Rural Water Supply Programme in India

People's Participation in Drinking Water Supply Sector Reforms: The emerging scenario

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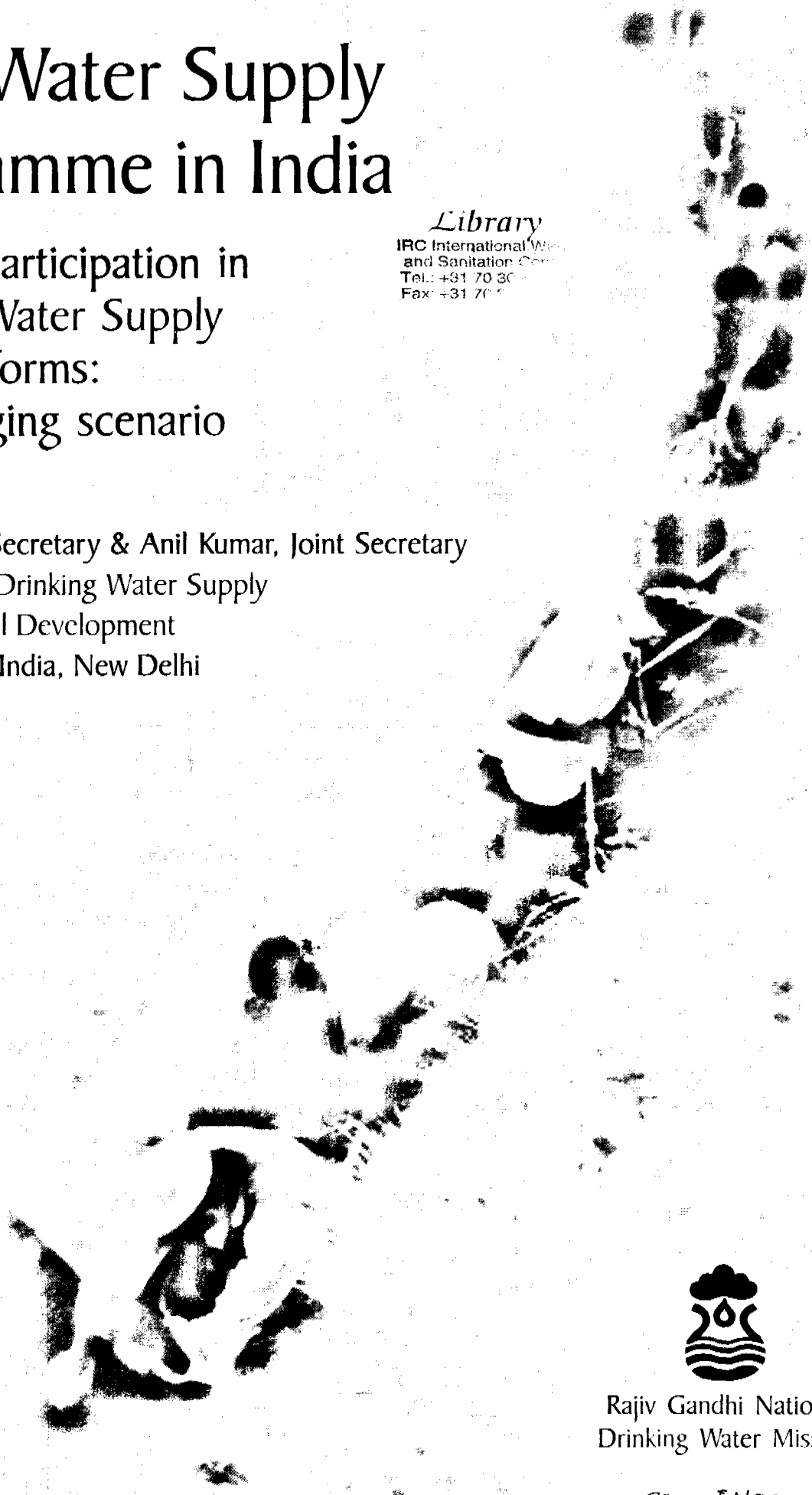


