

Legal Impediments of Groundwater Conservation and Water Law Reforms in India

V.J. Jithin*

Abstract

It is estimated that 80 per cent of rural drinking water and 60 per cent of irrigation water in India comes from groundwater. The excessive unregulated extraction and deteriorating quality of this freshwater resource have resulted in water scarcity, bio diversity loss, health issues and social deprivation and related issues. But at the same time, the prevalent rules and regulations on water resources in India focus mainly on the control of pollution or entitlement of its utilization, and these major legal instruments governing water are applicable only to surface water. This represents an instrumental blindness towards groundwater. Some States have formulated certain legislations on groundwater. But these statutes stand at different footings since some apply only to notified areas and certain statutes carries the tag of groundwater law for the namesake and fails to address the issues effectively. Since groundwater is the primary source of drinking water, its nexus with the right to safe drinking water as fundamental human right is indispensable. Thus the conservation and management of groundwater form part of basic human right and fundamental right also. Moreover, the issues of depletion and contamination of groundwater are transboundary in nature. These aspects warranting an immediate intervention at national level to conserve the water resources particularly the groundwater. This article focuses on the need for broader legislative instruments at national level and the legislative competency of the Parliament to enact such legislation. It also analyses the policy aspects and steps taken by the central government in this regard. It is expedient to boost up the reform measures at national level to have a water law framework to achieve environmental and social sustainability.

* Research Scholar, Centre for Law, Central University of Punjab, City Campus, Mansa Road, Bathinda-151001;
E-mail: vjithin@gmail.com.

Groundwater: Grounding the Realities

Water is one of the essential components that make life possible on earth. The entire flora and fauna depend on water for their survival. The progress of humankind hence has an indispensable correlation with the availability, utility and management of water resources. Apart from the existence of life and maintaining the equilibrium of eco system, water resource management is essential in agricultural production for its indispensability in irrigation, power generation, fisheries and other livelihood activities. Among the surface and ground waters, the latter comprises ninety-seven percent of the world's readily accessible freshwater and provides the rural, urban, industrial and irrigation water supply needs of two billion people around the world.¹ It is estimated that 80 per cent of rural drinking water and 60 per cent of irrigation water in India comes from groundwater.² This is an indication of the magnitude of the dependency on groundwater. In India the depletion of groundwater has caused alarm as revealed by the approach paper on 12th five-year plan (2012-2017):

“There has been a decline in the ground water level of 4 centimetres each year between 2002 and 2008 in the alluvial tracks of Northern India where natural rates of recharge are high. This is equivalent to an increase in over 70.0 per cent in the rate of water extraction compared to the previous decade. The decline in the water table is also evident in the crystalline, volcanic and mountainous regions that account for nearly 70.0 percent of our landmass where natural rate of ground water recharge is very low”.³

This problem of groundwater depletion is compounded due to the fast contamination of available groundwater. The presence of toxic heavy metals like lead, cadmium from the sludge generated by the industrial plants and the chemicals contained in fertilizers and pesticides lead to contamination. Pollution due to human and animal wastes and fertilizer application has also

¹ Hector Garduno, Saleem Romani, *et.al.*, *India Groundwater Governance Case Study*, (World Bank, June 2011) <<http://water.worldbank.org/sites/water.worldbank.org/files/GWGovernanceIndia.pdf>> accessed on 30 November 2015

² Planning Commission of India, *Faster, Sustainable and More Inclusive Growth*, (Approach Paper on 12th Five Year Plan, 2011) para 5.2, < http://planningcommission.nic.in/plans/planrel/12appdrft/approach_12plan.pdf> accessed on 18 December 2015

³ *Ibid* para 5.3

resulted in high levels of nitrate and potassium in ground water in some parts of the country.⁴ The minefields are causing depletion of groundwater since it causes severe changes in the alignment of aquifers. It also enhances the contamination of ground water. The depletion of ground water coupled with its increasing level of pollution causes water crisis and social deprivation. The depletion and contamination of groundwater have to be addressed together to have an assessment of the scale of challenge it poses. Deterioration of the quality and the quantity of the groundwater will have far reaching consequences as it affect the public health, economy; and ultimately causes social deprivation. Water level decline have larger economic impact on the poor since they are unable to afford the deeper wells⁵ or purchasing water, resulting a vicious circle of deprivation. It would also lead to human displacement, biodiversity loss, deforestation, ecosystem misbalance. From these, it is also evident that the impact of extraction and contamination of groundwater caused by the unregulated exploitation is transboundary in nature.

Outlook of Water Law Framework in India

Water Law in India has emerged through the customary and common law principles. At a later stage, the subject of water has covered under some enactments also. It includes not only instruments focusing on water but also a range of other legal instruments in other areas of law that address water directly or indirectly, such as environmental or fisheries law.⁶ In India, the prevalent rules and regulations on water resources focus mainly on the control of pollution or entitlement of its utilization. Therefore, the major legal instruments governing water are applicable to the surface water like rivers, lakes, canals, and ocean etc. Water (Prevention and Control of Pollution) Act, 1974, Indian Penal Code, 1860 and Factories Act, 1948 etc. are some of such legislations having preventive provisions related to water pollution. India being a federal entity, often faces the disputes over inter- State rivers. These inter-State river water disputes are being governed by the Inter-State Water Disputes Act, 1956.

