Further, there may be any permissions granted with respect to industrial or commercial use of the land.⁸⁰

Similarly, for urban areas, there is mandated the formation of the Ward Groundwater Committee⁸¹ and the Municipal Groundwater Committee⁸², both having powers and functions similar to that of the Gram Panchayat Groundwater Committee and the Block Panchayat Groundwater Committee respectively.

The Bill also lays down the provisions of the District Groundwater Advisory Council⁸³ and the State Groundwater Advisory Council⁸⁴. These are advisory bodies and they take on the role of reconciling the plans of all the municipalities, blocks or districts based on their hierarchical level. Apart from these Advisory councils, the Bill also makes provisions for the Constitution of Information and Monitoring Cells that are created to assist all the authorities under the Bill.⁸⁵

Another important facet of this Bill is the fact that it lays down mandatorily that there need to be environment impact assessments and social impact assessments completed, in order to be able to maintain and regulate groundwater resources.⁸⁶ Further there is also public consultation practices

⁷² Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 Chapter V

⁷³ *Ibid*

⁷⁴ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 17

Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 18(1)

⁷⁶ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 19

⁷⁷ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 20

⁷⁸ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 37,38,39,40

⁷⁹ *Ibid*, § 37

⁸⁰ *Ibid*, § 38

⁸¹ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 21

⁸² Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 23

⁸³ *Supra*, Note 66

⁸⁴ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 27

⁸⁵ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 29

⁸⁶ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 44

laid down with every project, and there are public hearings of all projects conducted in the areas the projects are said to occur.⁸⁷ Further, the principles of transparency systems, and proactive disclosure mechanisms are also taken into consideration.⁸⁸ Last, but not the least, there are also social audits, i.e. independent audits conducted by non-governmental agencies to evaluate the viability and the success rate of the projects.⁸⁹

KEY CRITICISMS OF THE BILL

There are many offences and penalties that are laid down under the Bill that give the act a more binding nature, and the threat of deterrence. However, what is more importantly to be noted in the bill, is the introduction of Alternative Dispute Mechanisms into the system.⁹⁰ Further, there is the position of a Groundwater Grievance Redressal officer created for the benefit of easier and more efficiently addressed grievances.⁹¹ Every such officer shall hold office for a period of 5 years.⁹² Furthermore, there is the position of a 'Nyaya Mitra' created in order to assist the aforementioned officer.⁹³ Appeals from the said positions go directly to the Nyayalaya set up in accordance with Section 3 of the Gram Nyayalayas Act.⁹⁴ Therefore, there also inherently exists a procedure for the redressal of grievances, couples with appeals, transparency measures and social audits. However, what remains to be noted is whether such a method actually effectuates into an efficient judicial system.

The mechanism of creating a system complete with advisory councils and various boards has been a tried and tested method within the Indian Legal framework with multiple Legislations taking cue from such a model inclusive of but not limited to the Consumer Protection Act, 1986⁹⁵, and various labour Legislations such as the Industrial Disputes Act, 1948.⁹⁶ An important facet to be noted in all these instances is the fact that all these legislations also have a separate institution of judicial and quasi-judicial bodies such as the various Consumer Courts,⁹⁷ and Labour Courts, Labour Tribunals etc. to specifically cater to the needs of the legislation. In the instance of the Model

⁸⁷*Ibid*

⁸⁸Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 45, 46

Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 47

⁹⁰ Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 Chapter XXII

⁹¹Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 53

⁹²*Ibid*

⁹³Draft Model Bill for The Conservation, Protection and Regulation of Groundwater 2011 § 55

⁹⁴ Gram Nyayalayas Act 2008.

⁹⁵Consumer Protection Act 2019.

⁹⁶Industrial Disputes Act 1948.

⁹⁷*Supra* Note 97, Chapter IV.

Groundwater Bill, the same does not exist. Of course, there exist adjudicating authorities such as the Groundwater Grievance Redressal officer, however, there exist some categorical differences between legitimate authorities adjudicating matters in front of qualified Judges, and a single officer burdened with adjudicating all disputes under the legislation. By not providing for a separate court system to dispose of matters specifically under this legislation, there exists a judicial gap, with there being no legitimate means of adjudication or appeals. While appeals to the Nyayalaya under the Nyayalayas Act might seem legitimate, it must be noted that the Court is not a specialised one in dealing with matters relating to groundwater. This essentially becomes important due to the scientific specialisation that is related to the groundwater legislation itself, the nuances of which have been analysed herein above, especially with respect to groundwater zones and the identification of aquifers for the creation of maps etc. Specialisation becomes important in legislations such as this, due to the very nature of the subject matter. Groundwater legislation, being novel in its subject matter demands a higher benchmark of care and efficiency while disposing of matters. Moreover, as mentioned early on in this paper, one of the largest advantages of a legislation is the accountability that comes attached to such legislation. Therefore, in not instituting a separate Court mechanism, a sizeable quantity of the legitimacy of the legislation is removed, due to the largely unsatisfactory recourse mechanism under this legislation.

CONCLUSION

In a nation like India, the need of the hour is to regulate and control the expenditure of Groundwater Resources, owing to the fact that the country is heavily dependent on groundwater for its sustenance. This paper has highlighted and provided key factors that have led to the exploitation of the groundwater in India. The enforceability of groundwater right as a property or easement right was discussed and thoroughly examined. The age-old argument of Policy v. Legislation was brought forth, suggesting that there needs to be a legislation legitimising the control and regulation of groundwater resources. Analysis of the same has further suggested that having a mere policy in place would not be of much use to the status quo. Even though there have been Authorities set up at a central level, Groundwater Regulation is more a localised process with more benefits when different areas having different needs have different legislations catering to them.

The regulation process attached to groundwater in India is analysed with necessary inputs based on judicial pronouncements. In order to further understand the position of the Indian Courts on groundwater protection, the Plachimada case is studied. A case-study on the protection of

groundwater in Maharashtra provides critical insights and understanding of the practical aspects attached with groundwater conservation. Furthermore, vide the analysis of the model bill, it is evident that the bill has all the requisite provisions for making the regulation of groundwater a success story. Especially with the subject of water being a state matter and not a central matter, the same bill can be utilised to cater to localised needs by amending the same in a manner that would be advantageous for every state.