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**COMMUNITY CONTRIBUTION
FOR ENVIRONMENTAL
SANITATION:
MYTH OR REALITY?**

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Community Contribution for Environmental Sanitation: Myth or Reality¹ ?

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Abstract

Reforms in water and sanitation sector intended to make stakeholders part of the implementation process. In the process beneficiaries share partial capital cost and meet 100 per cent of operation and maintenance cost by generating own revenue through user charges, which will reduce burden on exchequer. But, the experience shows that in most of the villages this approach has become a futile exercise. The option left is partially privatize the operation and maintenance activity for efficient delivery of service.

Introduction

In recent years there has been increasing recognition of the limitations on the capacity of national and local governments to manage the rapidly increasing number of development programmes effectively. In response, governments have been assigning greater roles to non-government organizations (NGOs) and the private sector and have actively started encouraging community participation. In the provision of drinking water and sanitary services, community-based programmes involving NGO and private sectors are being encouraged to increase efficiency (Churchil 1994). The major concern in such an approach is sharing / recovery of the cost from the community (Harmeyer and Mody 1998), in process the State gradually withdraw from provisioning of services and the gap will be filled by private agencies, local organizations. Neo-liberal economists argue that the imperfect nature of the State results in 'government failures' in the form of regulatory capture, rent seeking and corruption (Chang

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2002). Centralized decision-making and bureaucratic allocation of resources is fading fast to pave the way for decentralized allocation and stakeholder participation (Saleth, and Dinar, 1999), by which peoples, including the disadvantaged, influence decisions affecting them. Institutionalization of social capital and collective action improve efficiency in water supply systems (Narayan, 1993), social capital is essential for implementation and sustainability of the programme (Kahkonen 1999). Thus, there is strong support for structural changes in financing of development projects, including water and sanitations.

The world over, drinking water and sanitation projects have been viewed as fundamentals for promoting public health. As is well known, sanitation facilities prevent the transmission of oral-faecal diseases at the very source, by preventing human faecal contamination of water and soil. Human excreta are extremely dangerous for health unless disposed off safely (UN-HABITAT 2003). The term sanitation has been interpreted differently; in fact, sanitation involves interventions for reducing people's exposure to diseases by providing a clean environment for living with measures to break the cycle of diseases. This usually includes disposal and hygienic management of human and animal excreta refuse and waste water, control of disease vectors and provision of proper washing facilities for personal and domestic hygiene (WSSCC 2003). Improvement in water and sanitary services has helped control water-related diseases in France (Woods 2003), southern Europe, central America and several Asian countries (Das Gupta 2003). In fact, integrated water and sanitation programmes have had great impact in controlling diseases (Esrey et al.1985). Thus, potable/clean water and sanitation is inextricably linked to prevention of diseases and improves the quality of life and thus reduces poverty. Considering these facts, the United Nations has included the provision of potable water and sanitary services as one of the components under the Millennium Development Goals (MDG) to reduce poverty by 2015 (United Nations 2000). India being a member has agreed to introduce the paradigm shift in policy to involve beneficiaries, NGOs and the private sector. This has been followed by bilateral and multilateral agencies²

while funding these programmes in a few states, including Karnataka (World Bank 1999).

In Karnataka three major projects were implemented by external agencies (Annex 1), cost sharing and recovery by the community being the major thrust and people's involvement at all stages of implementation, from planning to finally owning the assets for operation and maintenance has been ensured in these projects. The approach critically viewed the premise that communities do not always go together as are heterogeneous in nature and lack the skills required, thus this exercise may become futile.

This study tries to investigate how and to what extent a paradigm shift has taken place in the sharing of costs by the community in the provision of potable water and environmental sanitation through user charges. The study has the following objectives:

- * to examine aspects of community contribution for environmental sanitation;
- * to assess the impact of community role in provision of services equally;
- * to examine the role of the community in the operation and maintenance of the assets provided.

Approach and methodology:

In order to pursue the objectives of the study, a multiple sampling method was used to pick the villages for the investigation. Of the total number of villages under the Karnataka Integrated Rural Water Supply and Sanitation project (KIRWSSP), two sets of sample were selected: (1) about ten per cent of the 1104 project villages, that is, 112 villages spread across 12 districts were selected randomly; all the pilot phase villages spread across State were selected purposively. The required secondary data were collected from Village Water Supply Committees (VWSCs), NGO and gramapanchayats; primary data was collected from sample households.

For household selection, the villages were grouped into two: the first category of villages consisted less of than 500 households each; while the second set of villages consisted of more then 500 households each. To ensure equal representation from both the groups, 30 and 15 per cent of households were selected randomly (Table 1).

Table 1: No of households selected across Pilot villages

Sl. No.	Name of the Village	Districts	Households		
			Total	Selected	Selected %
1	2	3	4	5	6
1	Seegevalu	Mysore	250	75	30
2	A.Nagathihalli	Mandya	238	71	30
3	Hombadimandadi	D.Kannada	257	76	30
4	Daginakatte	Shimoga	695	105	15
5	Kembliganhalli	Bangalore (R)	171	52	30
6	Lakhangaon	Bidar	750	112	15
7	Yelasangi	Gulbarga	629	94	15
8	Arkera	Raichur	702	104	15
9	Madlur	Belgaum	444	66	15
Total			4136	755	18

The tools chosen for data collection involved structured questionnaires and group discussions, wherein the participatory observation method was stressed. This paper is organized as follows. Section two, in brief, provides a background discussion on changes in policies and strategies towards community participation. Section three examines community contribution and the ensuring of equity and efficiency in the provision of sanitary services. The last section raises certain policy issues concerning the possible ways in which sanitary services should be designed and funded.