Rajiv Gandhi National
Drinking Water Mission

The World Scenario

Water is life and yet this precious commodity is perhaps the most widely mismanaged resource globally. Out of the estimated rural population of 3.2 billion in the year 2000, approximately 2.3 billion have access to water supply representing 71% of world's rural population. Hence, about one billion are still waiting to gain access to safe drinking water facility and this is in spite of the growing level of investment as well as considerable progress made in the water supply sector all over the world. Providing safe water to the unserved and under-served has been seen as the most challenging and priority task by the developing countries all over the world. Within the next two generations an additional three billion people are expected to join this group, mostly in developing countries thereby increasing the pressure on water requirement in various sectors, including the drinking water supply sector. The availability and quality of drinking water is increasingly under strain. Even if these conditions were to remain constant in the forceseable future, much of the world would find itself in a state of water related crises. To make matters worse, as mentioned earlier, population is growing rapidly, especially in those areas where water is already in scarce supply. Unless we change our ways of managing water we will face a serious crisis in the near future.

The sector is characterized by serious under-performance, and this crisis will continue unless there is a fundamental reform of service arrangements. Consensus is growing on the principles of successful approaches, and many local success stories have been identified. However, these successes are not being replicated on a large scale in the countries where they have been implemented, nor are they transferred sufficiently to other countries or regions. These problems get compounded on account of increasing water resource constraints, population pressures, service expectations, and environmental challenges.

Inadequate coverage, poor quality as well as unreliable and unsustainable supply of water have an adverse impact on the socio-economic development of developing countries. UNICEF has estimated that water related diseases contribute to nearly 4 million child deaths each year globally. Millions of people all over the world, mostly in the developing countries, have been suffering from water related illness. Though inadequate provision of water supply due to resource constraints may be one of the reasons, but the major reason for such a dismal situation is our misdirected emphasis on setting up of physical infrastructure without ascertaining its use or ensuring its effective O&M and sustainability, as a result of which the desired impact on the socio-economic development and health status of the targeted population could not be achieved.

It is becoming increasingly evident that national Governments alone, even with the assistance of international organizations, will not be able to provide the necessary expansion of services to a growing population. The role of Governments, to some extent, has to shift from the provision of services to the provision of a legislative and regulatory framework aimed at facilitating the provision of services on a stable and equitable basis.

The private sector is also becoming an increasingly important factor in the management schemes of existing utilities. The potential for increased private intervention in the near future is considerable with regard to the provision of services to more affluent urban areas of developing countries. However, its participation in the extension of services to the poor in urban and rural areas remains more problematic, hinging on pricing and cross-subsidy policies, that would enable private utilities to generate a fair return on their investment.

While the nature of government intervention is changing from that of a provider of services to that of creating an enabling environment, its importance has not diminished. For autonomous public and private utilities to succeed in the provision of services required by individuals, the existence of a stable regulatory environment is required. There is now a growing understanding,

which is reflected in an increasing number of policy measures taken by Governments, aimed at providing the regulatory framework needed to ensure that utilities provide services in an equitable and efficient manner.

Together with the shift in the role of Government, there has been an increasing recognition about the importance of empowering local communities to act as agents of change. Community organizations in sub-urban and rural areas have been successful in generating the financial resources needed for the extension of services and in acting as providers of services through the operation and management of local utilities. In addition, non-Governmental organizations have often provided crucial assistance to local community organizations in terms of technical and logistical support, in the design and operation and in some places the provision of small loans for the implementation of programmes.

While the need for additional financial resources has always been recognized, increased emphasis is being given to the strengthening of institutions and legislative frameworks in order to create the necessary enabling environment. There has been an increasing awareness of the need to strengthen technical and managerial capacity at all levels of Government as well as managers and operators at the local community level. Efforts have been made to improve education and training of technical and administrative staff and of local entrepreneurs in order to enhance their effective participation. Increased recognition is being given to the need for transfer of appropriate technologies and the use of indigenous technologies.

There is now a better understanding of the need for well-trained personnel responsible for operation and maintenance and for the establishment of suitable institutional arrangements, including the involvement of local communities. There is also a growing awareness of the importance of utilizing appropriate technologies, the operation and maintenance of which lend themselves to being managed at the proper lowest level.

