

WATER POLICIES AND LEGAL FRAMEWORK IN INDIA

Mohd Shawahiq Siddiqui¹

Abstract

The paper tries to look at the legal frameworks in the water sector in India, from the first laws drafted during British India to the revisions and additions post independence. It talks about the provisions in the law as well as the flaws and omissions and suggests an examination of and strengthening of the existing water laws and policies to address the problems of environment, ecology, equity and development. There is a need to devise an alternative socio-legal discourse and practice where the concerned authorities use organic knowledge of water resource management as seriously as the scientific knowledge, and work a consideration of people's struggles for water resource management as pursuit of human rights.

1. INTRODUCTION

Natural resources (NR) are essential for the survival of all forms of life on planet earth. The unsustainable use of these resources in all forms (due to increase in human population and consequential increase in demand) has intensified the competition for multiple uses of NR leading to limitless depletion². The ever expanding rift between availability and use has resulted in a wide spread threat to the ecosystem. Water policies in the past two decades have focused more on the expansion and physical availability of water without regard to sustainability. This approach has led to poor management of institutional structures and water resources. Current practices in water management may not be enough to meet the water challenges of the next century. There is a need to reexamine these institutional structures.

Water rights in India are closely linked to property rights in land. At an aggregate level, the implication of this is ground water over exploitation. Agriculturally important states in India are witnessing phenomenal fall in water table.³ Traditional water harvesting has taken a back seat. Rural drinking water is an issue. Panchayats have deprived local people of control of traditionally managed tanks and other common pool resources (CPR's).⁴ The paper attempts to highlight the key features in the existing legal framework where gaps and weaknesses in the existing legal system have contributed to the present situations, which are inconsistent with sustainability.

2. WATER POLICIES IN INDIA

This section first focuses on the steps taken prior to 1987 until the first National Water Policy was introduced. Then it examines the existing policies that govern different types of water source in India.

¹ Research Associate Enviro-Legal Defence Firm, Noida, India

² Changes brought about by the technological advancement are adversely affecting Renewable and Non Renewable resources. Renewable- replenished periodically or to some degree by human action e.g. (water and forest) and Non Renewable-are stocks accumulated in geological time and get depleted with use e.g. (land in minerals);

³ In Punjab, the level of exploitation is already at around 98%. Haryana follows with 80%. The situation is also precarious in states such as Rajasthan and Tamil Nadu where the level of exploitation is about 62% and 54% respectively. Several parts of these states have seen a rapid decline in water tables, often implying that water is being 'mined' or extracted at unsustainable rates; TERI Information Monitor on Environmental Science, Vol.2, no.1: relied on Ministry of Water Resources 1994, Govt. of India.

⁴ Under the Panchayat Acts, financial gains from the village resources have not gone to the Gram Panchayat but to government departments up to the administrative hierarchy thus facilitating the control of external agencies over the village resources; India's water crises: Avenues for Policy and Institutional Reform, TERI Vol2.

2.1 Government Policies: A Historical Background

A historical background of the water laws, policies and decisions is provided below:

2.1.1 1866

The British government decided that future irrigation projects would be constructed by the states through their own agencies and financed through public loans. This decision was far ahead of times in the context of existing water crisis and the states claiming their monopolies over it. It was established by the government that the states would not be allowed to come in the way of implementing the best possible solutions⁵. The policies of the British era focused more on the commercial aspect rather than social. The British government classified agricultural works as commercial and non-commercial. The work was deemed commercial if the specified rate of return was available from that particular work by the tenth year of the completion of the project.

2.1.2 The Government of India Act 1935

The act transferred the subject of irrigation from the control of the center to the states. This had a major implication as the center intervened only in cases where there was a dispute between the neighboring provinces.

2.1.3 After 1947

Bengal famine had made food security a major concern. Water development was given priority in view of food security. The era of planned development marked the era of development in the irrigation facility. The need of the people were realized and necessary steps were taken. This contributed to the building of huge infrastructure projects for water storage and development⁶.

In the span of 40 years after attaining independence, no serious attempt was made to formulate comprehensive policy guidelines. There was no well-documented water Policy until 1987. Only certain policy guidelines on flood control existed.

2.1.4 1980

In 1980s, the umbrella body for the management of water in the country was constituted. It was chaired by the prime minister of India and called the National Water Resource Council (NWRC). The council was supported by National Water Board. In 1987, the council finalized the National Water Policy. This document was a comprehensive statement of various policy issues considering the opinion of the states. As state governments also represented NWRC, it was agreed that the state would also support the national water policy. Accordingly, policy documents like the irrigation management policy, policies regarding asset management, policies on operational and procedural change etc were finalized through the NWRC.

A chronology of events in the evolution of the Government Water Policies in India is given below:

1866 The government is given the main role in the irrigation and development

1935 Central government transferred irrigation to the states governments.

1950 Beginning of the planned development

1972 Second irrigation commission report

1980 The Rashtriya Barh Ayog (National Commission on Floods) submitted its report.

1986 Formulation of NWRC

1987 National Water Policy (1987) finalized in the first meeting of NWRC

⁵ Mohile Anil.D. Government Policies and Programs. Oxford Handbook of Water Resources in India.2007

⁶ At present a considerable storage development with a live storage of about 200 billion cubic meters, a gross irrigation of about 90 million hectares, and an installed hydropower capacity of about 30,000 megawatts has been created through water development.

