

Engineering Participation : Water Law Reforms, Management And Strategies in India

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Abstract

Today, the worldover, examples of successful community based natural resource management can be seen. With very few exceptions these initiatives have remained at the local level, and these projects have largely remained "Islands of development". In countries as vast as India, these success need to be repeat.

Agricultural progress and regeneration cannot take place without water. In spite of large-scale irrigation systems developed in India, there are many problems in maximizing the full benefits of these installed irrigation system one of the man reasons being that unless people accept responsibility and ownership of the interventions, water management initiatives cannot become sustainable. Farmers who depend on irrigation water for their livelihood have the strongest incentive to manage the water carefully.

One of the ways in which this issue can be addressed in through the participating irrigation management or through WUA, (Water user Association).

Key Words : *Water User Association (WUA) PIM, community based management, social capital.*

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The economy of any country is resource based. Man has used his technical skills and knowledge in utilizing the resources in one way or the other resources, in general are defined as features which are useful and needed by man. It can also be defined as anything from living and non-living environment to satisfy the human needs and wants. Natural resources vary greatly in quantity, mutuality and resourceability in space and time. Our natural resources are hidden to us and no accurate estimate can be made of their actual quantity or amount.

Water is indispensable for the existence and survival of life on earth. With the advancement of civilization, water has found in the large and progressively increasing list of uses. Many nations which have a fair estimate of their oil and mineral resources, hardly know their water resource potential. In a country like India, where the rainfall pattern is highly variable and most of the people depending upon agriculture and allied activities, the appraisal and planning of water resources has become an important components for its development. In keeping with the central role of water, in regulation has been the object of significant attention for a long time. During colonial times, significant emphasis was put on the development of irrigation law. This has had lasting impacts because some principle deemed to given water overall are only found in irrigation acts from the colonial period or acts inspired by the same echoes. Yet in India, water law is comparatively underdeveloped. Thus to date there is no framework for water legislation similarly there is no drinking water legislation even though this in the principle, a primary concerns of the union and states (Cullet, 2009).

Despite of different laws concern to water pollution, environmental impact and rights of landowners on neighbouring flowing water and ground water there has been no comprehensive water legislation framework addressing all needs and uses.

Water law in India has been heavily influenced by early developments of water legislations that focused on the economic potential of water and the types of rights that landowners could claim over water. A broader framework needs to be provided for water law. The premises must be that water is first of all essential for life, essential for the realization of a number of our most fundamental human rights, essential for all ecosystems and extremely important as resources for a variety of activities ranging from food production to energy conservation. This gives water law a prime role in poverty eradication and the realization of a socially equitable and environmentally sustainable process of development means law must be at the centre of any broadly conceived strategy of development.

WATER LAW FRAMEWORK:

Water regulation has been important for time immemorial of the laws of Manu addressed issues related to the regulation of water, such as water pollution and its impact on health. In the Maurya Period, the Arthashastra specially indicated that users had to pay a water tax for the use of water for cultivation even if the water was taken from rivers, lakes. Private ownership of reservoirs, embankment and tank was allowed in that era. Further private owners were allowed to give waters to other parties through irrigation works in exchange for a share of the produce. Similarly, Islamic law applied during the period of Muslim rulers also addressed water regulation. This recognized that water is a common resource and that everyone is entitled to free access and use of water (**Siddiqui, 1929: 289**).

Yet until the colonial period it seems that there was little emphasis on formal water law in large part because water was not generally perceived as scarce. Indeed, while Islamic law had from the outset strict principles of water law developed for the water scarce region where the first Muslim lived, the need to apply these rules was never really felt in India because conditions of such scarcity did not exist at that time (Bengal Act, 1882).

The colonial government started taking a direct interest in water law in the nineteenth century. This included several kinds of interventions including laws for the protection and maintenance of embankments, the regulation of canals for navigation purposes aimed at improving these canals and levying taxes on users, the regulation of ferries and fishers. The colonial government gave increasing attention to irrigation in consonance with the desire to harness water for irrigation.

This included the Northern India Canal and Drainage Act 1873 for large scale irrigation works, an act that survives today in some parts of both Pakistan and India and the United Province Minor irrigation works Act 1920 for smaller irrigation works. On the whole, colonial laws tended to focus on the economically productive uses of water and did not concern themselves either with environmental consideration or with social aspect of water (**Ramnathan, 1992**).

Over time the colonial government took an increasingly assertive position with regard to control over water, culminating with an assertion of absolute rights by the time of the enactment of the M.P. irrigation Act 1931. The assertion of rights of control by the govt. over water formed part of a broader trend that saw water law focusing on regulating access to and control over water.

Over the past forty years, there have been momentous changes in water laws. Firstly, pollution of water was taken up in earnest in the 1970. Secondly, the social and human ongoing water law referring take a number of different forms. The most easily identifiable reforms are legislation in new fields and legislations updating

on amending existing acts.

Paper attempts to analyse all ongoing water law reforms. It examines a limited number of significant changes and focuses specially on water user association, legislation, acts setting up independent water regulatory, authority.