Policies and Strategies

Policies

It is estimated that 21 per cent of communicable diseases in India are water and sanitation-related; diarrhea alone killed over 7,00,000, that is, more than 1,600 a day, during the year 1999. In the past ten years, diarrhea has killed more children than all those that lost their lives to conflicts in almost 60 years since the Second World War. To remedy the situation the MDG state that the aim is to halve the number of people without adequate sanitation facilities by 2015. To achieve this target, on an average 3,50,000 people will have to gain access to improved sanitation every day between now and 2015..

Realization of the need for improvement in sanitation and hygiene is not a new development in India; the need for providing potable water and better sanitation was recognized even during the pre-Independence period for the better health of the British army (Ramasubban 1982). The Bhole Committee (1944) and the Environmental Hygiene Committee (1948) have provided a blueprint for the implementation of water and sanitary services and stressed their importance in improving public health. This blueprint became a basis for inclusion of these services under national agenda during the First Five-year plan (1951-56). However, it was only in 1954 that the Central Rural Sanitation programme (CRSP) was introduced part of the health sector. The operation, however, did not succeed until the 1980s due to confusion and inconsistency on the sanitation component. General guidelines for implementation of the CRSP, prescribe that each state should develop at least one model village every year under the Integrated Rural Sanitation Programme (IRSP)³.

Since the beginning of the Sixth Five-Year Plan (1980-85) and the launch of the International Drinking Water Supply and Sanitation Decade in 1980, India deepened its effort to rural water supply and sanitation. Though the provision of water supply and sanitation is the responsibility of each state government, central Government funding

constitutes nearly 40 per cent of the total investment in the sector. Nevertheless, water supply received greater attention compared to sanitation. The Seventh Five-Year Plan Draft (1985-90) was critical of earlier policies and programmes, due to two factors: first, it was essentially a supply-driven, top-down approach that did not take into account the pattern and intensity of demand for service; and second, the lack of community participation in service provision rendered it inefficient and unsustainable; further, public allocation often did not provide for an incentive structure for the use of services rationally and efficiently. To overcome these problems, it was proposed to involve stakeholders directly in the programme by introducing partial cost-sharing and recovery of user charges. In support of this, the Eighth Five-Year Plan policy paper stressed the need for devolution of responsibility to local governance and recommended changes in the mind-set of people, through four stages of intervention; viz.,

- (a) creating awareness;
- (b) developing a action plan to facilitate decision making, management and financial autonomy;
- (c) strengthening institutions and;
- (d) improving the monitoring, accountability and transparency of the sector (World Bank 1999).

The main objective of this policy change was to reduce the burden on the public exchequer. In support of this, policy instances were cited from worldwide experiences showing a positive correlation between stakeholder involvement and efficiency in implementation and sustainability (Harmeyer and Mody, 1997; Pushpangadan and Murugan, 1998). The 73rd Amendment to the Indian Constitution has vested enormous power in the hands of Panchayati Raj Institutions (PRIs) and its lowest tier, the Gram Panchayat (GP), has been mandated for the service delivery of potable water and provision of sanitary services. In many villages, Village Water Supply and Sanitation Committees (VWSCs)

co-exist with GPs, either as sub-committees or independently. Meanwhile, sector reforms have been introduced; the aim is to generate more demand-responsive and participatory approaches by empowering local governments and community groups to fully manage their own services without any outside support. In fact, the reforms support and strengthen the process introduced by multilateral and bilateral projects. In support of this, the Ninth Five-Year Plan (1998-2002) Working Group has endorsed it, considering the resource constraints. The sector reform programme is now being implemented as the Total Sanitation Campaign (TSC), involving stakeholders at all stages.

Coverage

Since the First Five-Year Plan, efforts have been made to cover the entire population of the country with potable water and improved sanitation. However, according to the latest official statistics, only 21 per cent of rural households actually have access to some form of sanitation (GOI 1998; GOI 2001). In the relatively poorer states of Orissa, Chattisgarh, Jharkhand and Bihar, more than 80 per cent of all the households have no toilet facilities. In the states of Madhya Pradesh and Rajasthan, the corresponding figure is between 70 and 80 per cent, 84 per cent of the households in Kerala have latrines attached to their houses(GOI 2001).

**Table 2: Availability of Toilets across States
1991 and 2001 (Per cent)**

States	1991		2001	
	Total	Rural	Total	Rural
Andhra Pradesh	18.40	6.62	32.99	18.15
Assam	37.43	30.53	64.64	59.57
Bihar	11.75	4.96	19.19	13.91
Chattisgarh	-	-	14.20	5.18
Delhi	63.38	29.60	77.96	62.89
Gujarat	30.69	11.16	44.60	21.65
Haryana	22.45	6.53	44.50	28.66
Jharkhand	-	-	19.67	6.57
Karnataka	24.13	6.85	37.50	17.40
Kerala	51.28	44.07	84.01	81.33
Madhya Pradesh	15.07	3.64	23.99	8.94
Maharashtra	29.56	6.64	35.09	18.21
Orissa	9.81	3.58	14.89	7.71
Punjab	33.18	15.79	56.84	40.91
Rajasthan	19.57	6.65	29.00	14.61
Tamil Nadu	23.13	7.17	35.16	14.36
Uttar Pradesh	18.02	6.44	31.43	19.23
Uttaranchal	-	-	45.20	31.60
West Bengal	31.51	12.31	43.71	26.93
India	23.70	9.48	36.41	21.92

Sources: Census of India 2001. Series 1, Tables on Houses,
Household Census of India 1991, series 1, Part VII, Tables.