1994 Modified draft of National Water Policy Allocation among states, circulated to the states.
1998 Water sector review by the GOI and World Bank
1999 Second meeting of NWRC considered water allocation and river basin authorizes
1999 Report of the National Commission on integrated water development
2000 Water vision by India Water Partnership
2002 National water Policy (2002)
2004 CPSP India studies by ICID-IAH

2.2 The National Water Policy 2002: Salient Features

National Water Policy 2002 has graduated from the National Policy on Water 1987 (See Table 2: The Matrix depicting the structural changes that have been made in NWP 2002). The main change was the incorporation of the integrated water resource management (IWRM). River basin management was emphasized. The Policy has been reviewed and updated in response to the number of new issues that have emerged over a period of time since its formulation in 1987. NPW 2002 envisages that water is the part of larger ecosystem, realizing the importance and the scarcity attached to fresh water it has to be treated as an essential component for the sustenance of life. The policy recognizes that water is a scarce and precious natural resource and needs to be planned. Thus, it emphasizes developing management strategies for the conservation of water keeping in view the socio-economic aspects and the needs of the states. Ecology is given a rather low priority (4th) but has been indirectly given recognition for its importance for the management of fresh water. The policy states that the management of the quality of the environment and management of the ecological balance should be the primary consideration⁷. The policy envisages the integrated and multi disciplinary approach to planning, formulation, clearance and implementation of projects including the rehabilitation of people and the and command area development. The policy says that the detrimental environmental impacts of the access use of ground water extraction must be taken care of by the centre and the state government⁸. The policy talks about the coordination process for the implementation of the national water policy. Considering the large scale use of water in agriculture and the fact that water rights in India are loosely linked with land rights, policy also talks about the integration of the water use and land use policies.⁹ The central and the state governments are equally responsible for preventing the detrimental overexploitation of water. The Policy takes into account the industries discharging the waste in to the water streams, rivers and other water bodies and says that effluents should be treated to acceptable levels of pollutants before discharging in to the main streams and that the minimum flow should be ensured to maintain the ecology keeping in view the social considerations¹⁰. The policy envisages that all the possible efforts should be made for developing projects to ensure water availability for tribal people and socially disadvantaged sections of the society. The policy is also vocal on the issue of seeking scientific and technical assistance for the water sector development and planning through public private partnership on need basis. However, some of the salient features of the NWP 2002 needs close analysis.

The important provisions of the National Water Policy 2002 are produced below.

2.2.1 The preamble

The preamble to the policy gives the understanding of the important principles on which the policy is based. The principles identified in the Preamble to the Policy are-

- (i) Commitment for an Integrated Water Resource Management and Development.
- (ii) Importance of environment related concerns
- (iii) The importance of innovative techniques and better strategies resting on a strong science and technology base

⁷ National waterPolicy2002,para 6.5

⁸ National Water Policy 2002 ,Para 7.3

⁹ National Water Policy 2002 ,Para 9.2

¹⁰ National Water Policy 2002 ,Para 14

Section 2

The section lays importance on the need of a well – developed information system. The section is silent about the need for an open access to the information.

Section 3

The section explains the principle that the available water resources should be converted into utilizable resources. Resting its foundation on the notion that the unused water resource represents the waste of resources managing to address ecology based concerns. The section negates the need to maintain the balancing use of water to maintain environmental balance of the riverine, estuarine, and the coastal ecosystems.

Section 4

The section deals with the institutional mechanism for the Act. Concepts like operation and management (O&M) of better institutional mechanism has been brought into focus. The need for appropriate river basin organization for the planned development and management of rivers has been mentioned.

Section 6

This section is on project planning. It says that the planning of individual water projects would continue to be conducted by the government. The much talked about public private partnership concept for future development projects has been ignored here as the section does not mention anything about the role of private sector in planning and implanting such projects.

Section 11

This is an important provision as it deals with the financial sustainability. It says that the use for water should also take care for the O &M charges and recover the capital costs.

Section 13

It is here that lately the policy deals with private sector participation. It acknowledges that private sector participation may help in introducing innovative ideas, generating financial resources, and introducing corporate management along with accountability to users.

Table 1: Comparison of Water Policies—1987 vs. 2002 (with Reference to the 1989 Review)

The 1987 policy and its limitations as brought out in World Bank (1999) review		Current position
Provision	Main Limitations	
General remarks	Does not reflect new economic policies Pre-determined Priorities inconsistent with social and economic values	The position continues. Private sector participation mentioned briefly. The position continues. This study mentions the need to properly define priorities for domestic water.
Legislative and regulatory framework	Jurisdictional problems about river basins	The position continues. For international basins, India prefers bilateral action rather than basin-wise planning. For interstate river basins, the need for RBOs is mentioned without bringing out the need for providing legislative support and executive responsibilities to RBOs. This study recommends legislative changes. Similarly, it recommends the finalization of a policy for allocation of waters of an interstate river to the states, and the possibility of constraining the allocations by uses. It also recommends a legislative back-up for these policies.

The 1987 policy and its limitations as brought out in World Bank (1999) review		Current position
Provision	Main Limitations	
	Absence of the creation of water rights and uncertainties regarding water rights	The position continues in the 2002 policies. A clear statement in this regard needs to be included in the policy. The author of this paper recommends the recognition of water as a 'negative community' in which only usufruct rights can exist. The 'negative community' status of water indicates that it is a 'common good', which is not owned by any one including the community. Thus, there would be no absolute property rights concerning water. Any potential user, including the state, cannot use the water by causing harm to others or without an agreement or award conferring the rights to use the water. Further, the right can be exercised on the waters, which are in the rightful possession of the user. It also recommends that the 'state' grants water rights to the users by creating water right regime. These water rights of users need to be subject to reviews.
Institutional mechanism concerning the Union institutions of the central government, civil societies, NGOs, communities, and industries	Incomplete monitoring and enforcement of legal provision of water pollution control; inadequate application of water qualities, classifications, regulations; limited effectiveness of River Board Act; lengthy procedures of conflict	The position continues except for the formulation of the central groundwater authorities, and the larger intervention of judiciary in regard to water quality regulations. RBOs with large stakeholder participation are recommended for better regulations. The 2002 policy (paragraph 4.1) mentioned the need for reorienting/reorganizing or creating institutions for multi-sectoral, multidisciplinary; and participatory work based on hydrologic units. However, there are no reforms
	resolutions through tribunals; non-involvement of all disciplines in the decision making of tribunals; fragmentation of water-related responsibilities and inadequate co-ordination has also been mentioned Limited sharing of information; neglecting their potential in water management consultancy and training; policies, regulations, etc., creating barriers in their functioning	Programmes are underway; the present report recommends large institutional reforms for the Ministry of Water Resources (MOWR)/Central Water Commission (CWC) somewhat on the lines of the recommendations of the National Commission. Reforms for giving a legal back-up to the NWRC and for larger autonomy to the national committees have also been recommended in the present report. This position continues. The 2002 policy does not deal with information sharing though information systems. Privatization is mentioned without emphasis. The participatory approach is discussed and is being promoted through programmes.