Participation and Decentralization: Water user Association legislation

Engineered participation implies that laws and programmes can not work in vacuum so the people based management of water is inevitable.

Irrigation water is primary importance in the regulation of water since irrigation as overwhelming majority of surface and ground water. Indeed, early water legislation from the late nineteenth century to the middle of the last century put significant emphasis on irrigation. There is thus or long history to irrigation water regulation. Most irrigation legislation needs updating.

In reality, the water law reforms that are being introduced do not reflect this need for broad ranging interventions. They focus on the specific aspect of irrigation, which is the management of water infrastructure by landowning farmers. The reforms introduced in irrigation management reflect the comments made concerning the concept of decentralization.

Rationale for reforms :

A number of reasons have been offered to justify the need for changes. Firstly, reforms are justified by the need to introduce participation and decentralization. Participation of farmers in the management of irrigation infrastructure is called for with a view to ensure that they have appropriate incentives to maintain canals. The need for farmers organization to take over operation and maintenance from the govt. is seen as providing the potential for improving efficiency of management and reducing govt. cost (**Gulati, Dick & Raju, 2005**).

This transfer is pressed on the shrinking availability of resources for irrigation and the fact that farmers can be more efficient than the govt. because they are unburned by bureaucratic regulations. Participation by farmers and the control they are given over certain management functions is directly linked to the introduction of a duty to take on responsibility for funding farmers are now to be considered as clients rather than beneficiaries of govt. patronage. In the new scheme, a direct link is established between revenue collection and expenditure. So that those responsible for operation and maintenance.

Participation in linked to decentralization. In principle, this decentralization reflects the 73rd constitutional amendment. In practice, however, this is not the case. Firstly, the reason for decentralization is not necessary linked to attempts at compliance

with the constitutional mandate but has been linked to financial pressure imposed both internally and externally by international lending agencies on governments (**V. Naran, 2003**).

Secondly Panchayati Raj Institution are said to unsuitable in the process of decentralization in irrigation sector. Though it does not mean that local institutional mechanism is not capable to govern the issue of water or participating irrigation management (PIM) reform on premise that role of govt. in irrigation must be minimized because they have lack of empathy, corporate skills and affinity with farmers.

Thirdly, the issue of cost of irrigation there is need to change the structure of financial liability on farmers, initially the cost bears by the farmers concern to operation and maintenance only a thereafter several illegal taxes has been imposed on farmers for irrigation. So there must be proper mechanism of cost-improvement on irrigation instead of improving by government ongoing reforms are contradictory because govt. and international lending agencies tend to construct the dams. While water sector reforms focusing on participating irrigation management.

Fourthly reforms seek to better facilities to the irrigation ad as well as better governance in irrigation sector. There are two approach that could be take in consideration are indicates that farmers are client and unanimously they will decide by own about distribution of water as well as they could make pressure on the service provider for better services and in second approach entire section must be privatize and commercialization of water to implement and exercise the irrigation schemes under certain preview of government.

Evolution of participatory Irrigation management Regulation:

Irrigation has been central component of formal water saw since the colonial era. The introduction of water laws by the colonial government occurred at a time when it sought to harness in the potential of water for productive activities. This focus on the water as a natural resource for the purpose of economic development purposes has had lastly impact and partly explain that why water has become commodity and it is unparallely unchallenged and why the human rights to water has not receives central position they deserves.

During the colonial era water does not gain the central position as it requires or water as deserve to be important did not pay attention by the rulers. Early irrigation laws does not attempted to water as a scarce. The Northern India Canal and Drainage Act 1873 thus entitled the government about uses and control in water apart from water storage created by humans. This was reinforced over time and later irrigation acts, such as the Madhya Pradesh Irrigation Act, 1931 asserted that rights in all surface water vest in the government. The main result of the regulating framework

was thus to extend government control over irrigation water and by extensions most surface water. The main result of the regulatory framework was thus to extend government control over irrigation water and by extension most surface water.

The new regulatory framework vesting increasing rights of government on water correlative impact of restricting or extinguishing traditional rights enjoyed by the individual and communities over the water used for public purposes or irrigation.

Existing scholarship does not provide customary rights to the individual and communities but available evidence shows that there are well-established and functioning system in place, and that is decentralized in character and managed by local beneficiaries.

While the irrigation laws on the whole significantly strengthened the power of the govt., there was a realization even by the colonial govt. that centralized system will not work efficient. The issue is not only related with the right of irrigation only but there was at least recognition of the need to involve them. For example the first irrigation commission 1901-1903) and the Royal Commission on agriculture (1928) recommended participatory management in irrigation.

Changes with regard to the devolution of irrigation structures to the irrigators over the past two decades fan be divided into two separate components.

On the one hand, different experiments have been carried out since the mid-1970, through implementation of pilot projects with focus to involve every farmers (Pant, 2008). On the other hand, the regulatory framework started evolving later.

The formation of committees where the govt. found it suitable and under condition that put water committees at the mercy of the govt. by providing that members, would hold office at the pleasure of the govt.

