

Sustainability of Investment in Rural Water Supply Schemes through Community Mobilization: Jalanidhi Experience

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ABSTRACT: In Kerala, under the Rural Water Supply and Sanitation Project (called Jalanidhi) gramapanchayath level Beneficiary Groups (BGs) successfully planned, designed, implemented and managed the O&M for rural water supply. The project cycle included social mobilization as an important activity. BGs contributed 10 per cent of the capital cost, the panchayat paid 15 per cent and the government, the rest. This joint-ownership also brought in aspects of co-management, so schemes were managed by the local stakeholders themselves. As part of the project, trained and built capacity for beneficiary in O&M. The BGs sourced the materials and contributed toward labour wherever possible. Additionally, the government trained BG members on book-keeping, monitoring and leadership development, and women participated in the process. This process again had accountability built in since communities were involved in the entire project lifecycle. The case of NenmeniSudhaJalaVitharana Society (NSJVS- Nenmeni Drinking Water Supply Society) one of such models implemented during 2005 under the World Bank aided Jalanidhi Project, is presented to show how sustainability of investment in rural water supply can be ensured through an effective community mobilization process.

KEYWORDS: rural water supply, community mobilization, demand responsive approach, operation & maintenance, sustainability

I. INTRODUCTION

KERALA Kerala is known for its development model, focused on literacy and women centred socio-economic empowerment. It has been the first to implement decentralised local governance, with its People's Plan in the late 1990's. The Last couple of decades saw increasing recognition of the failure of supply driven drinking water service provision. Schemes focused more on the construction of facilities to increase access quickly without paying sufficient attention to the post construction phase. This often led to costly reinvestment after the collapse of the schemes. Since the late nineties, given the pervasive problems relating to the performance and sustainability of rural water infrastructure in the developing world, the World Bank, and other international partners have been striving to develop new approaches to ensure sustainability of infrastructure investments over time.

National and state governments, in their effort to achieve long-term sustainability and improved performance of water supply services, started to focus on the institutional arrangements that would ensure involvement of beneficiaries to facilitate cost recovery as well as improve the operation and maintenance (O&M) of water schemes. There was a growing consensus both in the academic and policy circles that the water supply interventions need to be demand responsive with community participation and contribution towards capital and O&M costs to increase ownership and sustainability of the schemes and reduce dependence on higher levels of government (Project Appraisal document (PAD), 2011).

In Kerala, there is co-existence of multiple service delivery approaches for provision of rural water supply. Until the

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late nineties, the Kerala Water Authority (KWA), which essentially followed supply driven approach to the provision of water supply, was the only agency responsible for piped water supply service delivery in the state. In 1997, with a view to decentralize service delivery, the Government allowed the Local Self-Government Institutions (LSGI) to take over from KWA existing small water supply schemes or to establish new standalone water supply projects. In 2000, towards furthering the decentralization efforts, the Government of Kerala (GoK) decided to empower Beneficiary Groups (BGs) to make investment decisions, to lead and supervise the construction, to manage development funds, and to operate and maintain the water supply schemes. Kerala Rural Water Supply and Sanitation Agency (KRWSA) was set up as a Special Purpose Vehicle to plan, implement and supervise the World Bank financed Jananidhi project. Kerala successfully implemented the Jananidhi project (Phase I between 2000 and 2008 and Phase II since 2012 & now on going).which followed a demand responsive approach (DRA) to rural water supply encompassing beneficiary participation, capital cost contributions from beneficiaries and the GPs, universal household connection provision, and full O&M cost recovery from user fees (PAD, 2011).

There is a growing volume of literature on the sustainability of community driven water supply schemes which mostly investigate the success and risk factors for the equitable and effective operation of these schemes. Using this coexistence of different types of institutional arrangements for water supply in Kerala, this paper examines the sustainability and performance of rural water schemes built under various regimes in the rural water sector. This paper provides evidence on the effectiveness of DRA vis-à-vis traditional supply driven schemes for their performance.