⁴ Ministry of Water Resources, *Groundwater Resource Estimation Methodology*, (Report of the Groundwater Resource Estimation Committee, 2009) para 2.4 < <http://cgwb.gov.in/documents/gec97.pdf>> accessed on 23 November 2015

⁵ Sairam Bhatt, *Natural Resources Conservation Law* (1st edn, Sage, 2010) p.154

⁶ Philippe Cullet, Sujith Koonan (eds.), *Water Law in India: An Introduction to Legal Instruments*, (1st edition, OUP 2011) xiv

As per the constitutional framework of distribution of legislative powers in India as contemplated in Article 246, the Parliament is empowered to legislate on entries in List I i.e., Union List of the Seventh Schedule of the Constitution and the State legislatures have the power with respect to the subjects in List II i.e., State List of the Seventh Schedule and both Parliament and State Legislatures are empowered to enact the laws with respect to the entries in the List III i.e., Concurrent List. The legislative capacity on water is based on the Entry 17 of the State List and the Entry 56 of the Union List of the Seventh Schedule. They are:

a) Entry 17 of the State List

“Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provisions of Entry 56 of List-I.”

b) Entry 56 of the Union List:

“Regulation and development of inter-state rivers and river valleys to the extent to which such regulation and development under the control of the Union are declared by Parliament by law to be expedient in the public interest.”

From these provisions, it is clear that States have more mandates on water governance and thereby articulating the legislative power of the states with respect to the water in their territory.

Legal Framework on Groundwater in India

In India, the right to access water has been controlled largely through common law principles and these principles mostly link access to water with control over land.⁷ The over-extraction of groundwater due to this right as recognised by the legal system has results in the groundwater scarcity in the surrounding area to the actual place of extraction. It further shows the transboundary impact of the groundwater exploitation. About the legal aspects of flowing surface water, the prohibition on the ownership of water led to the development of riparian rights that is giving individual land owners the right to appropriate water flowing through a river for

⁷ Philippe Cullet, Sujith Koonan (eds.), *Water Law in India: An Introduction to Legal Instruments*, (1st edition, OUP 2011) 27

their private use.⁸ At the same time, the legal system has failed in addressing the similar issues on the groundwater effectively.

The right to groundwater is also not recognised as an easement under the Indian Easement Act, 1882 but the right to extraction and its disposal of groundwater within the limits of one's land that does not pass in a defined channel is recognised under the Easement Act. The Section 7 of the Indian Easement Act imposes the restrictions on such rights by way of easements. Further, the Section 17(d) of the same legislation states that the right to underground water not passing in a defined channel cannot be acquired by prescription. Illustration (g) to Section 7 of the Easement Act makes it clear that the right of every owner of land to collect and dispose within his limit of all water under the land that does not pass in a defined channel can be restricted through easement. More precisely the Easement Law recognises the right to groundwater as a right attached to the land and it can be restricted by easement. But due to the lack of proper understanding of the term 'defined channel' and also, the absence of proper scientific knowledge have limited the scope of further legal interventions and interpretations to this provision for a long period of time.

Apart from the legal aspects of groundwater extraction, the legal framework of prevention of groundwater pollution is also to be scrutinised to curb the groundwater contamination. In India, the Water (Prevention and Control of Pollution) Act 1974 (commonly called the Water Act), is the major legal instrument on prevention of water pollution. But there is no express provision to curb the issue of groundwater pollution in the water (Prevention and Control of Pollution) Act 1974. The amendment of 1988 to the Water Act prohibits discharge of sewage or trade effluent into a stream or well or sewer or on land without the previous consent of the state pollution control board.⁹ Thus, the dumping of the wastes which causes the groundwater pollution has come under the regulatory jurisdiction of pollution control board.

Clause 3(xi) of Coastal Regulation Zone Notification, 2011 framed under the Environment Protection Act, 1986 also prohibits the groundwater withdrawal within 200 meters of high tide line. Similarly, the Hazardous Waste (Management and Handling) Rules, 1989 framed under the Environment Protection Act have conferred on pollution control boards, the

⁸ *Ibid*

⁹ Section 25 of the Water Act as substituted by the amendment of 1988

power to grant authorisation for the activities connected with disposal of hazardous wastes but these rules are silent on the question whether the board should consider the various effect of hazardous waste on groundwater before it grants authorisation for disposal in a particular locality.¹⁰ Rule 5 of Hazardous Waste (Management and Handling) Rules 1989 empowers the Board to issue authorisation after the Board is satisfied that the operator of a facility or an occupier, as the case may be, possess the appropriate facilities, technical capabilities and equipment to handle hazardous waste safely. Rule 6 empowers the Board to cancel the authorisation or suspend it, if, in its opinion, the authorised person has not complied with the conditions of authorisation. By invoking the constitutional scheme of legislative powers on water, certain states have formulated groundwater legislations in India. The states of Andhra Pradesh, Bihar, Goa, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Puducherry, Tamil Nadu and West Bengal have formulated legislation on groundwater conservation. Apart from these legislations states of Uttar Pradesh and Chhattisgarh has framed bills in this regard. The nomenclature of Haryana and Punjab Sub-Soil water Act (The Haryana Preservation of Sub-Soil Water Act, 2009 and The Punjab Preservation of Subsoil Water Act, 2009 respectively) seems to be broader but in fact, both these laws prohibit the sowing of paddy before the notified date. The Gujrat Irrigation and Drainage Act 2013 incorporates the licensing system to draw the under groundwater for agricultural purposes. While at the same time this enactment keeps silence regarding the groundwater extraction for commercial purposes. Moreover, there is no unified format on all these state legislations even though the central government has framed model framework for the states to adopt. But that very framework has undergone the revision and the major drawback is that most of these legislations are applicable to the notified areas only. This Groundwater law framework in the country as it prevails today is firmly located in the unsustainable legal frameworks on natural resources.¹¹ This represents an instrumental blindness towards groundwater.

