

A Critic on the Legal Framework of Ownership Rights Over Underground Water Resources

Ms. Sahithi Mithra

Student, School of Law, Christ University, Bengaluru

Abstract

In the recent times, there have been a lot of debates and discussions regarding the ownership rights over underground water as it can be neither private nor public property. In India, there is no central water law on conserving the underground water resources, rather, as per the legal framework the allocation of land which in turn given the issue of groundwater management a strong property focus. Through this it can be derived that although the "owner" is given various rights, the state retains control over the topmost strand of the bundle. Due to the absence of explicit ownership rights, there is no clear rights or liabilities imposed neither on individuals nor on state. It is rising numerous concerns of unequitable access and mismanagement of the groundwater resources. Moreover, not protecting the landowner against unreasonable usage of ground water which is leading to non-sustainable approach. This paper aims to analyse the existing legal and policy framework revolving around the land ownership and authority in control of groundwater as a property and provides the reader with a critical perspective on the current regime and a way forward. Further, this paper also focuses on the United States legislations and compare with Indian legal regime in respect to property and ownership rights on groundwater resources.

Keywords: ownership rights, underground water resource, private and public property, legal framework, non-sustainable approach.

Introduction:

Groundwater resources are most prominent fresh water resources which are obtained through seasonal rainfall and stored in aquifers, which are the main source for storing and transmitting these resources to wells and also these are the only source of water left after contamination of surface water. Further, these resources are utilized for various activities from domestic to industrial and mining activities-in almost all sectors of production. In these decades, these resources are over utilized and over exploited which is leading to drying of aquifers and depletion of water tables. Moreover, even if the groundwater can be generated still aquifers which are the source for it are polluted and contaminated due to over exploitation. This led to alarming situations in international wide in order to protect these resources. This paper concern about whether the groundwater resources need to be placed in

private or public ownership. As a common resource, equitable access should be provided with state regulations. But these regulations are restricted to particular domine and there is no central legislation in regard to this, but only state legislations in Indian perspective. But still most of the state legislations incorporated promotes public ownership. In United States, there are state legislations with different doctrine promoting public or private or co-relative ownership. The researcher mainly focuses on determining which nature of ownership is suitable in Indian perspective. For this, the researcher mainly focus on the jurisprudential analysis of private and public ownership in Indian perspective. Secondly, examine Texas and California states' framework on these resources. as these are the main two states in US which are over-exploiting these groundwater resources.

Literature review:

1. Canseco, Susana Elena. "Landowners' Rights in Texas Groundwater: How and Why Texas Courts Should Determine Landowners Do Not Own Groundwater in Place." *Baylor Law Review*, vol. 60, no. 2, 2008, pp. 491-526:

This paper examines is in regard to judicial interpretations done in jurisdiction of Texas, mainly cases related to the private absolute ownership on groundwater resources and 'Rule of capture' along with the exception of this rule. This is helpful to the researcher to examine the various interpretations taken by the court on case-by-case approach and also helpful to understand the loopholes in respect to the absolute ownership on groundwater resources.

2. Thomas H. Bruggink, Third Party Effects of Groundwater Law in the United States: Private versus Common Property, *The American Journal of Economics and Sociology*, Jan., 1992, Vol. 51, No. 1 (Jan., 1992), pp. 1-17, <https://www.jstor.org/stable/3487647>:

This paper examines the different doctrines used in United States (according to state-wise) to examine the property rights over groundwater resources. Further, it also examined the common property problems and their effects on third parties. This is helpful to researcher to understand the effects of usage of private and public ownership doctrine In United states.

3. Torres, Gerald. "Liquid Assets: Groundwater in Texas." *Yale Law Journal Forum*, 122, 2012-2013, pp. 143-166:

This paper explains about the groundwater management and the limits or regulations imposed on state waters of Texas. The researcher able to analyse the ownership of groundwater resources and their management. Further, it is helpful to understand the EAA act and its loopholes.

4. Connelley, Chris. "The Inconvenience in Texas Groundwater Law." *Houston Law Review*, vol. 46, no. 4, 2009, pp. 1301-1344:

This paper analyses the historical legislative framework of regulation of groundwater

resources in Texas. This source is helpful for analysing the historical background of absolute private ownership over groundwater resources and also the criticism on common law doctrine.

