

# Community Contribution for Environmental Sanitation in Rural Area Myth or Reality

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## Abstract

All over the world, drinking water and sanitation projects are being viewed as a base for promoting public health. In India, the coverage of sanitation services are poor, to achieve the Million Development Goals (MDG) there appears to be insufficient resource allocation to the sector. Hence, under sector reforms the government replaces heavy subsidized programme with demand driven and community led approach, where community share/recovery of partial capital cost, to reduce burden on state exchequer. This study investigated how and to what extent this shift help in achieving the set objective by choosing a similar project implemented in Karnataka state with the following objectives:

- To examine community contribution for environmental sanitation.
- To examine impact of community participation in expected outcomes.
- To examine the contribution by different stakeholders during implementation of project

## Approach and Methodology:

To test the objectives, a multiple sampling method was used to select the villages and households. The result in analysis shows that the communities were unable to contribute for the capital cost. As a result, there was inequity in sharing the benefits of the project among the community. Hence, it necessitates redesigning the project with specific role for each actor in the project.

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## Introduction

In recent years, there has been increasing recognition of the limitations of the capacity of government agencies to effectively manage the rapidly increasing multiplicity of development programmes. As a substitute the governments have been assigning greater roles to the Non-Government Organisations (NGO), private sector and communities for greater participation. This shift in approach was observed in various sector including drinking water and sanitation services, to increase efficiency (Churchill 1994), for cost recovery (Harmeyer and Mody 1998) and sustainability of the schemes/assets (*Kahkonen* 1999), this has been experienced in many countries (Narayan 1993). In fact, the drinking water and sanitation sector received attention to promote public health, (Woods 2003; Das Gupta 2003; Esrey *et al.*1991) in turn the productivity of human resources can be enhanced, thus poverty can be reduced.

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In India, just 22 per cent of the households have access to sanitation in rural area (NSS 1998; Census 2001). This level needs to rise to 53 per cent by 2015 to meet the MDG target, a huge challenge. There appears to be a shortfall of some Rs 287 billion in the financing needed from 2002-15 (Water Aid 2005). Toward this goal the Government of India is making all the efforts, traditionally relied on high level of subsidies to construct latrines. The high subsidy approach has been now replaced with the principle of demand driven and community led, with the introduction of the Total Sanitation Campaign (TSC) in 1999. The concept of sanitation has now been expanded to include liquid and solid waste disposal, personal, domestic as well as environmental hygiene.

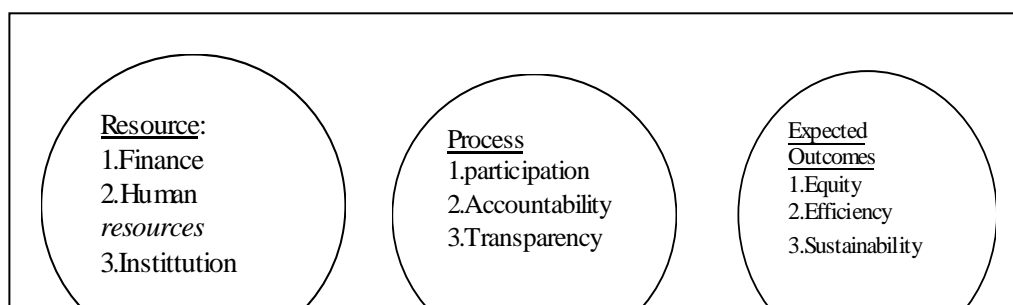
### Location of Project

The Karnataka (Federal State) state implemented three major projects supported by multilateral and bilateral agencies, the new approach introduced in TSC was in-built in these projects. This study investigated how and to what extent the paradigm shift took place in demand driven and community led. For investigation, the Karnataka Integrated Rural Water Supply and Sanitation Services (KIRWSS) project was selected, which was implemented during 1994-2002, in 1104 villages (rural settlements), supported by World Bank.. Two sets of villages were selected for investigation, first set of villages were randomly selected ten per cent of the 1104, project villages. Purposively all the nine pilot phase villages spread across the state were selected for investigating impact of project at household level, the households were selected proportionately to total households. Thus, 121 villages (112+9) and 755 households were finally selected and examined. According to methodology (see Appendix), the required secondary and primary data was collected from different agencies and households.

### Situation Analysis and Description of Problem

According to the latest statistics in state only 18 per cent of the households have access to latrines and 35 percent for drainage systems (Census 2001). Of the total access to latrines only 9 percent were have pit latrine. The reasons for the low coverage vary; however, the common factors are religious beliefs and culture, the advent of Hinduism and its caste system (Cooper 1997). The community often unable to perceive a direct relationship between the current health profile of household and sanitation services. (Veerashekhara, 2001; 2004)

As the project was based on need and demand driven concept, the primary objective was to create awareness on impact of water and sanitation related diseases, in turn to create demand for project. For this, the Information, Education and Communication (IEC) strategy was adopted. Under the project, the entire investment on water was met by the project funds, while for environmental sanitation 30 per cent of the cost has to be met by the community in the ratio of 70:30. The NGOs, beneficiaries and private sector have participated; the beneficiary was involved in all stages of implementation through Village Water Supply and Sanitation Committees (VWSC). The concept followed in the project was with better resources and community participation; the expected outcomes can be derived. The process and expected outcomes were well defined under the project, which was reproduced here briefly.