The reasons for low coverage vary across states, however the common factors are religious beliefs and culture; for instance; an early civilization in the Indus River Valley had sophisticated sewerage systems and among the oldest known toilets. But the advent of Hinduism and its caste system, during later centuries, changed attitudes and practices concerning disposal of human waste (Cooper 1997). The physical structure of the village and lack of awareness of the community about health and hygienic conditions (Veerashekhara 2002); also the poor policy framework, lack of public health leadership and political will, as other factors acting as constraints for the expansion of sanitary services (Mavalankar and Shankar 2004).

Policies on rural sanitation in Karnataka

The Government of Karnataka, has accorded high priority to providing sanitation and has implemented various programmes towards this end. In rural Karnataka, so far as access of households to drinking water sources is concerned, about 59 per cent of them have connection to piped water supply and 64.7 per cent receive adequate water (>55 lpcd). Though we do not have information on the level of community sanitary services such as habitations with proper drainage system, non-existence of stagnant water pools, compost pits etc., data are available on the level of household latrine facility, and accordingly, 82 per cent of rural households do not have latrines (GOI 2001; GOK, 2000).

KIRWSS programme

Karnataka State is well known for the provision of potable drinking water and sanitary services in general, particularly through the Mini Water Supply (MWS) and Nirmal Gram Yojana (NGY) programmes respectively. Further, the progressive nature of the State, decentralized governance and better network of NGOs, has drawn the attention of external agencies for investment in various sectors including water and sanitation⁴. Among them, the World Bank has sponsored the KIRWSSP covering 1,104 villages, the project integrates water supply, habitat components⁵ and

environmental sanitation⁶. Under the programme the first two items are provided free of cost, while for environmental sanitation 30 per cent of cost has to be met by the community⁷. Government, NGO, beneficiaries and private sector, all have assumed different roles and responsibilities in the process of implementation. The community is involved at all stages of implementation through the VWSC. The VWSC works as an 'extended arm' of the GP. The state government has laid down guidelines for the formulation and functions of rural local organisations under the Karnataka Panchayat Act 1993, Section 61A. Villages failing to comply with these guidelines are not eligible for receipt of grants for implementing rural water supply and sanitation schemes.

Community Contribution for Environmental Sanitation

District aggregate

The first and foremost responsibility of the VWSC is to plan for services and estimate the required finances based on the guidelines of the Engineering Survey Report (ESR). Once the required services and finances are finalized, they have to be shared on a 70:30 ratio basis by Government and the community. To tender water work construction, the VWSC has to mobilize 25 per cent of the agreed amount. Except in Belgaum and Bidar, in all other districts the agreed amount was mobilized. In a couple of districts the mobilization was more than the agreed amount, but in none of the districts was the amount entirely mobilized from household sources only (Table 3), hence non-household sources were used as supplements. For instance, the household contribution was 17.6 per cent of the agreed amount in Hassan district. Similarly, in most districts that was below 50 per cent. In the districts of Belgaum, Shimoga Tumkur, Bangalore and Gulbarga it was above 50 per cent. Further, it is observed that except for Dakshina Kannada, Raichur, Tumkur and Shimoga in all other districts the actual amount contributed by the households is much less than what was agreed upon.

Table 3: Proportion of household contribution

District	Proportion of Contribution to the Agreed amount (in%)	Household contribution	
		As a Proportion of Total Contribution	As a Proportion what was Agreed upon
Bangalore	142.8	56.7	81.0
Mandya	123.7	45.4	56.1
Hassan	259.1	17.6	45.5
Belgaum	98.6	98.5	97.1
Gulbarga	129.0	54.1	69.7
Bellary	116.6	31.7	36.9
D Kannada	100	100	100
Raichur	477.8	33.2	148.4
Shimoga	153	73.3	112.1
Tumkur	223	72.	100.4
Bidar	99.6	87.3	87.0
Mysore	151.9	43.9	66.6
All Districts	142.2	56.3	81.1

From table 3, a pattern of contribution emerges where it appears that the community has ability to mobilize the agreed amount, but at the same time it is unable to mobilize the entire amount from household sources. Thus the household contribution constitutes only a certain proportion of what was contributed by the community as a whole and this suggests that the balance amount must have come from other sources. Based on the data obtained and discussions held with office bearers of the VWSC and NGOs, the sources of contribution were broadly classified into two, household and non-household. The non-household sources were GP, cooperative societies, shops and

industrial establishments, local leaders and fairs and festivals. Of these, the role of local leaders, contractors and GP was important in that order, because together they filled the biggest chunk of the gap left by households, which amounts to 44.7 per cent.