5. Shadwick, Lana Shannon. "Obsolescence, Environmental Endangerment and Possible Federal Intervention Compel Reformation of Texas Groundwater Law." *South Texas Law Review*, vol. 32, no. 3, 1990-1991, pp. 641-706:

This paper explored in the aspects into administrative framework of Texas and discussion in respect to how absolute ownership rule will violate environmental laws.

6. Das, Chandrani. "Water Pollution in India: An Overview of Existing Statutory Frameworks in Management of Ecosystems." *Indian Journal of Law and Justice*, vol. 5, no. 2, September 2014, p. 137-151:

This paper explores the laws and legislations in international arenas as well as India governing groundwater resources. Also, discusses about the different groundwater pollution authorities and judicial precedents. This gives an idea about the legislative and judicial framework over groundwater resources.

Research Question:

How the ambiguity in nature of ownership and property rights over groundwater resources leading to over-exploitation of these resources?

Claim Statement:

The ambiguity in implication of private or public ownership and inadequacy of Indian state legislation leading to depletion of water tables and causing inequitable access to groundwater resources.

Research Problem:

For determining the nature of ownership which can be applicable to Indian perspective there is so much ambiguity which must be resolved. This is to reduce over-exploitation and over-utilization of groundwater resources and to promote sustainable approach to these resources.

Research Methodology:

The evaluation methodology used to establish this research paper is mostly doctrinal in nature. The scope of the examination is limited to necessary and supplemental sources. Indian statutes, laws, ordinances, precedent judgements, international conventions, few books, journals, internet articles, and productions have been mentioned in order to learn more about the subject.

Scope and Limitation:

1. This research paper is inclusive of jurisprudential aspects, Indian judicial cases, laws and judicial precedents of India and United States to substantiate my arguments in relation to nature of ownership over groundwater resources.
2. This paper is limited to state legislation (in general), judicial precedents in Indian perspective and only include legal framework of Texas and California of groundwater resources.

Groundwater as a property: Jurisprudential analysis

All material things belonging to a person is termed as property and through this the person's proprietary rights are derived. In this sense, groundwater is a material movable thing, which is transferrable or inheritable along with land. Further, '**Rule of ad coelum**' which is derived from the English jurisprudence mentions that 'Landowners are allowed to make complete ownership claims all the way to the earth's centre.' This implies that it includes the total volume of groundwater, including everything between the surface and the aquifers' bases. An owner of a land interest has a property right that reaches both above and below the earth's surface.

Right in rem and right in persona:

The landowner's right over the property consists of right in rem and right in persona. Proprietary rights in rem of the landowner towards groundwater resources is considered as against the whole world which implies that the landowner have unrestricted right to even either over-exploit or degrade its quality, which is underneath the land, without any interference. This is indeed referred in Indian easements Act which is derived from common law principle.

As per proprietary rights in persona, the landowner of a groundwater resource imposed with a duty upon him that he shouldn't exploit the adjacent land resources. For example: If person 'A' owns a land along with underneath resources that must not be interfered by the other adjacent landowner by drawing more groundwater purposes. Therefore, landowners doesn't have absolute rights over groundwater resources.

Violation of equitable rights:

As per **Section 7(g) Indian Easements Act**, landowner who owns the land have the right over groundwater resource underneath it. This violates the equitable right of landless people over the groundwater resources. But the question is rented people are having ownership rights over these resources? Still the tenant can use those resources as his own under the authority of the owner, but then does the groundwater of that land owned by two owners. If one of the owner exploits the resources then can the other owner can be held liable and further can there be equal rights prevailing between them over this resource even when they are in two different capacities.

Because of this specific provision public trust doctrine is not able to be implemented in India as individual owners are claiming owner rights under this legislation. Due to this, the individuals are taking part in various activities in which groundwater resources can either over-exploit or over-utilized.

