



Users' Participation in Water Resources Management

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Introduction

Water is gradually becoming a scarce resource in the international arena and it is time to shed our indifferent attitude towards the use of water. Water is definitely a renewable finite resource but its scarcity stems from its increasing demand due to increase in population, increase in industrial activities and improvement in water supply & sanitation. More and more water will be required for irrigation, navigation, pisciculture, recreational activities and maintenance of environment & ecology. Nearly 80% of the available water resources will be required for agriculture. Nearly all water resources projects are government owned, operated and maintained. There is a growing concern amongst policy makers and water managers over the low levels of performance of these projects due to various reasons. It is now recognised that community participation in water resources management is a prerequisite for optimum utilisation of available water by cutting off wastes and for sustainability of the system. In case of irrigation projects, the levy of water rates can be rationalised and their collections will improve.

Stake Holders of a Water Resource Project

The main stake holders of a water resource project are

- i) Government, which is the main authority who plans, finances, constructs & maintains a water resources project. Government is the owner and collects water levies from the users.
- ii) Community which comprises of people who live in a locality sharing common interest. They are the main beneficiaries of a water supply or a sanitation project.
- iii) Farmers who consume 80% of available water for growing crops which is the main source of economy of our villages.
- iv) Industry uses water for its manufacturing processes. Also industry provides construction materials and spare parts for the construction & maintenance of the water supply & irrigation projects.

Participation of all these stake holders is necessary for success & sustainability of a water resources project. Till recently water resource projects were conceived, developed and maintained by the State Government, without any consideration for the other stake holders, or taking their help at any stage. As a result the people did not feel a sense of belonging with the project. Even for minor repairs, to a tube well or a canal, the people waited for govt. staff to turn up & repair them. As a result there is a loss of efficiency & a total breakdown.

Community Participation in Water Supply & Sanitation Projects

There is very little scope in community participation in municipal water supply & sanitation schemes as they are highly technical and intricate. However mass awareness programmes can be launched for preventing wastage and creating healthy habits. Forming of surveillance groups within a locality or a slum area with members from that area will improve the situation. NGOs may be engaged to form such groups by giving training. These groups may include technical people and plumbers, provided with necessary tools, to repair any damage to community water supply & sanitation system.

In running of rural schemes users' participation is necessary for efficient management. Several water supply facilities have been provided in our villages spending huge amounts of money. Due to ignorance on the part of the community in using and maintaining such assets, they are underutilised due to frequent breakdowns. The main problem is not the failure of technology but the non-participation of the community in installation, operation and maintenance. Community participation is the corner stone of success of water supply projects. Experience in several villages has shown that taking care of hand pumps, recharging of water sources through micro-watershed management, - percolation ponds & rain water harvesting could be successfully implemented when the people have participated in planning, implementing & evaluating the programmes. Lack of community participation, specially by women, has resulted in abandoning water sources like borewells & ponds. Community participation is essential in the following four areas —

- (i) Community should participate in planning

process itself like site selection, water quality surveillance etc. (ii) Community should be responsible for the implementation, operation & maintenance of the installations by providing funds & labour, (iii) whole Community should share the benefits of the project irrespective of caste, creed, social & economical status or gender.

(iv) Community should evaluate and modify, if necessary, for sustaining the project.

Village level workers have to identify community leaders who can get the support of the maximum number of people and organise and form water & sanitation (WATSAN) committee under his leadership WATSAN must represent all caste & creed, poor & rich resident of the locality. The members of the committee must be willing, respectable with sufficient spare time to organise the training programmes, meetings & group discussions. WATSAN committees should collect & manage maintenance funds, procure construction materials, spare parts. They should arrange to train up villagers for operation & maintenance of the installations and for quality and efficiency monitoring. As domestic water supply is the prime concern of the womenfolk, they should be properly represented in WATSAN committee and given training in correct use of the installations for providing safe drinking water to their families and cut off wastages.

Users Participation in Irrigation Projects

Farmers are the principal users of water resources in a country and consumers of about 80% of available water. The main objective of participatory Irrigation Management (PIM) is to ensure optimization of the use of available water and raise the agricultural productivity in the command. PIM will help in better operation and maintenance of the system and in rationalisation in levy & realisation of water rates.

Farmers are to be first motivated through training programmes & executing pilot projects in major irrigation commands. For this Panchayats / NGOs may be involved. They will have to create leaderships and a team of trained villagers who may form small groups of farmers in the command of a minor irrigation scheme or of a field channel/water course of a medium or a major irrigation scheme. These groups can be organised as Societies or co-operatives who will eventually take up the irrigation management in their respective commands.

For this existing laws & Acts may have to be modified.

Before government can hand over a system to such a Beneficiary committee, it will have to bring the system to its proper condition by modernisation & repairs. Water has to be supplied through the outlets on a volumetric basis on a pre determined watering schedule. This schedule will have to be prepared on the basis of estimated water availability and water budgeting prepared by different farmers' societies in the command. Government will collect water rates on volumetric basis from the societies who will be allowed to keep a portion for their operation & maintenance expenditures. Head works, main canals & distributaries will be in the hands of the Government as these are intricate technical structures which require much skill in operation & maintenance.

At present large numbers of Farmers' Associations are functioning in the state Maharashtra, Andhra Pradesh, Karnataka & Madhya Pradesh. In West Bengal minor irrigation schemes like tube well & rivers lift projects have been handed over to local Panchayats for operation & maintenance. These schemes are functioning very well.

Conclusion

It is gradually dawning upon the planners & developers of water resources projects that to make these projects efficient & sustainable it is necessary to have the participation of the users & other stake holders at each stage of planning, execution, operation & maintenance. It will be a stupendous task both financially & physically to successfully implement these projects, in the vast rural areas of our country, by the government organisations alone. Hence, government & NGOs must immediately launch mass awareness & training programmes to make our villages ready for participation in these projects. For the water supply & sanitation projects the women should be the main target population for such awareness & training programmes. Progressive farmers & farmers with leadership qualities are firstly to be targetted to form irrigation co-operatives/associations. Administrative & legislative measures for this will have to be urgently taken up to solve the problems of rural poverty, public health & sanitation.

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