Table 4: Source-wise distribution of actual contribution across districts (Per cent)

District	House holds	Gramapanchayats			Local Leaders	Cooperatives	Shops & industries	Fairs & festivals	Contractors
		Loan	Grants	Auction & property tax					
1	2	3	4	5	7	8	9	10	11
Bangalore	56.7	-	-	4.5	27.0	5.9	2.4	0.4	2.9
Mandya	45.4	-	7.5	-	15.3	3.4	6.4	6.7	15.3
Hassan	17.6	-	1.0	5.0	13.2	-	-	3.7	59.5
Belgaum	98.6	-	-	-	-	-	-	-	-
Gulbarga	54.1	-	1.6	3.7	21.0	0.1	1.4	-	13.6
Bellary	31.7	2.1	-	1.4	51.2	2.8	4.0	-	6.8
D.K.	100.0	-	-	-	-	-	-	-	-
Raichur	33.2	2.9	-	-	-	0.7	-	-	62.7
Shimoga	73.3	3.8	2.5	11.6	3.3	-	-	1.6	3.9
Tumkur	72.0	-	-	3.3	15.5	0.2	5.5	-	3.5
Bidar	87.3	-	-	4.6	5.9	0.3	1.4	-	0.4
Mysore	43.9	-	1.1	-	40.7	6.2	3.9	4.3	-
District Average	56.3	0.9	2.0	2.8	16.9	1.9	1.3	0.5	19.4

Note: D.K: Dakshina Kannada

Across districts, the contractors' share in the total contribution was more than 60 per cent. The reasons vary across districts, for instance in Raichur and Hassan, the NGO appointed for community management

activities was withdrawn due to beauracratc reasons, to substitute which non-government individuals (NGI) were appointed to support and guide VWSCs in the respective districts. The NGIs could not convince households to make the contribution, and as a result most of the agreed amount was mobilized from non-household sources, and within these largely from contractors. Similarly, in districts such as Mysore, Bellary, Mandya, Gulbarga and Bangalore rural, much of the agreed amount was mobilized from other sources (Table 4).

However, it is noticed that each village has a different pattern in community contribution. According to Table 5, in four villages, households did not contribute at all, followed by less than 30 per cent contribution in 17 villages. Thus, in 21 villages, the household contribution was less then 25 per cent of total amount. In fact, among the selected villages, half the members (53 villages, including 4) were able to mobilize less then 60 per cent of the total agreed amount and in other villages the contribution was more then 60 per cent. The remained amount was mobilized from non-household sources like panchayats, local leaders, contractors and the like. However, as an exception to this general rule, of the 29 contractors who did make a contribution, 45 per cent of them contributed amounts varying from 40 per cent and upwards of the total contribution in a village. However, the total amount mobilized at state level from all sources under community contribution was Rs 130 million against the expected Rs 300 million (GOK, 2003), thus only 43 per cent of the agreed amount was mobilized. Within that, what was actually mobilized from households was just around 60 crores, thus the community was able in aggregate to mobilize a total of a one fifth of the amount budgeted against it. In fact, the community contribution has been a non-entity in some of villages.

Table 5: Distribution of Villages by Source of Contribution

Class Intervals (Percent of Contribution)	Number of Villages				
	Households	GPs*	Leaders	Contractors	Others**
0	4	75	59	40	73
0.1 –10.0	4	17	12	9	16
10.1- 20.0	6	5	7	42	6
20.1- 30.0	7	5	11	3	5
30.1- 40.0	13	6	6	5	3
40.1- 50.0	12	1	3	1	3
50.1- 60.0	10	2	0	3	5
60.1- 70.0	8	0	0	2	0
70.1 and above	48	1	5	7	1
Total	112	112	112	112	112

Note: * Under this source loans, grants, proceeds from auctioning of fuel, fodder etc., and property tax are included.

** Under these items sources such as societies and co-operatives, shops and industrial establishments, fairs and festivals are included.

As mentioned earlier, 25 per cent of the agreed amounts had to be mobilized by the tendering villages for water works, but in practice the norms were not followed in all the villages. The reasons attributed were that due to global tendering, for scale of economy, more than two villages were combined as a slice on a cluster basis while tendering for water construction. In the process, villages, which had not mobilized agreed with the amount being tendered on the pretext that the community would later mobilize funds as agreed. However, villagers did not show any interest in mobilizing the funds (Rajsekhar and Veerashekharappa 2003). Further, at the end of the project, in around 80 villages across 12 districts, even when the contribution was less than 25 per cent,

yet villages have been tendered. Mysore, Gulbarga and Bidar are among the top districts in terms of number of villages reporting contribution less than 25 per cent (World Bank 1999). Based on enquiry in selected sample villages, it is observed that 50 per cent of them could not mobilize the agreed amount in Gulbarga district of Karnataka (Rajasekhar and Veerashankarappa 2003). Sanitation work had not commenced at all and the community rejected the responsibility of operation and maintenance services. Thus, in sum, the community contribution could not take place to the extent that it was planned, particularly from households. What could be the reasons. This is discussed in the following sections

Village level community contribution

In all the selected pilot villages, except two the agreed amount was mobilized. About 64 per cent of the household have contributed 54 per cent of the total contribution, which was on par with the aggregate figures. However, the proportion of households, which contributed, vary across villages. A smaller number of households have contributed in Arkera (35 per cent) and a large number of households contributed in Seegavelu (93 per cent): similarly, the share of the amount contributed by households in total vary across villages, the lowest being in Lakhangao (35 per cent) and the highest in Dagainakatte (88 per cent). In Lakhangao, though the households mobilized a large amount, due to large contribution from non-household sources, the share of households appears reduced.