Absolute rights and liabilities over groundwater resources:

There is controversy prevailing whether Groundwater is absolute right or not which is given to an individual or to an entity. In cases of "M.C. Mehta v UOI" and "Subhash Kumar v State of Bihar", it is mentioned that "Article 21 includes the right to the enjoyment of 'pollution-free water'. This implies that as a fundamental right, the equitable non-degraded groundwater should be equally accessible to every citizen in India. But in later decisions like the coca cola case, it is derived that the coca cola has the right to access of water underneath its property as absolute property right. But this Kerala High court decision is violating equity principle as this given absolute right to coca cola overlooked the equitable access to community as a

whole. This decision is against to Bentham principle of happiness of greater population. Apart from this, even if the court's decision is in favour of the community still it will be unfair on part of plant in respect to its absolute right over resources. Further, in "*Venkatagiri v Karnataka Electricity Board*", the court taken stance of preserving water tables over the farmer's installation of private irrigation bore wells to access groundwater resource.

Thus, it can be understood that absolute right over these resource leads to unequitable access to either parties. In other words, as a absolute right no one should be deprived from accessing that right but in this scenario there is unfair distribution of resources between different sections of Indian society. But this case-by-case approach is taken by Indian judiciary to ensure preservation of groundwater resource and also protect individuals' rights over these resources. Along with rights, there are no liabilities imposed for over-exploitation of these resources. According to Kant, "A thing is rightfully mine when I am so connected with it, anyone who uses it without my consent do me an injury." This implies that if groundwater is exploited from other's land then it can be considered as an injury on part of landowner who drawn groundwater excessively. But neither in Indian legal framework nor in the state legislature, the penal provisions are mentioned. The underlining reason for this is that in few circumstances there will be no evidence of excessively utilization or exploiting of these resources.

Groundwater as a public resource:

These groundwater resources can be considered as common property resource because of its rivalrous and non-excludable nature. This resource is under government control and state is imposed with a duty to protect these resources and ensure its sustainability. This implies that the state is given power to regulate activities in respect with the underground water from over-exploitation and degradation as well as preserving water table. This power is allotted to state through public trust doctrine, state legislatures, judicial precedents and central government laws.

This can't be exclusively a public resource, firstly, due to the existence of private landowners' rights in the presence of Indian easement act protection. Secondly, the state legislations which regulates the

public activities over these resources are restricted to certain dominos and areas and these differs from state to state. For instance, most of the state legislations (derived from model bill) governing groundwater resources restricts the authority to regulate extraction to the extent of notified areas i.e., the areas where there resources are over-exploited. Also, the domine of utilization of these resources for domestic purposes is not regulated by most state legislatures. Thirdly, it is ensured that one person's share is not being excluded for allotting access to other people. But in reality, due to the open access of this resource and absence of property rights leading to more exploitation of these resources as there are no incentives imposed on private individuals. Fourthly, in few instances where state is focusing on state's economic development and ignored environmental concerns, this led to depletion of groundwater and caused degradation. In *M.C. Mehta v UOI* (2018), para 87 case, the Town and Country Planning Department constructed large-scale tourist resorts which caused the disturbance to aquifers (source of groundwater) and effected the water level and quality in Aravalli hills. State of Haryana held responsible for illegal constructions. Fifthly, the access should be restricted in order to promote equitable access to everyone but this violates common right to use the resources.

Public trust doctrine:

This is the doctrine which made groundwater resources as a common property resource in Indian legal system. Indian judiciary interpreted that these resources come under the ambit of 'public trust doctrine'. In "*M.C. Mehta v UOI*", this doctrine is first recognised in legal system with intention to interfere with private ownership rights in order to preserve environmental resources. Further, this disallows any private person to acquire a "vested right to appropriate" over these resources. Further, in a California's **MONO LAKE case**, it is held that duty lies upon the state in respect to regulation of water use for the community's general benefit as part of this doctrine. Later, Supreme Court of India, in *coco cola case*, has neither abandoned the public trust doctrine in favour of development nor equally weighed development with the public's interest in natural resources. This is because the court should overcome sustainable development doctrine and declare that everyone will have access to it, then it raises the issue of unrestricted access to groundwater resources. Further, as part of this

doctrine Texas constitution recognises that national resource conservation should be done by public. They have rights over these resources as well as duty is imposed on public to protect these resources. Therefore, the public trust doctrine is only a reasonable solution to protect environment and individual's interests but not an absolute one.