The 1987 policy and its limitations as brought out in World Bank (1999) review		Current position
Provision	Main Limitations	
Inter-Sectoral allocations and pricing	Water rates are too low and inadequate; charges are area based and not volumetric; no charges for use of groundwater; no disincentive for wasteful groundwater use; overwhelming tendency to subsidize rural water supply. Infrequent rate adjustment in urban water supply; lack of volumetric metering of domestic supplies; inadequate penalties for water pollution	The 2002 policy mentions (section 11) that water charges should cover O&M cost and a part of capital cost and that they should be linked to quality of service. Subsidies need to be targeted and transparent. However, no programs to facilitate or force the states to take actions on these recommendations exist. If the water charges are linked to the quality of service, the user can challenge the recovery of the charge on the basis of deficient service. Since the line departments do not find this convenient, the states, in law, prefer to consider the water charge as a tax. The use of market mechanism, at least in guiding administrative decision about water pricing, is also not being implemented. The author of the present study recommends that water charge needs to be linked to the quality of service, and need to cover at least the full O&M costs, cross-subsidies need to be targeted and be made transparent, and market mechanism needs to guide the administered decisions on water prices.
Intra-sectoral allocations	Allocation decided administratively, on ad-hoc basis, and based largely on historical context and policy priorities; allocations as per relative value of water use are not made; no compensation to users in case of re-allocations	This position continues. The Dublin principles of allocating water to the most productive use have not been accepted. The author of the present study agrees with the non-acceptance, and recommends the establishment of a regime of water rights, which could be subject to review, and re-allocations on the basis of improper use and changing ground situations.
Intra-sectoral allocations	Existing water markets are localized and fragmented Trading in water rights, either amongst states or by individual users not provided for	The 2002 policy does not change the situation. Although the water markets have authority in deciding the value of water, they continue to be unauthorized. The 2002 policy does not change the situation. No recommendations are made in the present study since, as per the author, water is a negative community, and the usufruct in water can therefore not be traded.

2.3 Conclusion to the policy

The policy concludes on the remark that the depending on the specific situation, private participation in building, owning and operating, leasing and transforming water facilities may be considered.

2.4 National Water Policy 2002 & Issues in drinking water

“India has over the last 50 years spent \$50 billion on developing water resources and another \$7.5 billion on drinking water” [L.C. Jain, a former member of India’s Planning Commission]

The 73rd and the 74th Amendments to the Constitution of India were brought keeping in view the empowerment of the village population by the system of Panchayats. It was also aimed that all the problems of the rural population would be addressed through the Local Bodies constituted by them. However, experience has shown contrary results. It has also been realized that the real issue is not so much about decentralization, but of its optimal level that ensures both accountability and performance at the local level. The data brought out by the Rajiv Gandhi National Drinking Water Mission in 1991 suggested ¹¹that 27% of the country’s rural population that constitutes roughly about 176 million has no access to drinking water. It is claimed that Rs 150 000 million have already been spent in the drinking water services through various government schemes and plans since the inception of NDWM. Although government statistics claim that very high proportion of the villages have been provided with safe drinking water, they merely imply that hand pumps and stand posts have been installed in most of the places.

A study commissioned by UNICEF(United Nations International Children’s Emergency Fund) on the type of water source used in India revealed some important facts. It said that the traditional open dug well continue to be the primary source of drinking water in most areas for all purposes. The study said that the hand pump installed by the Government of India were either non-functional or were located too far away for their convenience¹². The study further highlighted that one out of the three people who did not use hand pumps felt that the hand pump water tastes salty, looks rusty or smells medicinal¹³. Findings of this committee goes on to suggest that merely introducing hand pumps in villages would not be sufficient to overcome the drinking water facility challenges in the rural sector of Indian population. In towns and cities, the scarcity of safe drinking water has its own implications. The unavailability of safe drinking water causes problems at many levels and has many serious implications. A study has shown that the time spent in collecting potable water on an average constitutes 4 to 5 hours a day or seven hrs a week at places like Baroda region of Gujarat¹⁴. The time and effort involved in collecting water, if calculated in terms of the work hours and lost wages, would suggest that it has serious implications on economy of the country as a whole. Another study suggested that unavailability of drinking water impedes the growth and development of school children as they are forced to carry water from long distances that induces suffering and causes health problems on the other end. It is surprising that the concern for the dinking water has become a priority issue only after the inception of the National Water Policy 1987.

¹¹ The Accelerated Rural Water Supply Program (ARWSP 1972-73) by the GOI was also called The National Drinking Water Mission (NDWM, 1980). The NDWM was renamed Rajiv Gandhi National Drinking Water Mission (RGNDWM) in the year 1991.