Since groundwater is the primary source of drinking water, its nexus with the right to safe drinking water as fundamental human right is also indispensable. As 85% of rural water supply programme in India depends on ground water as the source, effects on health of rural population

¹⁰ P. Leelakrishnan, *Environmental Law in India*, (3rd edn, Lexis Nexis, 2012) p.169

¹¹ M.S. Vani, *Groundwater Law in India*, in Ramaswamy R.Iyer (ed), *Water and the Laws in India* (1st edn, Sage 2009) p. 439

due to such contamination is a matter meriting serious attention.¹² Thus the conservation and management of groundwater form part of basic human right and fundamental right also, which has been recognised by the Indian judiciary¹³ and international community¹⁴ at several instances. These interventions at the international, national and state levels at one level reflects the inadequacy of concerted efforts to address the issue of depletion and contamination of groundwater but another level point to the growing concern at multiple levels on the problem.

i) Judicial Response

The recognition of rights over the underground water has evolved through the customary rights that have been later adopted by the common law through judicial pronouncements. In *Acton v. Blundell*¹⁵, The Court of Exchequer Chamber held that the land owner owns everything below the surface of his land so that regardless of the effect on other owners, he may take and dispose of whatever lies beneath including underground water. This decision was based on the Latin maxim '*Cuius est solum, eius est usque ad coelum et ad inferos*' which means that the owner of the soil also owns to the heaven and the lowest depth. Thus, the legal position as clarified in *Acton v Blundell* is that there is no easementary right in groundwater but rather access to groundwater is a right attached to the land.¹⁶

The common law recognises the right of the land owner to appropriate or divert the groundwater from his land upon a restriction that the land owner shall not cause any damage to water flowing in a defined channel.¹⁷ In *Grand Junction Canal Co. V. Shugar*, Lord Hatherley pointed out that 'if you cannot get at the underground water without touching the water in a

¹² Planning Commission of India, *Groundwater Management and Ownership*, (Report of the Expert Group 2007) p.11, <http://planningcommission.nic.in/reports/genrep/rep_grndwat.pdf> accessed on 02 December 2015.

¹³ In *Subhash Kumar v. State of Bihar* AIR 1991 SC 420 and in *Charan Lal Sahu v. Union of India*, 1990 (1) SCC 598, the Supreme Court of India held that right to pollution free water is a fundamental right that comes under the purview of Article 21 of the Constitution.

¹⁴ United Nations General Assembly, [UN Doc. A/RES/ 64/ 292 (2010)] <<http://daccess-dds-un.org/doc/UNDOC/GEN/N09/479/35/PDF/N0947935.pdf?OpenElement>>accessed on 4 December 2015

¹⁵ (1843) 12 M & W 324 , 152 Eng Rep 1223

¹⁶ Frederick Peacock, *The Law Relating to Easements in British India* (Calcutta: Thacker, 1904) as cited by the Planning Commission's Working Group in its Report on Draft Model Bill for the Conservation, Protection and Regulation of Groundwater <http://planningcommission.nic.in/aboutus/committee/wrkgrp12/wr/wg_back.pdf> 15 November 2015

¹⁷ Sujith Koonan, *Groundwater- Legal Aspects of the Placimada Dispute*, in P. Cullete , A Gowllad Gaultieri, R Madhav & U Ramanathan (eds), *Water Governance in Motion: Towards Socially and Environmentally Sustainable Water Laws* (1st edn, CUP 2010) p.171

defined surface channel you cannot get at it at all. You are not by your operation or by any act of yours, to diminish the water which runs in a defined channel.’¹⁸ This view of Lord Hatherly reflects the common law concept of water extraction rights upon groundwater passing through undefined channel. The Indian judiciary has responded in an assorted manner to the issues concerning the rights of groundwater. It has adopted both common law aspects and the dimensions of statutory provisions in the Easement Act. In *Mst. Manturabai v. Ithal Chiman*, the Nagpur High Court held that no easement right can be acquired over percolating water unless it runs in a defined stream.¹⁹ Common law contemplates a distinction between underground percolating water and underground running stream and the Indian judiciary has differentiated this in the case of *Mahomedans of Lonar v. Hindus of Lonar*²⁰. In this case, the Nagpur High Court held that as far as percolating water is concerned, they are deemed to constitute part and parcel of the land in which they are found, and accordingly such waters belong to the owner of such land. But in *Malayam Patel v. Lakka Narayana Reddy*²¹, Madras high Court held that there is only a right of use as it passes and no ownership in the absolute sense. In this case the court also held that an agricultural custom whereby a subterranean stream is tapped at certain points by inhabitants of certain villages is perfectly valid and the English rule against the existence of rights in underground waters as well as the Section 17 (d) of the Indian Easement Act, 1882, would have no application because it is prohibitory of prescriptive rights and not custom.²²