There are many experiences, encompassing the above principles, which are today available in the developing world. However, as this paper is expected to target on the developments taking place in the Rural Drinking Water Supply Sector in India, it would perhaps be appropriate to move on towards the Indian experience.

Indian Scenario

In India, constitutionally, Drinking Water Supply is a State subject. Hence, drinking water facilities to rural habitations are provided by the State Governments, by implementation of various water supply schemes. The Central Government endeavours to supplement the efforts of the States by providing additional financial and policy support.

The Government of India envisages provision of safe drinking water to all rural habitations in five years.

Present Status

(i) Satisfactory coverage of rural habitations with drinking water supply facilities has been achieved, in physical terms, due to heavy investments. An investment of about US$ 6450 million has been made in the water supply sector till date.

(ii) The coverage status as on 1.4.2000 is as under:

Total No. of Habitations	Not Covered Habitations	Partially Covered Habitations	Fully Covered Habitations
1422664	26121 (2%)	213 (15%)	1183212 (83%)

In spite of the high coverage as indicated above, people are not fully satisfied with the service provided as the overall ground realities are different due to the following reasons:

(i) Systems having outlived their life span or becoming defunct due to poor maintenance

(ii) Water shortage during summer months in many habitations mainly due to depletion of ground water level

(iii) Increasing incidence of quality problems – there are about 2,17,000 quality-affected habitations as per present reports.

(iv) Bottlenecks due to recurring floods and droughts or other natural calamities such as cyclones, earthquakes, etc.

The factors that can be attributed for the above situation are:

(a) Supply driven centralised Government managed programme

(b) Absence of people's involvement in implementation of rural water supply schemes leading to lack of sense of ownership among them, thereby rendering the schemes unsustainable

(c) Unsustainable safe water sources due to improper planning and uncoordinated ground water management

(d) Lack of awareness and skill among the rural population to plan, implement and manage their own rural water supply schemes and safe water sources

Reasons for the present situation

Water is today perceived by the rural public as a social right, to be provided free by the Government, rather than as a scarce resource which must be managed locally as an economic good in order to ensure its effective use. The present pattern is that systems are designed and executed by the Department and imposed on end-users. Since the guiding principle for planning is that the Government will provide a minimum supply of 40 lpcd and that it will be free, there is no attempt to ascertain local requirements/ demand. As such, planning is not done on the basis of demand and does not take into account user preferences (and willingness to pay) for different service levels, nor future demand from increasing incomes and expectations.

Various surveys and studies conducted during the past few years have revealed that the conditions under which people would be willing to maintain and operate water supply schemes are:

- If they own the assets
- If they have themselves installed the handpump, or being actively involved throughout
- If they have been trained to do simple repairs
- If they have sufficient funds for maintenance, and
- If they have to pay for O&M.

Field research has shown that stakeholders are involved in O&M only when they pay for it, when they are certain that they will control the funds which are collected for O&M, and that water supply would be dependable.

At present people are not made aware of the technology aspects or given the choice between different technologies and they do not know the details of expenditure on the project. Non-involvement of people in the design and execution of project may lead to sub-standard quality of materials used, poor workmanship and insufficient maintenance. If these problems are not addressed, the life of a water supply scheme falls drastically, involving huge expenditure for its upkeep or even premature replacement in some places.

Examples of Earlier Initiatives

Whenever the issue of people's contribution towards a Government programme is taken up for discussion, the first question which is often asked is whether the poor people of rural India will be able to shoulder this burden. Our experience shows that if the communities plan and implement small schemes

for themselves, the capital investment would be low and the expenditure on operation and maintenance would also be minimal which the community would be able to bear. This would also ensure that the water supply scheme implemented meets their expectations.

There are many examples of such schemes implemented, operated and managed by the beneficiaries themselves in India. However, the most prominent, both in magnitude and content, is the SWAJAL project in the state of Uttar Pradesh.