¹² This is a glaring example of the failure to implement what has been provided in the Policy. The National Water Policy, 1987, recognizes that the existing set up has failed to meet the demands of the growing population. Having realized the need as early as in 1987, efforts in the supply of drinking water in rural areas have been made primarily through the National Drinking Water Mission(NDWM) which was set in 1986. The mission had the objective of providing potable water sources to every village with in a radius of 1.6 km.

¹³ (Venkateshwaran, 1995)

¹⁴ (Dasgupta *et al.*, 1993)

2.5 State Water Policies

Many states in India have their own water Policies. These policies are a replica of the National Water Policy, in many cases converting National Water Policy into a strategy relevant to the state. States like Tamil Nadu and Himachal Pradesh have Water Policies that are more inclined towards principle of equity and do take into account the participatory role of the peoples organizations or community based control over water resources.

3. CUSTOMARY RIGHTS OVER WATER RESOURCES

Water is an ancient resource not in terms of chronology but its use and related customary rights. Customary Rights over water were enjoyed by user communities for centuries and have evolved over a long period of time¹⁵. These informal rules and regulations, which evolved over a long period of time, reflected the socio-economic and political structure of society at any given point of time. They were also influenced by factors such as geo-physical and climatic conditions, socio-economic and political conditions and level of technological development at a given time. In India the emergence of colonialism and formation of welfare state have altered the power relations and have contributed to disintegration of these rights over natural resources, in particular water. Urbanization triggered by post independence industrialization, gave the state rights to extend cities and towns, and extend irrigation systems to bring more area under their command. The state has virtually taken away the existing rights of the people. Water law in India has been closely associated with land. The policies of the colonial period speak volumes about such nexus. Since 80% of the farmers do not own land, the same percentage is denied right to water. Further, more development projects such as dam construction and rehabilitation and resettlement plans of the governments from time to time have taken away the customary/user rights to water, which the inhabitants of the particular area were enjoying since ages. Consequently, marginalized people, whose rights have been appropriated, are defenseless and cannot seek justice in a court of law as there is no legal framework which talks about customary rights of water and community control of water resources in India. The issue of development and the duty of the state to distribute equitable water control over resources speak of how the customary rights were pushed away by state institutions. These developments can be studied in response to the following queries:

- A. What were the customary rights that user communities enjoyed since ages?
- B. How these rights have been appropriated by the state?
- C. While having control over water resources, did state achieve equitable distribution of rights?

3.1 Customary Rights of the User Communities

Human settlements at the dawn of the civilization were close to the river because irrigation technology was not developed in those times. However, water use for agriculture has run parallel with the formation of village societies¹⁶. These rights, which were not given to its users but acquired over a long period of use¹⁷. Customary

¹⁵ This is not to glorify the irrigation institutions that existed in the past. Indeed, the kind of irrigation institutions that were controlled by kings or local chieftains was nothing but hydraulic despotism and reflected very much the local power structure and production relations at any given point of time. Nevertheless, there existed some organized and codified rules and regulations, customs, roles and mores, legislations, notifications etc., which not only defined access over water for a community, but also subsumed all critical functions of water management. And, given the local power structure unequal access to means of production, these institutions performed well in protecting the water rights of 'user communities: *Water rights and participatory irrigation management in India: the case of surface water sector in Tamilnadu state*. A.Rajagopal, S.Janakarajan, Madras Institute of Development Studies

¹⁶ Steward, J.H. 1955

¹⁷ Water rights can be understood in the context of riparian rights i.e. rights gained or acquired/gathered over time and rights gained due to access to resources. "Urban industrialists controlling water resources in the rural areas by sinking deep tube wells (much deeper than the existing ones in a village) is a classic case in support of rights gained due to control over resources. (Water rights and participatory irrigation management in India: the case of surface water sector in Tamilnadu state. A.Rajagopal ,S.Janakarajan, Madras Institute of Development Studies)

rights are well recognized in the International law, Hindu law, and later by the English laws in India. As stated, due to geo- climatic diversity, customary laws varied from state to state. These laws had common element of community recognition of rights and informal arrangement for the settlement of disputes relating to rights. The prevalent practice of informal dispute settlement at the local level in some of the rural areas of the north eastern states is the result of the customary practices. These customary laws also had other advantages. They were compatible with the needs of the people. The rule of sovereignty over the water resources was not so rigid as far as its utility to the user community was concerned. If compared with the statutory rights conferred by the various state governments in respect to water allocation and distribution, customary laws were dynamic and broader in approach than the statutory rights¹⁸.

Customary, traditional, and indigenous rights over water in India provided for groundwater management and water harvesting systems. The customary rights also defined self created institutions and rules which helped the traditional system of groundwater harvesting and management work successfully over centuries. The evolved customary set up also provided a mechanism for conflict resolution for groundwater disputes at the local level.

Since the country is rich in natural diversity (and cultural as well), the customary rights were geographical zone specific, and depended on the traditional inhabitants of the area¹⁹. The important areas where customary water rights were set up, had been adversely affected due to government control over water resources including hilly areas, gangetic plains and other river basin, semi arid zone of the Deccan plateau, coastal areas, arid areas like Rajasthan and Gujarat, wetlands, flood prone areas. It is interesting to learn that the British government made efforts to codify customary laws relating to water. The Easement Act 1832 is a classic example of recognition of customary rights of people in the statutory form. The other state specific example is that of a Tamil Nadu where customary rights were codified and printed as early as in 1813. These were known as mamulnamas.

3.2 How were customary rights acquired?

Broadly speaking water related customary rights were acquired by the community on the basis their role in the construction and management of water resources at the community level. The organizational structure for carrying out the responsibilities of traditional water institutions operated at two levels: The first was that of a supervisory nature which enforced rules and regulations concerning water management. The second one was more of a menial nature, which involved hard labor. In many parts of the country, these positions were held on a hereditary basis²⁰.