In *M.C. Mehta v. Kamal Nath*²³ the question of public trust doctrine related to the groundwater came before the Supreme Court of India. In this case, the apex court took a view that the public trust doctrine primarily rests on the principle that certain resources like air, sea, water and the forests have such a great importance to the people as a whole that it would be wholly unjustified to make them a subject of private ownership. The said resources being a gift of nature, they should be made freely available to everyone irrespective of the status in life. The doctrine enjoins upon the government to protect the resources for the enjoyment of the general public rather than to permit their use for private ownership or commercial purposes. And in this

¹⁸ (1871) 6 Ch. A.483

¹⁹ A.I.R. 1954 Nag. 103

²⁰ AIR 1945 Nag.106

²¹ AIR 1931 Mad. 284

²² N.S. Soman, *Legal Regime of Underground Water Resources*, <<http://www.ielrc.org/content/e0821.pdf>> accessed on 29 November 2015

²³ (1997) 1 SCC 388

case, the court declared that the public trust doctrine is a part of the law of the land. The court adopted the view of Professor Sax on restrictions imposed by the public trust on governmental authority. The following are the three types of such restrictions:

- i) the property subject to the trust must not only be used for a public purpose, but it must be held available for use by the general public
- ii) the property may not be sold, even for a fair cash equivalent;
- iii) the property must be maintained in particular types of uses

But in this case, unfortunately, the Supreme Court of India extended the notion of public trust only up to the running surface water. This tendency of treating surface and ground waters separately implies that the principles that apply to surface water do not necessarily extend to groundwater.²⁴ In *State of West Bengal v. Kesoram Industries*²⁵, The Supreme Court restricted the power of the State to grant any right in relation to deep underground water. In this case the court held that the deep underground water belongs to the State in the sense that doctrine of public trust extends thereto. Holder of a land may have only a right of user and cannot take any action or do any deeds as a result whereof the right of others is affected. In *M.C. Mehta v. Union of India*²⁶, the court directed the government to constitute Central Ground Water Board as an Authority under Section 3(3) of the Environment (Protection) Act, 1986. The division bench of the Kerala High Court while deciding an appeal from the single bench in the Plachimada case²⁷ stated that, “a person has the right to extract water from his property, unless it is prohibited by a statute. Extraction thereof cannot be illegal. We do not find justification for upholding the finding of the learned Judge that extraction of ground water is illegal. It is definitely not something like digging out a treasure-trove. We cannot endorse the finding that the company has no legal right to extract this 'wealth'. If such restriction is to apply to a legal person, it may have to apply to a natural person as well.” In this way, the Kerala high Court has squandered the chance to declare the responsibilities of the corporate in the utilisation and management of the natural resources. However, this matter is now pending before the apex court.

²⁴ Philippe Cullet, *Water Law, Poverty and Development*, (1st edn, OUP 2009) p.126

²⁵ (2004) 10 SCC 201

²⁶ (1997) 11 SCC 312

²⁷ *Hindustan Coca Cola beverages Private Limited v. The Perumatty Grama Panchayat and Ors.* 2005 (2) KLT 554

Mainly the common law rules on groundwater extraction are based on the lack of knowledge and scientific evidence on groundwater aquifers and percolation. The Indian judiciary's stand over the groundwater issues is not complete. It requires an integrated approach of environmental governance in ensuring the groundwater conservation by applying the legal instruments and principles. Sometimes the interests of the corporate are being protected by the judiciary. The decision of the division bench of the Kerala High Court on Plachimada Coco Cola Plant is an example in this regard. In the absence of clear laws, rules and regulations to guide the courts, judgments are ad hoc and have a limited term of relevance and because of the same reason, contradictory judgments are being framed from the courts.²⁸

Water Conservation: Contemporary Approaches and Legal and Policy Interventions

At present, several factors necessitate the need for a national water law framework. The report on groundwater of Lok Sabha Standing Committee on water resources has recommended the central government to take steps to build a national consensus to bring water either in the Union List or the Concurrent List.²⁹ The national water policy, 2012 also recognizes that even though the states have the right to frame suitable policies, laws and regulations on water; there is a felt need to evolve a broad overarching national legal framework of general principles on water to lead the way for essential legislation on water governance in every State of the Union and devolution of necessary authority to the lower tiers of government to deal with the local water situation.³⁰ The National Water Policy of 2012 upholds the need for a National Water Framework Law. The policy further mandates that the framework law should recognise water not only as a scarce resource but also as a sustainer of life and ecology. The water policy of 2012 also recognises the doctrine of public trust particularly the management of groundwater as a community resource to food security, livelihood, and equitable and sustainable development for all. It directs the modification of the existing statutes to achieve this objective. But at the same time the policy recognises the need for comprehensive legislation for optimum development of