II. FOSTERING MOBILIZATION AND PARTICIPATION OF COMMUNITY IN RURAL WATER SUPPLY

The perceived failure of the state in planning and implementing sustainable water supply policies has led non-state actors, such as bilateral and multilateral aid agencies, local and national NGOs, civil society networks and groups, private suppliers, communities, and even individuals,⁷ to develop alternative provision schemes. Simultaneously, recent policy thinking about speeding up service delivery in rural areas has led to an international consensus whereby governments strapped by financial and personnel constraints are opting to transfer the management of drinking water supply schemes to user communities. This is a neologism based on two influential paradigms in the social management of water : the 'hydraulic civilisation' hypothesis and the model of 'village republics' (Nitish Jah, 2110). Since the new 'idea' in development envisages each gramapanchayath as a democratic and sustainable provider of water for its own population, the label of 'hydraulic republic' seems appropriate. Throughout India as well, state governments are at the forefront of establishing schemes that will ultimately be managed by the villages they are meant to serve. The principal objective of these efforts is to increase the efficiency and effectiveness of water delivery by making communities self-reliant in participatory scheme management. To this end, previous programmes that focussed only on supplying water to villages are being succeeded by ones that stress community consultation and participation in the delivery of a water supply package. However, as described below, the conception of what constitutes a burden for the community is usually very narrowly conceived. For instance, the presumption is that the act of supplying water per se lifts the water burden off a village. In reality, the burden increases because the tasks related to water management multiply. The development of this new model for service delivery has progressed to the extent that several state governments in India are already experimenting with turning over schemes to users, especially in rural areas. Since municipal corporations are still nominally in charge of such service provision in urban areas, the role of the community in self-provision is not as explicit. Yet there are already a few isolated instances of urban communities taking it upon themselves to provide members with adequate services. With these developments, therefore, the role of community as provider has come full circle. The Indian government (and its various agencies), which replaced communities as self-providers in the water supply and sanitation sector in the post-independence era, is now keen to see communities retake the lead in this respect. Over the course of time, technology for water service delivery has changed considerably, so the schemes that communities are being given charge of today are very different from those that they were used to handling in the past. It is hoped that community members, led by locally-elected water committees, will be capable of running these schemes with minimal external assistance. The problem is that the user communities interested in an assured supply of water facilities lack the technical, economic and managerial capabilities required to manage their own schemes, and often any capacity building carried out before schemes are handed over is perfunctory in nature (Jha, 2010). If schemes are to be managed primarily by communities, it is not enough that communities have the requisite managerial capacity.

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In order to ensure that a scheme's benefits reach its poorest users, it is just as important that the principle of equity operates in service provision. To this end, policy makers and development practitioners stress that all users should be able to participate in decision making processes. To lift the "water burden", they argue, community management must be participatory and the community as a whole must "own" the project. The three inherent concepts are "participation", "water burden" and "ownership". An incomplete or faulty understanding of these concepts may lead to their becoming blind spots in the process of development, which condemn a project to failure even before its implementation.

III. SUSTAINABILITY OF JALANIDHI MODEL SERVICE DELIVERY

The whole premise of Jalanidhi project design, being based on the DRA, is to maximize the sustainability of the RWSS systems implemented through it. The DRA piloted in Kerala under the predecessor project demonstrated that the methodology maximized the sustainability of the resultant RWSS services – with average sustainability indicators of over 80% achieved for the 3,700-plus systems implemented. The DRA methodology ensures that the GPs and, especially, the BGs are fully engaged throughout the subproject implementation cycle, in the planning, procurement, construction and management phases. This bottom-up, participatory approach – through which GPs make commitments including a 15% contribution to the scheme's capital costs and in which the BGs are the central actors in implementing the subproject, making a 10% contribution to capital costs, fully participating in the planning and design phases, undertaking the works procurement and having responsibility for fully covering the system's O&M costs – engenders a strong sense of ownership for and responsibility towards the water system. In nearly all cases, the systems implemented under the predecessor project demonstrated they were still delivering water services to the target beneficiaries a number of years after the schemes were inaugurated – and in many cases the BGs managing the systems would use, or supplement, the reserve fund created for the system in order to purchase and install household water meters, replace burnt-out pumps, or install additional distribution pipes. Such results and actions are testament to the sustainability of the project and its design and implementation philosophy.