The methods adopted in mobilization of contribution varied across villages. At the household level, the economic status of the family was considered; accordingly the amount was fixed per household. For instance, in Hombadimandadi and Yelsangi villages the amount was fixed in the range of Rs.250 to Rs.1, 000, in Madlur, land holders were charged Rs.100 per acre and the landless Rs.50. In addition to individual household contribution, funds were mobilized through innovative methods, such as lottery (Lakhangao), musical night (Arkera and Nagathihalli), drama, village fair (Madlur), etc. The reason for less household contributions

was the inefficiency of the NGO. In fact, the household reported that they had not been convinced of the benefits from the programme and they were of the opinion that 'none pays' or 'nothing happens even if we did not pay'. Under such circumstances, the role of NGOs was very crucial, for changing the mindset of the people. The failure of the NGOs was an advantage to contractors; in each village the contractor has contributed Rs 50,000 to Rs two lakhs (Lakhangao) to meet the target. However, there is tremendous potential in the community to finance capital costs not only for sanitation construction work but also for drinking water supply, if households are convinced about the relation between contaminated water and health profile of the households (Veerashankarappa 1999).

Table 6: Community Contribution in selected villages

Sl. No.	Name of the Village	Availability (LPCD)	Agreed amount of Water	Percent amount mobilized to agreed	Percent of households contributed	Percentage of amount mobilized	
						House hold	Non-house hold
1	2	3	4	5	6	7	8
1	Seegevalu	7.7	190000	100.0	93	55.6	44.4
2	A.Nagathihalli	26.3	114000	91.2	58	79.8	20.2
3	Hombadimandadi	27.5	48000	52.0	57	80.0	20.0
4	Daginakatte	14.1	113420	100.0	45	88.2	11.8
5	Kembliganhalli	10.1	134000	100.0	53	40.3	59.7
6	Lakhangao	26.9	219000	182.0	93	35.0	65.0
7	Yelasangi	25.9	215000	100.0	86	52.6	47.4
8	Arkera	38.2	150000	100.0	35	66.7	33.3
9	Madlur	3	110000	100.0	100	68.2	31.8
Total				112.4	64	54.8	45.2

Note: Non-households sources: contractors, donors, lottery, musical nights and village & Gramadevata fair.

Role of the community in Implementation

Functions of VWSCs, apart from mobilizing resources, are to liaise between community and other agencies involved in implementation. For this, the committee should hold periodical meetings with the community as well as with other agencies, according to norms the VWSC meetings have to be held at least bi-monthly. According to Table 8, only 43 per cent of them held meetings according to schedule and 28 per cent at the initiative of officials. The reason for the lower number of meetings held was attributed to factions within the community on the lines of political parties. For instance, in Lakhangao and Seegavelu, the factions were so strong that they hampered the construction of drainage work, even though the agreed amount was mobilized. In both the villages, the animosity between the factions was so intense that any action initiated/proposed by one group, irrespective of its merit and need, invariably met with opposition from the other group(s). Elaborating further, during our visit we observed that if a member of one faction arrived first, members of the other faction stayed away from the meeting. Similarly, if the venue of the meeting was in a particular street, people from other streets used to be absent; hence most of the meetings used to take place during the officials visit at their insistence. Eventually, the VWSC could not gather the confidence and support of the villagers, as the committee members were divided on lines of political parties, though VWSC it self is a non-political entity.

The decisions taken at VWSC have own importance. The office bearers perceived that the decisions were based largely upon the consensus of all members; however, in a few cases, the GP president and NGO staff play an important role in taking decisions. On most of the issues, the secretary and president can take decisions, but these have to be ratified by the members. Sometimes a general consensus is obtained through open majority or secret ballot. It was observed that women would attend meetings but were not vocal enough in expressing their views⁸, though training was provided to them in understanding their

roles and responsibilities. A few women had some vague idea about what was happening but did not realize that they had a major role to play in understanding and solving the problem. However, female representation was better in the villages where women organizations were functioning efficiently (Daginkatte, Arketa and Lakhangao). The VWSC was authorized to award contracts for construction of sanitation services. In practice, the contract was awarded to persons who had contributed a large amount. In every village the contractor or political leaders have contributed and cornered the contract for themselves or for the persons they had recommended. In a couple of villages, the households are under the impression that there was a nexus between engineers, contractors and bureaucrats in awarding contracts.

The contractor being a local man and known to the villagers, because of factionalism in some villages the contractors work was subject to criticism. For instance, in Yelsangi there was a tussle on the location of the public stand post (PSP). Similar conflicts were noticed in other villages as well, such as using low quality pipes and not laying the distribution pipes at the required depth. In some villages, owing to the low capacity of the water storage tanks built, water needed to be filled twice, which was constrained by lack of electricity and other factors. Whenever the households raised these issues in the general body meetings and gramasabha, they have been faced by questions like 'Why should you interfere' 'Are you going to pay for it' 'Why bother who gets the contract'. If you want to interfere, why don't you contribute more funds?. Moreover, when the contractor is willing to contribute the share on behalf of the community. Thus, the VWSC choose to turn a blind eye to the malpractices.