²⁸ A. Vaidyanathan, Bharath Jairaj, *Legal Aspects of Water Resource Management*, in Ramaswamy R. Iyer (ed.), *Water and the Laws in India*, (1st edn, Sage 2009) p.5

²⁹ Lok Sabha Standing Committee on Water Resources, *Augmentation of Depleted Groundwater Level, Sustainable Development, Conservation, Management, Use of Groundwater and Prevention of Water Pollution*, (10th Report, Lok Sabha Secretariat, 2011) < <http://ielrc.org/content/e1117.pdf> > accessed on 28 November 2015

³⁰ National Water Policy of 2012 < <http://mowr.gov.in/writereaddata/linkimages/NWP2012Eng6495132651.pdf> > accessed on 30 November 2015

inter- State rivers and river valleys to facilitate inter-State coordination ensuring scientific planning of land and water resources taking basin/sub-basin as unit with unified perspectives of water in all its forms (including precipitation, soil moisture, ground and surface water). The policy also calls for a platform at national level to evolve consensus, co-operation and reconciliation amongst party States and the establishment of a permanent Water Disputes Tribunal at central and state levels. It gives attention to constitute a National Water Informatics Centre to collect, collate and process all water related data regularly from all over the country, and to maintain it in open and transparent manner on a GIS platform.

Even before the framing of such policy, in 2005, the Expert group on groundwater management and ownership, constituted by the Planning Commission of India submitted its report stating that the land owner has a limited right which extends only up to the use or exploitation of groundwater to the extent to which it is not causing depletion in the groundwater levels so that the similar rights of the adjoining land owners and public at large are not encroached upon since this natural resource is meant for public use and it should not be allowed to be exploited beyond replenishable level.³¹ But a strong inclusion of this substantive argument is missing in the National Water Policy of 2012. In 2011, the Sub-group on Legal Issues Related to Groundwater Management and Regulation of the Planning Commission of India headed by Prof. Philippe Cullet had prepared the draft model bill for the conservation, protection and regulation of groundwater to be adopted at State level. It recognises the principle of subsidiarity. It prioritises the water use and provides demarcation of groundwater protection zones. This model bill advocates more effective regulatory mechanisms and methods by setting up of different forums and affirms the importance of local level governance. It also imposes higher liability alongside calling for dispute resolution mechanism and ensures the role of panchayats and municipalities in it. But the state governments have not taken any steps to address these aspects till now. This circumstance, in fact, necessitates central legislation on groundwater conservation in India.

At the same time, the Sub-group on National Water Framework Law set up by the Planning Commission's Working Group on Water Governance for the Twelfth Plan headed by

³¹ Planning Commission of India, *Groundwater Management and Ownership*, (Report of the Expert Group, 2007) p.23

Mr. Ramaswamy R. Iyer was constituted and assigned with a mandate to prepare a draft national water framework Act. Subsequently, the Sub-group has submitted its draft national water law framework Act in 2011. The explanatory note to this framework law itself recognises the link between surface and ground waters. This draft national water law framework Act prepared by the Planning Commission's working group in 2011³², recognises the inter-relation between the surface water and groundwater especially in the areas of river basin. It further directs that the extraction of groundwater in the river basins should be undertaken with due regard to the hydro-geological and ecological characteristics and features of the aquifer as a whole. The explanatory note to the draft national water framework Act points out that if a national law is considered necessary on subjects such as environment, forests, wildlife, biological diversity, etc., a national law on water is, even more, necessary. It further states that even though the water is a State subject under the Constitution of India, but it is an increasingly important national concern in multiple contexts. This explanatory note to the draft national water framework Act counts the following concerns that necessitate a national water law framework:

- i) the right to water being a part of the fundamental the right to life
- ii) the perception of a water crisis because of the mounting pressure on a finite resource
- iii) the inter-use and inter-State conflicts that this leads to, and the need for a national consensus on water-sharing principles, and on the arrangements for minimising conflicts and settling them quickly without resort to adjudication to the extent possible
- iv) the threat to this vital resource by the massive generation of waste by various uses of water and the severe pollution and contamination caused by it
- v) the long-term environmental, ecological and social implications of efforts to augment the availability of water for human use
- vi) the equity implications of the distribution, use and control of water equity as between uses; users; areas; sectors; States; countries; and generations
- vii) the emerging concerns about the impact of climate change on water and the need for appropriate responses at local, national, regional, and global levels.

³² The Draft National Water Framework Act prepared by the Subgroup on a National Water Framework Law set up by the Planning Commission's Working Group on Water Governance for the Twelfth Plan < http://www.planningcommission.nic.in/aboutus/committee/wrkgrp12/wr/wg_wtr_frame.pdf> accessed on 16 December 2015

The 12th five-year plan also marks the urgent need for a national water law framework. The Twelfth Five Year Plan Document, approved by the National Development Council at its 57th meeting held on 27th December 2012, highlights that the different State Governments tend to adopt different positions on the rights of different States over the waters of a river basin that straddle more than one State and such legal divergences tend to render the resolution of inter-State river-water conflicts even more difficult than they already are. The plan document also desires to have a national statement of the general legal position and principles that governs such cases. The Twelfth Plan document adopts the view of the Ramaswamy Iyer Committee's opinion that if a national law is considered necessary on subjects related to the environment, forests, wildlife, biological diversity, etc., a national law on water is, even more, necessary since water is that much of basic in nature. This Plan document has placed the importance of water resource conservation at a higher footing with an urgent need to take steps on groundwater conservation at national level.