The DRA methodology has demonstrated a positive impact on the sustainability of the resultant water supply schemes. The proposed project is intended to ensure that the Jalanidhi DRA principles are mainstreamed for use for all new and rehabilitated intra-GP schemes in the state, and that sustainable models for the management of multi-GP schemes issues are demonstrated for future scale-up. The project will support diagnoses and planning work to assist GOK in exploring the critical links between WRM and water supply provision and to look at rationalizing and bringing further efficiencies to the spectrum of water service provision in the state.

IV. NENMENI DRINKING WATER SUPPLY SCHEME – A CASE

With the support of World Bank, the Kerala Government has piloted a new service delivery model for rural water supply service. The NenmeniSudhaJalaVitharana Society (NSJVS- Nenmeni Drinking Water Supply Society) is one such model under the World Bank aided Jalanidhi I Project and this case study explores how the community manages its own service delivery in a professional manner. The NSJVS is a registered non-profit organisation established to manage a rural piped water supply scheme in the Nenmeni Gram Panchayat. The end users of the water supply scheme make up the Society's General Body with some becoming part of the democratically elected Executive Committee. As a registered public body, they are bound by the relevant laws of the land for its governance. The technical and managerial competencies developed during the implementation of the Jalanidhi programme in the 2005-2007 period have paved the way for the success of this community management approach, as well as its sustainability. The well-defined project cycle with intensive emphasis on pre-planning and planning before implementation of the project was the key to sustain the results of the initial 27 month project. Notwithstanding the considerable external investment in software during the intensive capital development phase, implemented with the involvement of a support organization (NGO Shreyas), the NSJVS is an independent body with a dedicated team under a technically sound and efficient leadership that not only manages the water supply scheme very professionally but also provides expertise to other organizations involved in water supply management. The governing body, as well as the administrators, maintain transparency within the organization and this helps the NSJVS attract more consumers, from 727 in 2007 to nearly 3,000 in 2015 and in expanding their area coverage, besides taking over three other failing schemes from the Gram

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Panchayat and converting them in to fully functional water supply schemes. With only little more than a third of the population being served at present the NSJVS has to confront many challenges with their professionalism to reach 100 % coverage with potable water supply in the Nenmeni Gram Panchayat. The operational expenditure at the service provider level for 2014-15 was INR 254 per person served, funded against the revenue generated of INR 249 per person, coming from various sources including the tariff, membership entry fee, subscription fee, training fees, etc .

Year	Income	Expenditure	Balance
2010-11	9,88,572	8,42,894	1,45,678
2012-13	17,43,481	15,40,172	2,03,309
2014-15	28,00,518	27,26,174	74,344

Table 1: Income and expenditure (in INR) under O&M

This success should be seen in the light of the socio-environment-economic background of Kerala and the decentralised governance in practice there, where the management of water was seen, along with other socio-economic and environmental aspects, in an integrated manner. Notwithstanding this considerable success, the study notes the ongoing subsidy to power costs through the GP support for pumping to be paid for to the state electricity board at domestic electricity rates and also for the external support to improve water quality through a new treatment plant.

V. CONCLUSIONS

'Jalanidhi' ensures community involvement and monitoring in the operation & management of rural drinking water supply. When compared to other community managed schemes, Jalanidhi schemes performed better in O&M and overall performance. But the main success of Jalanidhi was in creating stronger institutions that is one of the prerequisites for the long term sustainability of the community based approach. The substantial time and effort that was spent in mobilizing communities, creating capacities, and involving communities in planning and implementation of the Jalanidhi schemes possibly explain their superior institutional performance compared to other community managed schemes. The community based approach is a superior alternative to traditional supply driven models in expanding and improving water service delivery in rural areas. Success of the community based approach demonstrates that the people are willing to contribute towards the capital costs of the schemes and pay for the water that they use for a better service delivery. However, to ensure long term sustainability of the community based schemes, more attention needs to be paid in creating stronger beneficiary level institutions including capacity development for financial management for successful operation and management of these schemes. In addition, institutions need to be created to provide operational and financial support to these schemes when needed.

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