Since the early 1990, the regulatory framework for participation in the management of irrigation has completely changed. This is due to two parallel, though largely unconnected developments. Firstly the adoption of 73rd amendments to the constitution that is emergence of Panchayati Raj Institution on which the centralized system of irrigation was running but it was failed. Secondly, the worldwide policy documents as well as World bank projects and policy proposals.

Since the mid 1990s, there has been a dramatic increase in the rate of change in various states. While forms of participation had been proposed throughout the twentieth century more widespread changes started with the emergence of donor funding focusing on setting up of water user associations.

Proposed Model:

Over the past two decades, as number of new measures have been introduced

in the regulation of irrigation. These new measures have focused on irrigation management and the main response to perceived inadequacies has been the proposal for the compulsory setting up of water user associations, two main tenants of the present reforms stand out at the outset.

Firstly ongoing reforms are not reforms that comprehensively address all issues related to irrigation. The reforms pick up a limited number of issues that are addressed through the setting up of new institutional frameworks. Secondly, ongoing reforms follow a pattern. Despite the relatively frequent reassertion that a single model is not suitable for a diverse country like India, the acts introduced over the past decade propose participatory irrigation management reforms that are similar in different parts of the country. The similarity of framework that can be identified between the different acts implies that there are number of principles and assumption that are common to most of them. Interestingly, this finding is also valid in international comparison. Indeed an FAO study of water user associations legislation found that the basic principles on which water user associations (WUA) operate as well as the legal rules that underpin those principles, are similar (Hodgson, 2003)

The primary rationale for water user association is to transfer to actual irrigations the management of the irrigation infrastructure they directly benefit from. This transfer from irrigation dept. to farmers is justified by the principles of decentralization in not used in its usual meaning but serves as the background for the setting up of new local bodies that are outside of Panchayti Raj System.

With regard to participation the understanding water user associations act is limited to specific water management tasks. This is, for instance, the case in Maharashtra where the two main objects of water user Association are to ensure an equitable distribution of water among its members, to adequately maintain irrigation systems are to ensure efficient, economical and equitable distribution and utilization of water to optimize agricultural production (**Farmers Act, 2005**).

Although Maharashtra stands out among the various states where participatory irrigation management legislation has been enacted over the past decades. Firstly the act was implemented in 1970s in Maharashtra but if I am talking about U.P. participatory irrigation management Act, 2009. It is not implemented in better manner, but the mechanism is same as Maharashtra.

In particular they have the power to determine the command area of an irrigation project for which a WUA must be constituted. Further the same authority can amalgamate or divide existing WUA, on a hydraulic basis and having regard to administrative inconvenience.

The power granted at the local level is limited by the fact that authorities have the largely discretionary power to make and break WUA.

The system set-up under the act is constraining insofar as once a WUA, has been set-up, no water is supplied to anyone individually outside the WUA, framework and the scheme is binding on all land holders.

In this way WUA, are forced to take on the burden of administering the irrigation system and are largely left to sentout ways in which they want to achieve this. Further the act provides a uniform model of WUAs regardless of existing arrangements at the local level and regardless of their success at equitably and sustainably using water.

The framework provided under the act seeks to balance benefits and burdens on the one hand WUA, are meant to benefit from a more assured water supply and more water allocated to them. Further, it is authority's duty to supply the amount of water they are entitled to receive on the other hand, the act gives WUA, a number of powers which are infact responsibilities. This include a number of function and monitoring of water distribution among WUA members to the assessment of members, watershares, the responsibility to supply water equitably to members, the collection of service charges and water charges, the carrying out of maintenance and repairs to the canal system and the resolution of disputes among members.

WUA, not only given the task to manage the infrastructure but also to provide on institutional structure that equitably provides all the services that a public authority would provide while such arrangements would be an appropriate choice if WUA, are linked to Panchayati Raj Institutions, it is difficult to see how an association of landholders that lacks in democratic legitimacy can perform all these task in an equitable and sustainable manner for its members and for the broader society around it. An attempt is made to include women and SC/ST in the rules, but these provisions remain weaken then in the case of PRI.

In other words, the existing legislation is both concerns on WUA, who seem to be saddled with more responsibilities than rights and is at the same time unlikely to provide a framework leading to a more socially equitable access to and sharing of water.

CONCLUDING REMARKS:

It is needless to say that farmers participation in the maintenance of all types of irrigation systems existed in the past and continued in several informal ways. The participation was extensively in terms of voluntary labour and under conditions of water stress, it took even the form of monetary contribution. Water user associations or Pani Panchayats with diverse payment arrangement continued

in various farmers. Besides maintaining works and water distribution these arrangements also helped to preserve village as a community. Although the field experiences on the working of the new WUA, suggest that the flow of funds and alongwith that the rules and commands run the risk of seriously undermining the community orientation through depersonalized bureaucratic procedures. There is need for cheaper grassroots level research as to how the new WUA, could be integrated with existing positive community spirit.

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