Services delivery and sustainability

Under the programme, the objective was to provide potable water and sanitary services to all households in the villages equally and adequately so that they traverse shorter distances. However, it was noticed that despite community involvement at various stages, the services were biased towards wealthy localities, in term's of accessibility and adequacy

of water supply. According to our survey, 82 per cent of wealthy households had their source located at shorter distances. Similarly, 32 per cent of wealthy households draw water 40 lpcd and above, whereas on an average, 17 per cent of the poor draw water less than 40 lpcd. The quantity of water is drawn based on consumption requirements; the consumption or use of water varies across households because of cultural factors. Some households, because of cultural factors bathe daily and mop the house twice or thrice weekly and hence require more water. However, the quantity of water drawn was positively associated with the landholding and wealth status. From Table 7 it can be seen that on an average 39 per cent of the households were getting adequate water. Across income groups, households which had annual income in the range of 25,000 to 40,000 were getting adequate water compared to other income groups. In the case of lower income groups, households which were near the source had better access to sufficient water.

Table 7: Access to adequate water by income status

Income per annum (In Rs)			Total No.of respondents	% of HHs With adequate water
	Adequate	Not adequate		
1	2	3	4	5
Less than 15,000	36	98	134	27
15,000 to 25,000	127	175	302	42
25,001 to 40,000	62	79	141	44
40,001 and above	71	112	183	39
Grand total	296	464	760	39

The sanitation services provided under the programme are (1). washing platform, (2).dustbins, (3). cattle troughs, (4).community bathing cubicles and (5). drainage. As mentioned earlier, sanitary services had provided largely on demand from the community. Thus, in many

villages some of the components such as community toilets and bathing cubicles, were not proposed during the planning stage. It was felt that those components are not important given the village level contextual factors (location advantages of various services), as normally people prefer to bathe at their houses or at the water source. The review of the ESRs suggests that in most villagers, facilities like washing platforms, dustbins, cattle troughs and individual household toilets should be installed. However, most households reported that there were large variations in the components provided in the ESR and proposed by villagers.

Among sample households, on an average, 17 per cent of them had Individual Household Sanitation Latrines (IHSL), against the targeted 30 per cent. Even the 17 per cent a cumulative figure of various programmes implemented in the villages, such as Nirmalagrama. Across villages, Dagainakatte, followed by Hombadimandadi and Lakhangao had better coverage in providing better sanitation facilities, including drainage, dustbins etc. The reason for better coverage was specific to each village. In Dagainakatte, due to NGO commitment; in Hombadimandadi, due to cultural factors and in Lakhangao, due to connection of bio-gas to IHSL. The reason for poor coverage was lack of required land and households were not convinced about receiving the expected services

Table 8: Households using water and environmental sanitation services(Percent)

Sl. No.	Name of the vilage	Water supply	Bathing cubicle	Washing platform	Cattle troughs	Street bins drainage	Sullage	Individual-latrines*	Indv lat-cum biogas
1	Seegavalu	65	NA	neg	nil	NA	70	8	NA
1a	K.Koppalu	nil	NA	NIL	NIL	not in use	50	NA	NA
2	A.Nagathihalli	100	NA	neg	40	not in use	70	16	NA
3	Hombadimandadi	50	neg	nil	nil	not in use	nil	19	NA
4	Daginakatte	65	NA	nil	20	NA	60	9	NA
5	Kemblighanhalli	100	NA	nil	nil	not in use	60	7	NA
6	Lakhanagaon	neg	neg	neg	NA	NA	50	1	30
7	Yelasangi	100	neg	20	20	NA	30	1	NA
8	Arkera	100	NA	20	20	in use	60	18	NA
9	Madlur	100	neg	20	20	NA	90	2	NA

Note: although a number of ISLs were constructed, only a few of them were used.

Households in some villages pointed out that the provision of IHSLs was biased towards wealthy people. This was explicit as the sanitation services were provided to those households who made a matching contribution of 25 per cent of the total cost. In the villages covered by this programme, it was common to see box type drainage in the wealthy localities and L shaped drainage in poorer localities. Further, in a few villages the VWSC have linked sanction of subsidy to household toilets with community contribution and private household connection (PHC) of water, the beneficiary has to meet either one of these condition. The objective of this decision is to plough back the subsidy amount to the community contribution fund indirectly. The contribution is a pre-condition to sanction latrines under the IRWSS, as per the informal practice observed in all sample villages. This undue

has kept away many households from opting for latrines, as most of them could not deposit the amount. Thus, households face discrimination not only in getting toilets but also in obtaining any sanitation services in their locality. To prevent such unethical decisions, marginal sections of the community were provided a reasonably better representation in the VWSC by reserving an adequate number of seats. However, this could not help in raising their voice, because each proposal was linked to the persons contribution. In fact, many poor households were ignorant about the project, the credentials of the VWSC were questionable, as they have actually been paid to create awareness in general, particularly among the poor, to empower them to participate in the process of implementation.