The report of the Committee for Drafting of National Water Framework Law, constituted by the Ministry of Water Resources on 3rd July 2012, which submitted its report in May 2013³³, found that the Draft National Water Framework Law prepared by the Sub-Group (as part of the Working Group on Water Governance) set up by the Planning Commission emphasized water as sustainer of life and part of heritage and ecology. The report finds that the draft law prepared by the Sub-Group stipulated ideal propositions but lacked stipulations for actions by Central / States Governments. It was clarified that the proposed national water law by the Sub-Group was not intended to centralise water management or to change the Centre-State relations in any way. It proposed a framework law, i.e., an umbrella statement of general principles governing the exercise of legislative and/or executive powers by the Centre, the States and the local governance institutions.

From the long title of the Draft National Water Framework Bill, prepared by the drafting committee of the Ministry of Water Resources in 2013, it is clear that the draft bill aims to establish a framework with governing principles for protection, conservation and regulation of waters and for matters connected therewith and incidental thereto. The definition of water under this bill includes both surface and groundwater resources. The Preamble of the Draft National

³³ Available at < <http://www.wrmin.nic.in/writereaddata/linkimages/nwfl1268291020.pdf>> accessed on 04 December 2015

Water Framework Bill recognises that the water is a limited natural resource and States have the right to frame suitable policies, laws and regulations on water. It further recognises that the Constitution of India provides for devolution of powers and responsibilities with regard to some of the water related services to Panchayats and Municipalities. It states that the different State legal interventions need to be to within a framework of governing principles for protection, conservation and regulation of waters so as to bring about the prudent, wise, equitable, socially just, conflict-free, efficient, and sustainable management of water. Further it justifies the need about National Water Framework Law stating that it is an umbrella statement of general principles governing the exercise of legislative and/or executive powers by the Centre, the States and the local governing bodies. This view is being taken on the basis of the National Water Policy of 2012.

The draft National Water Framework Bill, 2013 integrates the aspects of land use and the availability of water. It reflects the view that the water-use decisions shall have due regard to the land use appropriate to the relevant area. It also underpinned the need for a precautionary approach. From the critical analysis of the provisions of the 2013 Bill, it is clear that it fails to draw a clear substantive directive to govern the water resources. It also vests the powers upon States to manage groundwater conjunctively with surface water based on the interconnections between aquifers or between an aquifer and a body of surface water, as well as any impact on aquifers caused by activities within the States jurisdiction. Its remarkable pith is that it recognises the water as community resource and promotes the community regulations upon the extraction of groundwater with due regard to the hydro-geological and ecological characteristics and features of the aquifer as a whole. Apart from these aspects, Clause 14 of the National Water Framework Bill, 2013 provides the aspects of Industrial Water Management. According to this, industries in water-short regions shall be allowed to either withdraw only the makeup water or have an obligation to return treated effluent to a specified standard back to the hydrologic system. It also incorporates the aspect of water returns on Major water using industries and businesses consuming water more than one Million Cubic Meter in a year. The 'water returns' contains information, such as, water utilisation per unit produce, effluent discharge details, rain water harvested, water re-use details and fresh water consumption. The following are the other aspects on groundwater management as contemplated in the draft bill prepared by the drafting committee constituted by the Ministry of water resources:

- i) Regulating the use of electricity used for groundwater extraction
- ii) Identification of critical natural recharge areas of an aquifer and those areas that require special attention with regard to the recharge of groundwater and including areas that are affected by contaminants and saline water ingress.
- iii) Protection and conservation of critical natural groundwater recharge areas.
- iv) The appropriate Government and local Authority shall take all possible measures to protect and improve the quality of groundwater, including measures for prevention of pollution and for remediation from groundwater contamination.
- v) Introduction of licensing mechanism for mining and industrial activities to protect the quality of groundwater
- vi) The appropriate Government and local Authority shall keep all groundwater related information, such as, groundwater levels, water quality, local aquifer maps and groundwater utilization, in public domain.

The provisions of basic principles of water management as formulated by the Draft National Water Framework Bill 2013, recognises water as a public trust and state as a trustee. It further directs that the planning and management of water resources shall be integrated appropriately with the management of all resources and shall take into account in an integral manner the local, regional, State and national needs. The recognition of decentralised local rainwater-harvesting and micro watershed development initiatives, standardized water foot prints for every activity or product and right to potable water even at times of privatisation of any services related to water and the establishment of web based Water Resources Information System maintained through a National Water Informatics Centre are some significant steps incorporated in the National Water framework Bill. This draft bill also calls for the adoption of economic incentives and penalties to ensure water quality and quantity.