Groundwater as a private individual source:

These resources came into domain of private property due to the presence of the Indian Easements Act. Once the groundwater flows from beneath the land, the landowners lose all rights to the water, and the groundwater then becomes subject to the rights and interests of neighbours landowners as it had been under the previous landowners. Further, there are only judicial interpretations and doctrine of public trust prevail in India to curtail this exploitation, which are also not indeed effective. Private ownership can promote right to equality in accessing the groundwater resources along with government. But due to recognizing this as a public resource through state legislations restriction are imposed on public access and the usage of these resources are regulated.

There is ambiguity in regard to implication of public or private ownership over groundwater resource. In presence of this ambiguity, there is lack of proper legal framework in order to regulate these resources. Ultimately, the inadequacy of regulations leading to more of exploitation of groundwater resources.

II Analysing the landowners absolute ownership: Texas legal framework

In United States, as similar to India, the underground water legislations differs from state-to-state. As per United States Geological Survey, around million gallons per day of underground water is utilized in United States. Further, Texas and California are the states where the groundwater resources are over-exploited.

In Texas, surface water is considered as state's property and underground water is considered as private property since a century. Further, only when the underground water is drawn, it is considered as exclusive property of the owner but in Texas legal framework even the presence of such resource, the owner of that property is able to gain the right over it.

Basically, on one hand, in India it is neither considered as private nor as a public. On other hand, Texas courts' decisions are based on 'doctrine of absolute ownership' and 'Rule of capture' which is incorporated from common law. Contrary to that, in "Barshop v. Medina County Underground Water Conservation District", the Supreme Court of Texas held 'Edwards Aquifer Act' as constitutional even though it regulates groundwater withdrawals by well. Till date as per the Texas court decisions' there is certain ambiguity prevails in regard to the nature of groundwater property and its ownership. The reason to this that people considered the regulation of underground water as invasion of rights of landowners and courts delivered decisions based on precedents. Thus, Supreme court of Texas tried to impetrate the legislature to lay a regulatory framework in respect to protecting groundwater correlative rights but Texas government rejected as it impedes landowner's vested rights over groundwater resources. In recent decade, during years of drought, the people approved the conservative amendment to Texas constitution and District control groundwaters bodies by considering the protection and preservation of state's natural resources as public rights and duties.

Variation of Texas Judicial decisions:

The Texas groundwater decisions varied from time-to-time by incorporating exceptions to the 'Rule of capture'. In 'Houston & T.C. Ry. Co. v. East' case, the Houston & Texas Central Railway drilled a large well and pumped 25,000 gallons of water per day to provide steam for train engines which led to drying up the neighbourhood well. The Supreme court upheld Rule of capture/ Non-liability rule based on two policies: "(i) Groundwater movement is too secret and occult due to which there is no certainty to regulate legal rules. (ii) Court felt that incorporating correlative rights in determination of groundwater ownership would hinder economic progress." The court decision enables a well's owner to pump as much water as wanted, even if it's taken from beneath someone else's property unless and until he don't commit trespass and directly injure the capacity of groundwater. Actually, this decision of the court is only reflecting the fact of limiting defendant's liability but it is inevitable to separate the significance indirect mentioning of court in regard to absolute ownership. The concerns relating to this case are: (i) In this era, "the storage capacity, rate of replenishment, limit of water tables and

reasonable degree of accuracy" can be detected through various modern technologies" and; (ii) The court concerned about economic progress would be impeded if in case the resources are regulated but in current economic conditions, these resources are being exploited.

In consonance of the above case in the Texas Co. v. Burkett, there is a prevailing 1-year sale contract of water rights between two parties and plaintiff sued defendant on breach of contract. The Court held that the groundwater belongs to the plaintiff as he is the "exclusive owner of the surface of soil".

In Sipriano v. Great Spring Waters of Am., Inc., wherein the defendant negligently drained the wells by pumping 90,000 gallons of water every day, the court rejected the plaintiff claim of replacing rule of capture to reasonable use rule.

The incorporation of absolute ownership over groundwater resources into the legal framework leads to inequitable distribution of resources as in the above cases wherein eventhough the groundwater is drawn illegally which is resulting to unfair utilization of resources. Thus, the courts of Texas brought few legal exceptions under the 'Rule of capture'.