Swajal Experience

The SWAJAL project is being implemented in the state of Uttar Pradesh in around 1000 villages covering 19 districts, with World Bank assistance. The objectives of the project are to:

(i) assist the Government of Uttar Pradesh to identify and implement an appropriate policy framework to promote long term sustainability of the rural water supply and environmental sanitation sector;

(ii) deliver sustainable health and hygiene benefits to the rural population through improvements in water supply and environmental sanitation;

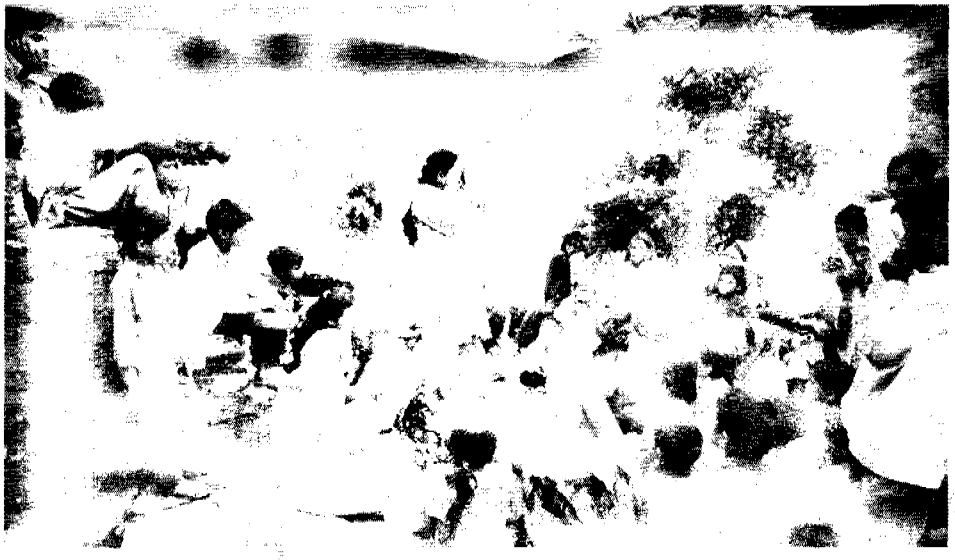
(iii) improve rural income through time savings and income earning opportunities for women;

(iv) test alternatives to the current supply driven service delivery mechanism; and

(v) promote sanitation and gender awareness.

Part of the capital cost and full operation and maintenance cost are met by the beneficiaries. The project seeks to empower the community to enable them to take the necessary decisions regarding project planning and implementation, non-formal education, hygiene environmental sanitation awareness and women's development initiatives are utilized as tools towards attainment of this empowerment. The basic idea is to build the capacity of the community towards sustainability and leave behind a legacy of strong village bodies, which will then be in a position to take care of their development in all spheres, not only the water and sanitation sector.

The Village Water and Sanitation Committees (VWSC) choose the technology to be adopted and the community level procurement of goods, works and services in the SWAJAL project is a unique feature in the country and probably, in the world.



New Policy Initiative

The twin problems of water quality deterioration as well as of ensuring sustainability, both of source and system, are causes of serious concern. Due to these problems, the systems so far installed with huge investments have not been able to deliver the desired services to the targeted population in terms of quantity, quality and reliability all taken together. Often technologies chosen do not meet the aspirations and requirements of the people. They are finalised without adequate interaction with the people who have been living in a particular place for decades/centuries and have an ethnic understanding of the sub-surface geo-morphology. Indiscreet implementation of modern technology, undoubtedly, met the short term requirements of people in some places, but at the same time it contributed towards over-drawl of precious water reserves thereby resulting in ground water depletion and increase in quality problems. This proves beyond doubt that introduction of technology without adequate interaction with the people and without focussed understanding of the geo-morphological aspects always proves counter-productive and is unsustainable.

The selection of technology can no longer be treated as an isolated activity; rather it should be closely linked with the level of service to be provided as well as be cost effective to the community to be served. The technology must be simple and manageable so that the community itself can undertake the task of operation and maintenance, both from the managerial and financial point of view.

In India, major initiatives for inducing reforms in the Water Supply Sector have been taken up for ensuring sustainable improved service delivery to the un-served and under-served sections of the society.