Caste was the core factor in determining the responsibilities of maintenance and construction. In accordance with the caste hierarchy, there existed a hierarchy of functionaries to undertake all these activities. In this system farmer performed the duties of canal manager, and scheduled caste people looked after the general maintenance of the canal (labor). If looked from the socio-liberal view that this set up undoubtedly contained its own weaknesses based on caste system that jeopardized the distribution of work but the village societies enjoyed complete control and access over water resources with in their jurisdiction. The unique feature of this system was that there were un codified but well laid down rules and regulations to manage all critical functions such as dispute resolution, penalty for non participation in management of water resources, water sharing in times of scarcity and so on.

¹⁸ “Customary law has been dynamic more in tune with the needs of the people than dogmatic about certain fixed notions of territorially or ownership right.... Limitless to space and quality, they are broader in approach than the legal systems”; Singh 1991: pp.67

¹⁹ These rights were common in most states in terms of the sanction that they provided to the local inhabitants of the area to access, control and manage community resources.

²⁰ A.Rajagopal, Madras Institute of Development studies, p.3

3.3 State Control over Water Rights

Pre independence methods to gain state control over water resources could not materialize due the absence of uniform law in this regard. The existence of various state specific regulations, Policies and Government Orders passed by the British Government further complicated the situation. Post independence efforts to gain state control over water include Irrigation Bill 1953 prepared on the pattern of 1924 irrigation Bill. The Bill sought to declare that water is the property of the State, and that the State has the right to control irrigation works under both Zamindari and Ryotwari systems. It also declared that no civil court has power to hold back the government from undertaking any irrigation work. The Bill was not passed for several reasons.

3.4 Comprehensive irrigation Law in India:

Irrigation law in India has much to do with the water rights related to the land. Different Acts focus on different aspects of irrigation. The Irrigation Commission in the year 1972 made an attempt to consolidate and simplify the Irrigation Laws in India in order to bring them together and consolidate for the purpose of bringing uniformity. The purpose was also to control exercise over the water resources. On the recommendations of the Commission a Model Irrigation Bill was prepared in the year 1977. The effort was wasted as the Model Bill did not receive attention from the state governments.

3.5 Submissions

The fact that the state had taken number of initiatives to develop irrigation in the rural areas. (a long list of government policies refer to this aspect), one cannot ignore the groundwater irrigation policies funded by the World Bank. The land transfer from the feudal class to the cultivating class has also taken place; the use of technology has further changed the permutations for the management of water resources. The caste system being out of place according to the provisions of law²¹ does not allow the maintenance of water resources and allocation of tasks on the age-old caste system. The state has absolute and sovereign power to control and manage the country's resources. A fine equilibrium has to be created before sowing any policy measure for the participatory management of water resources in the country²². Communities shall be allowed to maintain traditional water resources with an external support and monitoring from the State. Tamil Nadu Farmers' Management of Irrigation Systems Act, 2000 is the ideal example to follow the equity principle. The Act provides the ideal mechanism in order to strike the fine balance between the community control of water resources and the state control over the water resources of the country.

4. LEGAL FRAMEWORK FOR WATER IN INDIA

4.1 Historical background:

Statutory water law in India includes a number of pre and post colonial enactments in various areas, irrigation being the prominent one. Water law in India has had a long journey from the legislations of the colonial period to the recent regulation of water quality to the judicial recognition of human rights to water. In India water law is closely linked with the irrigation laws and the right to water in the property laws. Historically, irrigation laws constitute the most developed part of the water law because the British saw irrigation as the most important economic activity and made the classification of water accordingly²³.

²¹ The Untouchability Act is a central legislation for the time being in force that discourages caste based institutions and allocation of work.

²² National water policy 2002 : Clause 12 talks about the participatory approach to water resource management" where it has been laid down that Municipalities and Gram Panchayats should be involved in the operation, maintenance and management of infrastructure /facilities at appropriate level with a view to eventually transfer the management of such facilities to the user groups or local bodies. This is a participatory approach based on equity principle in the sense that it has not clearly said about the customary rights but the approach is somewhere close to it.

²³ Supra note 5

4.2 The Existing Legal Framework:

The existing legal, institutional and decision making frame work for water law in India, both at the National and state level is embodied in the nine major Acts at the National and state level. The National Legislations as applicable to water are:

- Water prevention and Control of Pollution Act 1974;
- Air prevention and Control of Pollution Act 1977;
- Environment Protection Act 1986;
- Forest Conservation Act 1980 and amended in 1988;
- Public Liability Insurance Act 1991;
- Environment Assessment Development of Projects, 1994;

The Ministry of Environment and Forest is the nodal agency in the administrative structure of the central government for planning promotion and coordination and overseeing the implementation of environment legislation and programs and regulatory functions like environment clearance.

4.3 Constitutional Provisions

The constitution defines the allocation of functions relating to water resource development between the centre and state governments. Water is designated as a state subject to the central intervention to regulate the development of interstate rivers and for settlement of interstate disputes on water. The River Boards Act and the Interstate Water Disputes Act are made under these provisions. The central government can also intervene in the interest of protecting environment and forest , and under provisions regarding national planning for development.

Under the Constitution of India which came into force in 1950 water is primarily a state subject. Entry 17 List II i.e. State List 7th Schedule of the Constitution States “water that is to say water supplies, irrigation and canal, drainage and embankments, water storage and water power subject to the provisions of entry 56 to the List I”. States are thus free to enact the water law and frame policies in accordance with this provision. Entry 56 of List I (Union List) refers to above states “regulation and development of interstate rivers and river valleys to the extent to which such regulation and development under the control of the union, is declared by parliament by law to be expedient in the public interest.”