Under the programme, the community will have a memorandum of understanding (MoU) with the government to take up the responsibility of operation and maintenance of assets by collecting user charges. But in some villages (Lakhangao and Daginkatte) even without the MoU the assets had been handed over to one or two committee members. There were cases where most committee members felt that the work carried out was very shabby. Though the replacement of old pipes with new ones was part of the contract, with the nexus between officials and contractors that was not carried out. In Dagainakatte, the villagers felt that the construction work was very shabby and a large number of valves were not functioning. On these grounds the villagers rejected taking over the O&M responsibility, but with the help of couple of a few committee members, the officials were able to transfer the assets to the VWSC.

The sustainability of systems depends upon skills in maintenance and timely replacement/augmentation of existing systems, which in turn depends on financial and institutional sustainability. Among these interdependent components, financial sustainability is of the utmost importance. VWSCs should have financial stability and this can be achieved by generating resources through imposing user charges and other charges. To increase the user charges, the number of PHCs

has to be increased each year to match the increasing expenditure. Of the total of 755 sample households, 217 had access to PHC, of whom, nearly 70 per cent belonged to wealthy and middle-income categories. This is quite obvious as the deposit had to be made, in addition to the community contribution. However, it was noted that user charges levied did not have any direct influence on water supply efficiency or its rational use. Villages who were paying higher charges also faced problems of scarcity and inadequacy accompanied with inaccessibility. This was discouraging for people, who were opting for a demand-driven approach to water supply services.

As mentioned earlier, in some villages sanitation work was not taken up due to lack of community contribution and in those villages the community could not take the responsibility of O&M. Subsequently, of all the villages under the programme, except for 10 to 12 villages, all other villages were handed over to the respective gramapanchayat for O&M. Now the GPs are meeting the expenditure from the development fund account of the village, as providing water to the villages is one of the basic responsibilities of the GP.

Lessons learnt and Alternatives

The above analysis began by elaborating that the concept of community participation through cost-sharing and recovery in development projects has been theoretically established and empirically tested in many part of the world. International agencies are promoting this idea by funding directly and indirectly, and countries are accepting these approaches, as they would reduce the financial burden on the public exchequer.

In India, based on this concept, several programmes were implemented; among these the Karnataka integrated water supply and sanitation programme is one. The success of this experiment was subject to the following factors: community awareness, political will of the government including local government, the effective functioning of the VWSC. However, our analysis brings out that the VWSC was ineffective in

organization and functioning, owing to lack of statutory power and most of the demerits of the gramapanchayats were inherited by it. Owing to lack of political will, the programme was used for the benefit of local leaders rather than institutionalize the programme. In the process, proper institutional framework and collective action does not take place under the programme. In fact, members of the committee acted as licensing authorities rather than facilitators to promote water and sanitation services in village.

Based on our survey findings, it may be held that the VWSC has not been successful in many villages in mobilizing the required community contribution for environmental sanitation. The tendering of villages for construction of water works without mobilizing upfront contributions defeated the philosophy and the essence of the programme. As a result, beneficiary involvement in sharing capital cost and recovery of operation and maintenance costs by levy of user charges could not take place in many villages. Subsequently, this had a negative effect on provision of sanitation services, particularly on construction of drainage services. The amount spent on creating awareness and mobilization of community contribution was more than what was collected as community contribution. If one compares project villages and control villages, the problems are the same or even worse in project villages, because of the lack of accountability among the actors involved.

The lessons learnt from the above analysis is that the concept of need, demand and community contribution were not marketed well. In the sense, NGOs, which had been assigned the responsibility of creating the demand for better service, have not performed their job efficiently. People, with their past experience of existing delivery systems, are unable to believe that services will improve under the VWSC, because the service provider is going to be part of the same local governance. Thus, there is a need to separate the job of service provider from the local governance. This calls for partial privatization of service delivery to improve services. The VWSC can hold the

responsibility of regulation on behalf of the GP. Under sections 100 and 106 the gramapanchayats or any one appointed by them is empowered to inspect any sewer, drain, privy, water closet, house-gully or cesspool. Considering this legal support, the GP can compel households to construct sanitary latrines. The gramapanchayat can then outsource the provision part to an NGO or any dedicated organization, similar to Ramkrishna Lok Siksha Parishad, Midnapur. However, these institutions must have a clear structure of goals and methods of implementation. Care must be taken not to duplicate efforts or damage the working relationship between the partner institutions.

End Notes

¹ DANIDA, KFW, DfiD, World Bank, UNICEF, UNDP and European Union

² These include the facilities like sanitary latrines, conversion of dry latrines, garbage pits, soak-pits, drains, paving of lanes; sanitary latrines in anganawadi schools panchayatghar, health centre; smokeless chullahs; cleanliness of ponds and tanks; clean surroundings around, handpumps and other drinking water sources with platform including washing and bathing platforms etc.

³ World Bank, the Netherland government and DANID, etc.

⁴ Washing platforms, bathing cubic, cattle trough and dustbins

⁵ Sullage drainage, (2).Road reprofiling and (3) Bye-lane pavement.

⁶ Out of the total amount required 70 per cent will be provided as grant by the programme and the remaining 30 per cent has to be contributed by the community in the form of cash, material and manpower.

⁷ The effectiveness community participation is observed looking at the implementation of the decision taken in the meetings and quality of work undertaken. In most of the villages where the VWSCs role was meager in mobilizing the community contribution, the quality of work was very shabby.