Inspired by the various success stories referred to earlier, the Government of India has revamped the Rural Water Supply Programme with a view to institutionalise community based rural water supply systems by incorporating the following three basic principles for ensuring peoples' participation:

(i) Adoption of a demand-driven responsive and adaptable approach based on empowerment of villagers to ensure their full participation in the project through a decision making role in the choice of scheme design, control of finances and management arrangements;

(ii) Shifting role of Government from direct service delivery to that of facilitator.

(iii) Partial cost sharing either in cash or kind or both and 100% responsibility of Operation & Maintenance by end-users.

As a beginning, 58 Districts across the country have been identified for implementing the sector reform projects, incorporating the above basic concepts, on a pilot basis. 57 of them have already been sanctioned for implementation. These 58 projects are estimated to cost approximately US$ 375 million. But as these are process projects, an accurate estimation of the cost is impractical at this stage. The exact requirement of the funds would crystallise only as the project implementation progresses.

Evolving community participation in each stage of the project cycle, providing opportunities to the women and NGOs for their purposeful involvement in the programme are sharply focussed in the projects.

There cannot be any standard blueprints, which can be prescribed for successfully operationalising the reform process. For evolving a situation-specific appropriate innovative approach, there is a need for creativity, and above all, clear understanding and deep sensitivity to the needs of the population to be served.

The purpose of the Sector Reform projects is not only to implement a physical scheme but also to propagate and implement a new concept. As such, these projects would be heavily based on Information, Education and Communication (IEC) (awareness) campaigns and Human Resource Development (HRD) (Training) activities, through which the rural water supply technologies would be demystified to the rural population. Various technology options including the traditional systems, which could be implemented in a particular habitation/village, will be identified. All the possibilities, along with the merits and demerits of each technology option, their estimated cost, the amount which the community would have to bear as partial capital cost sharing, the operation and maintenance cost and replacement cost of each technology etc. would be communicated to the villagers through IEC activities.

The training programme is expected to equip, on one hand, the administrative agencies about the behavioural aspect for interaction with people, messages to be delivered, importance of traditional schemes and techniques to train the villagers on various aspects of reforms and its implementation etc. and, on the other, it will equip the villagers to themselves plan, implement, manage, operate and maintain the schemes of their choice. Actual implementation of the physical scheme will follow. Such schemes would be based on the of demand generated as a consequence of the awareness and training campaigns. The generation of demand will, of course, be indicated by the willingness of the people to participate in the implementation, management, operation and maintenance and also by the proportion of capital share they contribute in each village.

Subsequently, the villagers would be assisted to decide about the technology most suited for them keeping in view their preference, service demand and affordability. Hence, it is likely that different villages may opt for different technologies as per their respective choice, suitability and affordability for implementation of rural drinking water supply schemes. The schemes would then be got implemented by themselves and handed over to them for sustained operation and maintenance. The water recharging activities could also be taken up along with the rural water supply schemes to ensure sustainability of sources. Hence, if implemented successfully, these projects are envisaged to ensure sustainability of both systems and sources in the project districts.

Such a joint effort, where the actual beneficiaries/users, Village Panchayat, District Panchayat/administration, State Government agencies and the Government of India work together, would ensure that the cherished objective of institutionalising a satisfactory and sustainable rural water supply system is achieved.

The implementation of the projects has just commenced and the trend of the project progress would be visible only after about 12 to 18 months. The completion of the projects, though estimated at 36 months, is likely to take much longer time. Hence, the results could not be assessed at this stage.

Institutionalizing a satisfactory and sustainable community based Rural Drinking Water Supply system is the cherished dream of all those who are even remotely concerned with the rural drinking water supply sector. In India we have taken it up and initiated the concept at the highest level. The bottom up concept is now being propagated at the grass root level. The introduction of Panchayat Raj Institution as a consequence of 73rd amendment to the Constitution acts as a catalyst to our reform initiatives. We invite and expect the people of India, their political representatives, the NGOs, the media, national and international education and research institutes and last but not least the external support agencies to come forward and be a partner in this noble venture by associating themselves with the projects in whatever way feasible to make its implementation a success.