National Water Law Framework and Groundwater Conservation in India: The Way Ahead

Even after acknowledging the need for a national water law framework and the role of groundwater as a major source and its indispensability in water resource conservation, the planning commission's proposal lacks a well defined framework to govern the aspects of groundwater. This is mainly because of the distribution of legislative powers and the existing

centre-state relations. The policy guidelines on groundwater conservation framed by the Planning Commission called for the constitution of National Water Commission at central level and Water Resources Regulatory Authority at the state level.³⁴ But this proposal and mechanisms under draft model bill of Planning Commission cannot be in motion unless the state governments have a common consensus since water is an entry of List II to the Schedule VII of the Constitution of India where States have the privilege to enact laws. This question of legislative competency of centre and existing disputes between states, especially on river water, is a challenge to build up binding obligations and regulations on groundwater conservation in all necessary levels. The centre can also invoke the power conferred under Section 3(1) under the Environment Protection Act, 1986 to frame rules and regulations for the effective environmental governance. The High Court of Delhi has also opined that the Environment Protection Act, 1986 is sufficient to protect the ground water.³⁵ The contradictory view from the judiciary is often generated by the vacuum persisting in the area of regulation and control of groundwater extraction and contamination. This varies from the decisions of the benches of the same courts or different courts. The case of Plachimada Coca Cola Plant is an example to this. In this case, the single bench's positive approach over the legality of restricting the Coca Cola Plant in continuing its function has reversed by the division bench of the High Court and the matter is now pending before the apex court.

The Planning Commission's Sub-Group proposed enactment of National Water Framework Law under article 252 of the Constitution. On the other hand, report of the Committee for Drafting of National Water Framework Law, constituted by the Ministry of Water Resources states that the constitutionality of a national legislation is self-evident if the Parliament could enact the River Boards Act, The Inter-State Water Disputes Act, and the Water (Prevention and Control of Pollution) Act. It also recognises the fact that right to water is part of right to life with consequent obligations on the State also adding the constitutionality. But it lacks in finding a clear legislative mandate under the constitution as well as the provisions for groundwater regulations. As far as the enforcement of the provisions, this draft water framework bill also directs the States to enact laws and regulations to accomplish the purposes of the bill.

³⁴ Planning Commission of India, *Faster, More Inclusive and Sustainable Growth*, (Twelfth Five Year Plan, Vol. I, 2013) p.174

³⁵ *M/s Delhi Bottling Co. Pvt. Ltd v. Central Board for Prevention and Control of Water Pollution* AIR 1986 Delhi 152

The Twelfth Five Year Plan Document also states that the idea of a national water law is not something unusual or unprecedented. It mentions the instance of South African National Water Act of 1998 and European Water Framework Directive of 2000 as very enlightening. It admits that the considerations behind those national or supra-national documents are relevant to India as well, although the form of a water law for India will clearly have to be guided by the nature of the Indian Constitution and our specific needs and circumstances. The South African National Water Act, 1998³⁶ recognises water as a scarce and unevenly distributed national resource. The preamble of this law further recognises that the existing discriminatory laws and practices had prevented the equal access to water resources which belong to all people. The European Water Framework Directive³⁷ aims for good status for all ground and surface waters in the European Union. It treats water as a heritage and not as a commercial good. It aims at the protection of available water resources. Monitoring of surface water status, groundwater status and protected areas form part of this directive. The Water Framework Directive stipulates that groundwater must achieve 'good quantitative statuses and good chemical statuses. It aims at achieving good surface water and groundwater status by 2015. The directive also stipulates that the recovery of costs for water services in particular with the polluter pays principle, where lays the warranted legal action framed upon the foundations of sustainability.

The principle of participatory governance should be promoted so as to ensure the enforceable mechanism at local level. Principle 2 of the Dublin Statement on Water and Sustainable Development, adopts the participatory approach on water development and management by involving users, planners and policy makers at all levels. It further clarifies that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of projects. The role of panchayati raj institutions in this regard is very important. The legal framework of the panchayati raj institutions in India empowers them to act in respect of the matters of water management, watershed development, drinking water, health and sanitation and minor irrigation³⁸, Whereas the municipalities have the

³⁶ Act 36 of 1998, passed by the Parliament of the Republic of the South Africa and assented by the President on 20 August 1998 < <http://www.info.gov.za/view/DownloadFileAction?id=70693> > accessed on 12 December 2015

³⁷ European Water Framework Directive of 2000 < <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2000:327:0001:0001:EN:PDF>> accessed on 03 November 2015

³⁸ Constitution of India, Schedule XI [Entries 3, 11 and 23]

responsibility on water supply, domestic, industrial and commercial purposes.³⁹ By virtue of this, the local authorities can prepare plans and implement schemes which accelerate the groundwater recharge, conservation and safety. The local authorities can even deny the license to operate the machinery which extracts excessively and contaminate groundwater.⁴⁰ Apart from infusing the existing institutions with newer orientation and responsibilities, it is also important to use some of the programmes that have extensive reach for this purpose. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) under rural employment programme would be something that could be factored in. The local self-government institutions could direct MGNREG scheme towards efforts at wetland management, rain water harvest and water conservation. This would not only enhance the groundwater recharge but also disseminate awareness among people. Recently the government has taken into account of these factors for the better implementation of the MGNREG scheme.