References

Bhore Committee (1946) This committee, known as the Health Survey & Development Committee, [www.ndc-nihfw.org/html/Committee And Communications.htm](http://www.ndc-nihfw.org/html/Committee%20And%20Communications.htm)

Cairncross, Sandy (1992) – *Sanitation and water supply: Practical lessons from the decade*, Discussion Paper Series 9, World Bank, Washington DC.

Chang, Ha-Joon, (2002), "Breaking the Mould: an Institutionalist Political Economy Alternative to the Neo-Liberal Theory of the Market and The State", *Cambridge Journal of Economics*, 26 ,

Churchill, Anthony; (1993) *Rural water supply and sanitation - Time for a change*, World Bank Development Project; See, also, Serageldin, (1994) *Water Supply, Sanitation and Environmental Sustainability, Financial challenge*, The World Bank, Washington.

Cooper, J Kenneth (1997) *Human Waste Overwhelms India's War on Disease*. Washington Post, Foreign Service, Monday, February 17.

Dasgupta, Monica das and others (2003) Governance of communicable disease control services: a case study and lessons from India, *Background paper for WDR 2004(unpublished)*.

Environmental Hygiene Committee (1948 -49), which recommended a comprehensive plan for providing safe water, www.sulabhenvi.in/pages/database_detail.asp.

Esrey, S.A., Feachem, R.G. and Hughes, J.M. (1985) Interventions for the control of diarrhoeal disease among young children: improving water supplies and excreta disposal facilities. *Bulletin of the World Health Organization*, 63(4), 757–772

Government of India (1999) *54th Round. Drinking water, sanitation and hygiene in India*. National Sample Survey Organization, New Delhi.

Government of India (2001), Tables on Houses and Household Amenities and Assets, Series 1. Office of the Registrar General and Census Commissioner, New Delhi.

GOI(2003), *Towards total sanitation and hygiene: A challenge for India*. Ministry of Rural Development, New Delhi, Website: www.ddws.nic.in

Government of Karnataka (1998) *Evaluation study on water supply and sanitation*, Directorate of Economics and Statistics, M S Buildings, Ambedkar Veedhi, Bangalore.

GOK(2000) *Strategy paper on rural water supply and sanitation, 2000-2005*, Department of Rural Development and Panchyat Raj, M S Building, Bangalore, October.

Harmeyer, David and Ashok Mody "Private Capital in Water and Sanitation" *Finance and Development*, March 1997.

Kahkonen, Sathu (1999) Does social capital matter in water and sanitation delivery:

A Review of literature – Social capital initiative working paper No (9), The World Bank

Khaleghian (eds.) The organization of disease control systems: case studies from Asia, Africa and Latin America (forthcoming).

Mavalankar Dileep ; Shankar M (2004), "Sanitation and Water Supply: The Forgotten Infrastructure" , *India Infrastructure Report, 2004* , New Delhi: Oxford University Press.

Myles, F Elledge (2003)'*International water and sanitation' Reviewed by Roland Schertnlib (SANDEL)* , IRC International and Sanitation.

Narayan, Deepa. (1995), "*The contribution of people's participation, evidences from 121 rural water supply projects*", Environmentally Sustainable Development Occasional Paper series No.1, World Bank, Washington D C

Pushpangdan, K and Murgan, G "User financing and collective action: Relevance for sustainable rural water supply in India" *Economic and Political Weekly*; April 4, 1998..

Rajasekhar, D and Veerashekhharappa (2003)' Role of local organisations in water supply and sanitation sector: A study in Karnataka and Uttaranchal states, India, Institute for Social and Economic Change, Nargarbhavi, Bangalore 560072.

Ramasubban, Radhika (1982) *Public health and medical research in India.*, Saree Report (4): Swedish Agency for Research Cooperation with Developing Countries. Stockholm,

Ruth, Meinzen Dick and Mendeza Meyra (1996), Alternative water allocation mechanisms: India and international experiences, *Economic and Political Weekly* Vol, 31(12) March 30 page A-25.

Saleth, Maria R. and Dinar, Ariel. (1999) "*Water challenge and institutional response: A cross-country perspective*", Policy Working Paper No. 2045. Washington, D.C.: The World Bank.

UN- HABITAT (2003). *Water and Sanitation in the World's Cities: Local Action for Global Goals*. London: Earthscan Publications Ltd

United Nations(2000), UN Millennium Development Goals(MDG)"Website <http://un.org/millenniumgoals/index.html>.

Veerashankarappa (1999), *Karnataka integrated rural water and environmental sanitation impact: An evaluation study*, Institute for Social and Economic Change, Nagarbhavi, Bangalore 560072.

Veerashankarappa (2002) Community participation in rural drinking water supply and sanitation: A case study of Karnataka' *Journal of Indian Water Works Association*, Vol XXXIV (1) , Jan-Mar..

Veerashankarappa (2004) *Promotion of individual household latrines in rural Karnataka: Lessons learnt*, Working Paper (160), Institute for Social and Economic change.

WHO and UNICEF (2000), *Global sanitation water supply assessment 2000 Report*, Geneva, WHO-UNICEF.

Woods, Robert.(2003). *Public health service delivery: the historical experience of the developed countries in Monica Das Gupta and Peyvand*

WSSCC (2003), Website: www.wsscc.org related to water and sanitation

World Bank (1999). *Rural Water Supply and Sanitation*. Washington: World Bank and New Delhi: Allied Publishers.