4.3.1 Under Article 262²⁴ of the Constitution, Parliament may by law

- (1) Provide for the adjudication on any dispute or complaint with respect to the use, distribution or control of the waters of, or in, any interstate river or river valley.” and
- (2) Neither the Supreme Court or any other Court shall exercise jurisdiction in respect of any dispute or complaint referred to in (1)

5.ACCOUNTABLE INSTITUTIONS

At present, the roles of various institutions in the matter of the evolution of water policies by the Union government are as follows:

The National Water Resources Council

The council performs the function of approving water-related policies through the evolution of a consensus.

The National Water Board

The Board assists the National Water Resources Council.

²⁴ Article 262, Constitution of India 1950

The Ministry of Water Resources

It has the crucial role of drafting the agenda of the National Water Resources Council. The other important function is of giving effect to the decisions.

The Central Water Commission

The Commission acts as the secretariat to the National Water Board. Prepares the basic documents and drafts about water policies. Advising and assisting the ministry.

The Central Ground Water Board

Its main function is to assess groundwater through geo-hydrological surveys and studies, and through the drilling of exploratory tube wells to facilitate such studies. Banks variously use the groundwater assessment information created by the Central Ground Water Board in deciding the credibility of proposals for obtaining loans in regard to the construction of wells and tube wells.

The Central Ground Water Authority

It has legal powers to regulate the exploitation of groundwater in order to ensure that environmental damage due to overexploitation of groundwater is avoided. As stated already, the Union uses its residual powers in regard to the environment. The central groundwater agency thus has no general powers of regulating groundwater use.

The National Committees

These Committees participated in the deliberations on various specialized subjects such as hydrology, irrigation and drainage, hydraulic research, etc. for deciding research areas as also in evolving a consensus at the professional level, about the problems and possible solutions.

The Specialized National Institutes

Within the ministry of water resources these institutes carry out research on problem areas including issues like the role of forests in hydrology, the quantum of return flows from irrigation, etc. which have a bearing on policies.

Various River Basin Institutes

The Ministry such as the Brahmaputra Board, the Betwa Board, the Upper Yamuna River Board, the Narmada Control Authority, etc. over sees the implementation of the various agreements, tribunal awards, etc.

Various Water Dispute Tribunals

To adjudicate on the water disputes in accordance with the terms of reference fixed by the government to formulate the awards. The case law so evolved, and the spirit of the award itself, has important implications on future evolution of water policies.

Non -Governmental Organizations

The NGOs act as watchdogs to pressurize the state governments and the central government in regard to various executive decisions and policy evolution. Although, at times, the involvement of the NGOs seems to delay or negate the process of water development, their involvement sometimes leads to better actions. Better policies in regard to rehabilitation and resettlement of reservoir affected persons; better standards for drinking water quality, improved decisions about design of structures (for example, the Ottu weir on the Ghaggar River), etc. are some achievements of actions by the NGOs.

The Judiciary

The decisions of the water dispute tribunal cannot be revised through appeals to the courts. However, before a tribunal is set up, the aggrieved states can and do approach the judiciary for a remedy. For example, the states of Andhra Pradesh and Maharashtra approached the Supreme Court for restraining the state of Karnataka in regard to the construction of the Alamatti reservoir. NGOs or individuals can also approach the courts for giving suitable directions to the government. For example, individuals approached the Supreme Court for

intervention regarding water quantity and water quality problems of the Yamuna river in Delhi. Similarly, NGOs approached the Supreme Court for directions to discontinue the raising of the Narmada dam. The case law evolved through the process affects water policies. Interventions as highlighted by the studies were documented.

6. DEFICIENCIES IN THE EXISTING LEGAL FRAMEWORK

6.1 Absence of the Uniform Water Law

Constitutionally water is a state subject²⁵. In the absence of uniform law and policy, water management in India remains by and large uncoordinated. Various states have varied legal positions on water ownership. It is felt that water being a common natural heritage has to be governed by different set of laws which are essentially not *jus civile*²⁶. Water is a natural heritage to be protected and not a commercial property for absolute private use and exploitation it has to be governed by different set of laws which meet the requirement of the contemporary society. The Supreme Court of India in various judgments on water related issues has laid emphasis on the principle of *jus gentium*²⁷ or doctrine of public trust inherent in the Article 21 of the Constitution of India²⁸. This important doctrine of Public Trust can be appropriately utilized for attaining good ecological status for water resources. India is a federation of states, therefore to lay down uniform law and policy it is essential to identify and incorporate those tenets, which are common and applicable to all the states. If analyzed, surface water, soil water and underground water are manifestations of a single resource that can be managed. If there is a deliberated policy based on scientific study of these resources, the water law in India can be given a coordinated shape.

6.2 Other deficiencies

Laws concerning water have grown in a piecemeal and ad hoc manner without a clearly articulated conceptual basis in respect to fundamental, as the nature and content of water.

There are serious questions in relation to the state's authority in regulating the use of water and the manner in which this authority is to be exercised. Governments, both central and state, claim the right of eminent domain over water and absolute right. Where and how it is to be developed and how it is to be managed and to make and change entitlements and allocation is at their discretion.

Vesting eminent domain in the state without setting any limits to the exercise of its discretionary power leaves too much room for arbitrariness. The danger is increased many fold where all the relevant functions—development and management, implementing regulatory functions, redressal of grievances and conflict resolution are taken by the executive arm of the government. Since the state is supposed to serve the interest of its citizenry, one would think that the regulatory functions regarding development and management of the resource should be vested with the bodies independent of the executive agencies. Making and changing rules of allocation and entitlement should be decided through a transparent process.