Exceptions:

In case of **City of Corpus Christi v. City of Pleasanton**, the court allowed to waste water during transportation and also mentioned the owner shouldn't wilfully waste water or maliciously injure neighbour. Further, in **Friendswood Development Co. v. Smith-Southwest Industries, Inc.**, when the plaintiff's property damaged due to negligent withdrawal of groundwater by the defendant, the court modified the 'rule of capture' and incorporated negligence as an exception to it. But still Texas courts are adapted to Rule of capture and Doctrine of absolute rights of landowners. Other exceptions are where landowners who waste artesian well water by letting it to run off their property or percolate back into the water table. In a landowner's well, the water is contaminated. No one is permitted to wrongful contaminate groundwater.

The courts' mentioned that only negligence or malice intention can be the only main exceptions to this principle. But it can be argued that eventhough there is no intention to cause damage or injury to

other party still it can be considered under strict liability principle and as in this the above cases the defendants' can be held liable. Further, the Texas Supreme court upheld the Edwards Aquifer Act to put limit on the landowners' private rights and to promote, conserve groundwater resources and to prevent unfair exploitation of resources.

Analysation of Indian State Legislatures and Edwards Aquifer Act on underground water:

This is the legislation prevailing in Texas for regulating groundwater resources along with the Water Conservation Districts Authority. This is the state's legislation promotes conservation, protection and preservation of groundwater resources. Some of the features of this act can be incorporated in states' legislations and even in model bill:

1. The permit regulation under this Act gives preference to "existing users" which includes prior and future landowners. The Authority will renew permits of historic users based on beneficial groundwater usage profile. But in Indian legislations there are no historic users are considered only new users are taken into consideration though it is mentioned in CGWA guidelines. Most of the state legislatures are concerned about the establishments of new wells or drillings but not of exploitation done by domestic wells or small wells and their renewal of permits such as West Bengal groundwater Act.

Domestic wells should be taken into consideration compulsorily because highest percent of groundwater resources are utilized by households after irrigation.

2. This Act regulates in all parts of the state along with District conservation authority. But in most of the state legislations in India only notified areas are taken into consideration and provision on mandatory permit for establishments are concerned with those notified areas and excluded non-notified areas such as West Bengal and Karnataka state legislations.
3. Eventhough the grant of permit regulations are granted in every part of state the permits are restricted to specific purpose such as drinking water is exempted from the requirement of granting of this permit.

These are few provisions or concerns that should be taken into consideration and incorporate in Indian State legislations. Some of the other provisions which must be incorporated in all India state legislations are Individual households utilizations, mandatory reuse or recycle of groundwater by the firms to replenish the resources again.

Analysing the public trust doctrine: California legal framework

California before the drought conditions occurred, the groundwater resources are considered as private property but later it incorporated these resources under public resource domain. In **National Audubon Society v. Superior Court**, California Supreme Court held that "the public trust doctrine is exclusively applicable to states' water rights system" which includes underground water bodies. Further, in the case of "**Environmental Law Foundation v. State Water Resources Control Board**", several groundwater wells have been sunk by local farmers and ranchers, and ever-larger volumes of groundwater have been extracted from those aquifers. Thus, administrative action has been taken by the State Water Resources Control Board to restrict groundwater pumping in the Scott River basin. The court upheld the public trust doctrine as this issue pertains to groundwater extraction that has a negative impact on navigable streams like the Scott River.

Conclusion:

India is not progressed as United States thus absolute ownership doctrine of Texas is not suitable to Indian conditions. Than compared to Texas population Indian population is more and this leads to over exploitation and India for the purpose of economic progress haven't imposed stricter legislations. Further, eventhough the public trust doctrine is suitable approach to deal with groundwater issue still there are drawbacks with this doctrine which must be resolved. The state legislations governing over groundwater resources varies from state to state based on local conditions. But these important provisions such as inclusion of non-notified areas, equal application of similar provisions throughout the state, inclusion of existing wells and granting permits to them and so on. Therefore, firstly, there should be a standpoint provisions which should be incorporated by all state legislations irrespective of the state conditions. Secondly, the resources should be used equally either by individuals or the state. State should arbitrarily impose more restriction on individuals for exploiting groundwater resources on stance of states' economic progress. Thirdly, the central legislation is not suitable in Indian perspective because of different hydrogeological settings and socio-economic situations which are the essentials for sustainable and equitable management of groundwater resources. But still to what extent these doctrines can be applicable in Indian perspective is questionable.

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