The disposal of effluents is also to be monitored at the local level so as to avoid the contamination of ground water. The close integration of the legal provisions regarding environment protection, prevention and control of water pollution, hazardous waste management and handing, disposal and storage of hazardous chemicals, etc. are needed. Regulations are necessary for conservation and management of groundwater and to fix liability upon the violators. Inter alia, recycling of water, reducing the demand for water and land utilisation plans and cultivation pattern are also to be addressed by the policy makers and the general public. The governments should focus on policies in order to attain the goal of sustainable development with the backup of green economy and should not be driven merely by the conventional indicators of economic growth/ development. Moreover the rainwater harvesting is primarily conducted on land surfaces, groundwater legislation also needs to be linked organically to land use laws that regulate the use of public as well as private lands.⁴¹ The usage of electricity for extracting groundwater should be priced. The usage of high power pumping machines should be brought under a licensing mechanism.

³⁹ Constitution of India, Schedule XII [Entry 5]

⁴⁰ By invoking the provisions of Kerala Panchayati Raj Act, 1994, and rules made thereunder, Perumatty Grama Panchayat in Kerala has denied the license for the equipment of Coca Cola Company which extracted a huge amount of water and caused the groundwater depletion and quality.

⁴¹ M.S. Vani, 'Groundwater Law in India' in Ramaswamy R. Iyer(ed.), *Water and the Laws in India* (1st edn, Sage 2009) p.439

In order to enact the national water law framework, the central government can take initiatives to appeal the state governments regarding the need of a central legislation backed by the resolution of State legislature under Article 252(1) of the Constitution. This procedure was followed in enacting the Water Act in 1974. The Parliament can also make law under the conditions prescribed in Article 249, but this option is not feasible since, it provides more burdens on Council of States to pass resolutions in every year with special majority to give effect to such enactment. The Constitutional amendment to incorporate water in union list or concurrent list under Article 368 also a complex process since it needs special majority in the parliament and the ratification of half of the legislatures. The central legislation on groundwater can be formulated under Article 253 even though water is an entry in the List II of the Schedule VII of the Constitution. The legislation made under this provision can be the most viable one since the process under Article 249 or Article 252 or Article 368 of the Constitution are complex in nature. The Article 253 can be invoked to enact laws relating to groundwater conservation to give effect to the commitments made by India at Stockholm during United Nations Conference on Human Environment, 1972 and in other international fora. The Principle 2 of the Stockholm Declaration calls for the measures to be adopted by the parties to conserve the natural resources including water through careful planning or management. Thus, the legal intervention for groundwater conservation at national level will be justified through this. Moreover the official announcement of the ongoing International year of water cooperation, also states that this year's objective includes the identification of burning issues on national and international legal framework on water.⁴² The ongoing United Nations Decade for Action, "Water for Life" (2005-2015)⁴³ will also provide a threshold to the legislative competency to the parliament to give effect to the international commitments.

Any of the initiatives on groundwater conservation at national level having legislative competency should be aimed at framing regulations, liability, technological advancement and cooperation in the effective management of groundwater along with the local level implementation mechanism so as to attain sustainable water resource management. The policy and law should address the issues of geographical and regional peculiarities. The adoption of

⁴² 2013-United Nations International Year of Water Cooperation- Official Announcement < <http://www.unwater.org/downloads/216005e.pdf> > accessed on 03 December 2015

⁴³ United Nations General Assembly Resolution 58/217, 9 February 2004
< http://www.gdrc.org/uem/water/decade_05-15/N0350754.pdf > accessed on 20 December 2015

scientific methods and technology should be in such a way that to suits the arid, coastal, wetland, forest or mountain region or valley as the case may be. The national legislation should aim to constitute central and state level Groundwater Authorities to formulate and coordinate the scientific aspects of groundwater conservation and preventive aspects of contamination. The local level mechanisms to govern the groundwater conservation should be constituted as that of the draft model bill of 2011 prepared by Planning Commission. The monitoring and dispute resolution mechanism should also to be constituted at the local level. The disputes relating to inter-district level should be dealt by the concerned State level adjudication mechanism while recognising the jurisdiction of National Green Tribunal. The traditional approach of the judiciary which confined to settle the disputes over the claim of entitlement and utilization of water has also needed to be changed and transformed. The judicial imperative is to recognise the right to safe drinking water, and its interventions should go beyond imposing liability upon the polluters and depleters, taking concrete steps as part of judicial discharge of duties to ensure responsive environmental governance in relation to the groundwater crisis. It should also direct the policy makers to act in tandem with such a new environmental consciousness on groundwater resources.

Conclusion

To achieve the sustainability in groundwater as defined by the United States Geological Survey, the utilisation of groundwater should be in such a way so that it can be maintained for an indefinite time without causing unacceptable environmental, economic or social consequences.⁴⁴ Water being a diminishable and contaminate resource, a new environmental consciousness and agenda that ensures its revitalisation and purity need to be in place at a time when demographic and industrial pressures on water are higher. Any deviation from this mode of utilisation and management will cause irreparable damage to humanity and eco system. Hence, it's high time to have a strengthened legal framework on conservation, management and utilisation concerning the ground water at national level since groundwater is a least addressed and most exploited, depleting and contaminated natural resource in the era of resource exploitation for personal and commercial benefits.

⁴⁴ As defined by United States Geological Survey, cited in Planning Commission of India *Groundwater Management and Ownership*, (Report of the Expert Group 2007) 2 < http://planningcommission.nic.in/reports/genrep/rep_grndwat.pdf> accessed on 17 November 2015.