Another lacuna is the lack of clearly defined criteria for determining the entitlements of different claimants to the common pool resources in a river basin. Thus, central legislation does not specify the basis for deciding the entitlement of riparian states. In the international context, two different criteria have been advocated as the basis for sharing water in a basin flowing through different states: the Harmon Principle and the Helinsky/Dublin Rules. The former recognizes the right of a region to use the water, which flows through it while the latter is based on the optimum utilization of the basin's resources for the common benefit of all its inhabitants. In India there is no formal recognition of either principle even in respect of interstate rivers. Tribunals have tended to use a combination of these two principles.

²⁵ Entry 17 List II i.e. State List 7th Schedule of the Constitution of India 1950

²⁶ Laws that are governed by private property

²⁷ *Jus gentium*, variously translated as law of all peoples or law of all nations. Application of *jus gentium* gave birth to the doctrine of public trust. During the 13th century, public trust entered English common law through the Magna Carta

²⁸ The Supreme Court has been influenced and rightly so by the exercise of the EU. in the Water Framework Directive of the European Union issued in 2000, the 27 member-nations, with diverse traditions and culture, are working towards changing their water laws to achieve a common vision based on a uniform set of principles inherent in *jus gentium*

None of the state governments have laws or executive notifications specifying the basis for water allocation between different segments of basins falling within their territories. States are largely free to change the allocation of water between and within a particular system and between uses (for example between irrigation and water supply) at their discretion without observing any consistent application of clearly defined principles and procedures laid down by law.

7. THE REFORMS AND PROGRAM INITIATIVES UNDERTAKEN IN INDIA

7.1 Innovative Policy and Program Initiatives

In the last few years there have been many innovative policy interventions and programs in the water sector. Some of the important ones are mentioned as follows:

7.1.1 In the Irrigation Sector

The accelerated irrigation benefit programme (AIBP) was taken up for early completion of ongoing projects, which were in an advanced stage of completion, by pumping in additional funds. Over the years, this programme has been modified and in the process, the main objectives have become diluted. Delays have also been experienced in the process of transferring the funds from the finance department of the state to the project, depending on the 'ways and means' position of the state. This innovative programme has therefore been only a partial success. The programme perhaps needs to be revamped by specifying stricter criteria for the selection of the projects and by making it easier to operate in regard to direct availability of the funds to the project. There is enough scope for using banking institutions for regulating the flow of funds.

7.1.2 In the Hydropower Sector

The new policy for hydropower has been an important policy intervention. Again, this has been partial success, and only a couple of hydropower projects in the private sector have materialized as a result of the policy. Most hydropower developments continue to be in the public sector, and the public sector corporations are implementing such projects on the basis of loans from Indian or international financing institutions. At present, most hydropower projects under implementation are of the 'run-of-the-river' type. For effectively meeting the peak demands, in the largely thermal-based grid, storage projects are essential. It appears that at present the policy does not adequately address the problems of political risks, delays in land acquisition and in the resettlement of people, and delays caused by consequent litigations in an adequate way. A further revision of the hydropower policy appears necessary.

7.1.3 In Regard to Domestic Water Supply

An important policy intervention consisted specifying that in each irrigation project, a provision for water supply to the adjoining areas, to utilize about 10% of the additional supplies, be made. This seems to have worked well and this provision is being generally adhered to. A post-evaluation, however, may be useful.

7.1.4 In Regard to Conjunctive Use of Surface and Groundwater

The policy intervention requires that all irrigation projects provide for such a use. For facilitating this process, detailed guidelines on conjunctive use have been finalized (INCID and CWC) (INCID: 1994). The feasibility reports of all major and medium projects are supposed to provide for detailed conjunctive use plans. In the experience of the author, these plans are never adequately detailed, and often the costs and benefits of the conjunctive use are not included in the project. The institutional modalities for implementing the plan and the necessary changes in the state policies also are left uncertain. This intervention can therefore be considered only a partial success.

7.1. 5 In regard to Urban Water Supply and Sanitation

Reforms have been undertaken for encouraging decentralization by shifting responsibilities to the municipal governments, changing the role of the government from service providers to regulator, commercialization of existing units, financial reforms for providing market access to service providers etc. The beginning has already been made in respect of private sector participation in urban water supply utilities, for example, in Chennai, Bangalore, Delhi, etc. However, the interfacing of the private sector participation proposals with the protection of water rights of the upstream and downstream users requires careful consideration. The experience regarding the use of the waters of the Sheonath river through private participation indicates that if these details are not considered, serious criticism about the sellout of natural waters can result.

7.1. 6 In Regard to Rural Water Supply and Sanitation

Sectoral reforms have started for empowerment of the community in decision-making. This would include decisions about the planning and implementation of schemes and, eventually, about the control and management. Partial capital cost sharing and full sharing of the O&M requirements is also provided.

7.1.7 In Regard to Rural Water Supply for Problem Communities

The Rajiv Gandhi National Drinking Water Mission (RGNDWM) is an important programme intervention. This has been fairly successful, although supply to communities in areas with endemic groundwater quality problems has not been successful. Sub-missions have been constituted to deal with preventive and remedial measures to address problems like arsenic, brackishness, and iron.

8. EXISTING LEGAL FRAMEWORK FOR WATER: PRIORITY²⁹ AREAS AND WATER RIGHTS

8.1 Ground Water law

The existing ground water law in India is close to inappropriate. This is of major significance as the use of ground water determines the availability of water for tanks, wells and many other minor irrigation systems. Traditionally ground water has been treated as a chattel to land property, where the access is to private land owners alone. Such property laws do not relate to hydrological, ecological or equity concerns at all. Few attempts of less significance have been made in the past at the state level. In the state of Gujarat groundwater rules have been reframed by amending the Bombay irrigation Act. Tamil Nadu water Board had framed certain model water Bills. But these arbitrary experimentations have proved grossly inadequate for the larger private and common property legal regimes, nor do they take into account the ecological and social diversities in which the laws needs to operate. The need for conjunctive use and integration of groundwater and surface water laws have also been conveniently ignored by the state governments.

In the view of the author, there is an urgent need to systematically explore the legal alternatives for integrated set of laws that will incorporate both ecological and social diversity as well as problems related to the inter-relationship between ground water and surface water use. Moreover, access to ground water is highly inequitable, since it depends upon land ownership and economic capacity to draw.

8.2 Legal Framework for Ground Water Rights

Existing legal frame work for ground water is as follows:

Ground water rights are under totally private legal regime. These rights belong to the land owner, since it forms part of the dominant heritage and land ownership is governed by the tenancy laws of the state. The transfer of property act necessitates the transfer of ground water based on heritage. Conversely, the land acquisition act, asserts that if someone were interested in getting rights over easement (groundwater for our

²⁹ Priority areas as identified by author ,which need immediate attention

purposes) he would have to possess land. There is no limit to the volume of ground water a landowner may draw. The consequence of such a legal framework is that only landowners can own ground water in India. It leaves all landless and tribal's, who may have group (community Rights) over land but not private ownership. It also implies that rich land lords can be water lords and indulge in openly selling as much water as they wish.

8.3 Recommendations

To ensure proper and equitable distribution of water it is recommended that water rights should be separated from land rights. No national effort has been taken so far. The only state to move in this direction is the state of Gujarat.

Areas where legal sanction is needed.

1. Where there is over exploitation of ground water.
2. Where there is dispute between two parties regarding the exploitation of water.
3. Where there is environmental degradation due to overexploitation.
4. Where there is ground water pollution.

8.4 Tank Water Bodies

In many parts of India, irrigation has traditionally been tank based. Even now in terms of food production, what is officially called "major irrigation system", namely the irrigation canals, covers only 36% of the agricultural land. 64% is rain fed, ground water irrigated and natural or artificial tank irrigated crop lands. Despite this crucial dependence on tanks and wells, India has witnessed the destruction, negligence and reclamation of thousands of tanks and gross misuse of groundwater. The realization that ground water is unsustainable in an ecological system where forests are fully exploited, soil conservation grossly neglected and rivers have been rapidly supplemented, is reaching the main stream concern rather slowly. That tank irrigation offers a vast potential for alternative approach to water management, needs to be emphasized and need to complement canal irrigation.

There is need to reform the appropriate legal structure that will support local controls and provide incentives for sustainable and equitable use of water tanks. Since traditionally tanks in India have been regulated through the community resource management systems and customary laws, there is need to carry out extensive field studies to examine customary methods of water management and institutional structures.

Legal frame work:

There is juristic aspect associated with the existence of the tanks, which relates to the political economy of the country. Tanks are local water resources; people have immediate access to them and are not dependant on far off authorities for their water supply. The existence of the tanks implies decentralization of power over water resources. The rise of modern state, which seeks centralized control over resources and the dependency on the state or capitalistic authorities would naturally not be in favor of the technologies, or resource distribution which would oppose it. If we are to follow constitutional mandate of economy and social justice, it is extremely important to utilize resource in a manner, which leads to equity and freedom from dependency on others.

8.4.1 Recommendations

It is proposed to make detailed study of the customary and statutory laws of the concerning use of tank and wetland waters in rural areas. It is known that these laws provided various strategies through which common resources could be utilized for common good. The aim of the study would be to devise appropriate legal strategies' for the preservation of tanks, its management and for equitable use of its resources.

8.5 Dam Construction

The neglect of tank and ground water law is directly related to the emphasis on construction of dams, since these have been conceived as the main scientific alternative for irrigation and food production. Unless the

appropriate legal framework is conceived for planning and establishment of Dams, it is unlikely that the attention will turn to the development of tank and ground water laws.

Construction of large dams, regarded as boons of development in the first two decades after independence have now become the reason for unfavorable questions, both in official and popular discourse. It is clear from these trends that juristic and legal knowledge is yet to be related to it.

8.6 The legal framework

The executive, more than the legislative or judicial, power is prominent in this area. Indeed, staggeringly large, major decisions are in the realm for discretion.

For example, decisions relating to construction of dams, planning of national and international assistance, location of sites, approval of the size of the dams, rejection of medium and small project alternatives and planning of design and safety. The legislation intrudes in this area but not so substantially as to ensure just and fair, and accountable uses of imperious executive discretion. In all of this the constitutional context is altogether absent.

8.7 Recommendations

1. Review of the emerging constitutional standards of fairness and public accountability in their bearing upon irrigation works should be conducted.
2. Critical examination of international economic law in terms of its bearing on international human rights in the context of large and medium irrigation works in India
3. Impact of forest law and emerging environment law on dam construction
4. There is need for analyzing the constitutionality of cost benefits analysis in the determination of environment impact;
5. Innovative exercising in safe guarding human rights in public projects is strongly recommended.

9. CONCLUSIONS

Reform for water law is crucial for India's economic, ecological and social development. The existing legal framework inherited mostly from the colonial period, is in need of major reforms and democratization and the appropriate alternatives are the need of the hour. Strategies concerning socio-legal aspects for the management of water system in India however have so far remained grossly neglected. An analysis of the policy and legal framework enables the author to conclude that the regime of water law in terms of rights and duties, originated in civil society and it is not something generated by the state. Second, the emergence of the state in pre colonial and post colonial period in India has been an era of appropriation and misappropriation of water law by various governments. In addition, the mutation of regimes of people's right over water involves various misconceived theories of development by the state.

Hence there is a need for future work in water law to devise an alternative socio-legal discourse and practice where the concerned authorities use organic knowledge of water resource management as seriously as the as the scientific knowledge, and work a consideration of people's struggles for water resource management as pursuit of human rights.