As mentioned earlier, the community has to share 30 per cent of capital cost of sanitation. To tender water work construction, the VWSC has to mobilize 25 per cent of the 30 per cent, thus the community was made accountable for initiation of the project. Of the total 12 district (provinces) where project implemented, except in two districts, in all other districts the agreed amount was mobilized, but in none of the district the amount was entirely mobilized from the household source. The balance amount has come from non-household sources, such as Gramapanchayat, cooperative societies, contractors, etc. Of these, the role of local leaders, contractors and Gramapanchayats was important in that order, because together they met the biggest chunk of the gap left by the households, which amounted to 41.6 per cent. Of the total selected (112) villages, including four villages, where no contribution has taken place, in total 21 villages the contribution was less than 25 per cent. The major concern in this context was, of the 29 contractors, 45 per cent of them contributed an amount varying from 40 per cent and upwards of the total contribution in the village (in one village 80 per cent). Finally, the total amount mobilized at state level from all sources under community contribution was Rs 130 million as against the expected Rs 300 million (GOK 2003), thus, 43 per cent of the agreed amount was mobilized. Within that, what was actually mobilized from the household was just around 60 million.

As mentioned earlier, 25 per cent of the agreed amount had to be mobilized for tendering villages for water works, but in practice the norms were flouted. The reasons attributed were that the tendering was done on global competition, to achieve the economy of scale and a couple of villages were combined as a slice on cluster basis. In the process, the villages that had not mobilized the agreed amount also tendered on the pretext that community would mobilize the agreed amount later. But, that could not take place at all, thus the accountability on the part of community was relaxed.

In pilot villages, the pattern of contribution was more or less same what was observed in large sample. The most identified reason for less number of household contributions was the inefficiency of NGO in convincing the household about the benefits of the project. Most of the households were under impression that 'none pays' or 'nothing happens even if we did not pay'. Thus, the NGO could not make much effort in changing of mindset of the household, which was very crucial for successful implementation of the project. The inefficiency of NGO was turned out be an advantage to contractors in each village. If the households had been convinced on the relation between contaminated water and health profile of the households the situation would have been different. The role of NGO, along with creation of awareness, it has to facilitate VWSC in its various functions, such as facilitated to conduct meetings, provide technical training in operation and maintenance of assets, etc. As per the norms, VWSC meetings were scheduled every fortnight, but, the minutes of meeting book show that in all the villages, in aggregate 43 per cent of meetings held as per schedule. The reasons for not holding

meetings as per scheduled was attributed to the factions in village and reconstituting of VWSC in couple of villages, due to change of party in power. It is observed that women and vulnerable section of the community attended the meetings, because of appropriate reservations were made to them while constituting the committee. But, their presence was not felt in meetings.

The VWSC had been authorized to award contract for the construction of sanitation services. In practice, the persons, who played a key role in mobilizing the large amount, took the decision. In each village, the contractor was awarded to the person recommended by them. If any person questions the award of contract was cornered and suppressed with questions like 'Why should you interfere? Are you going to pay for it? Why bother who gets contract. If you want to interfere, why don't you mobilize more? Moreover, when the contractor was willing to contribute on our behalf, we have saved of paying towards our share of capital cost. Thus, there was no community participation and transparency in awarding contract, as there was nexus between elite group of village and contractor.

Thus, though finance (enough funds), human resources (NGO) and organisation (VWSC) was provided in the project as input in. But, it is noticed that there is not equity provision of services, which were biased towards wealthy localities in terms of accessibility and adequacy of water supply. Of the total households, 82 per cent of the wealthy households found the source located within short distance, 32 per cent drew water 40 lpcd and above, whereas on an average, 17 per cent of the poor drew water less than 40 lpcd. The quantity of water obtained was positively associated with the landholding and wealth status. Similarly, there was inequity in provision of sanitation services. As mentioned earlier, sanitation services made available largely on demand based by sharing proportion of total investment cost. As a result there were large variations in the components provided and proposed, considering the mobilization of agreed amount (Appendix). For instance, the drainage construction was not taken place in one village, in three villages it was partially constructed that too in wealthy locality. The box type drainage was constructed in wealthy locality, while in other localities the L shape drainage was constructed. Of the total selected households, on an average, 17 per cent of them had Individual Household Sanitary Latrine (IHSL), against the targeted 30 per cent by the project. The 17 per cent were a cumulative figure of various other similar programmes, such as Nirmal grama yojana (NGY) implemented in respective villages. The reasons for low coverage were attributed, for linking sanction of subsidy to the household toilets with community contribution and private household connection (PHC) of water. The beneficiary had to meet at least one of these two conditions to get the benefit. This undue practice had kept away many deserving households from opting for latrines. At the same time, our investigation found a couple of households misusing the facility, with the nexus of officials and key persons within the village, by showing latrines constructed under NGY or self initiated against the KIRWSS and claimed the subsidy.

### **Lessons learnt and Alternatives**

The above analysis brings out that; the concept of community participation through cost sharing and recovery in development projects had been theoretically established and empirically tested in many parts of the world. The international agencies have been

promoting this idea by funding directly and indirectly, countries are accepting these policies to reduce the financial burden on public exchequer of their county.

The lessons learn from this project was, the programme not deep rooted in minds of people, to achieve this, the approach has to be revised. Both the institutions (NGO and VWSC) were ineffective in various aspects, in fact the VWSC was functioning as an extended arm of the gramapanchayat. Thus most of the demerits of that institution have been inherited by this organization. As a result, neither the beneficiary shared the capital cost nor user charges were paid in many villages. In fact, the project helped the key persons in the village to capture benefits, without accountability. Subsequently, most of the villages (except 10 to 12 villages) were transferred to gramapanchayat, the operation and maintenance cost is met largely from state budgetary allocation.

Hence, there is a need to re-examine at the design of similar projects, particularly designing the process, which is most important. Particularly the job of regulator and service provision has to be separated, to achieve equity and efficiency in service provision, if necessary partial privatization can be acceptable by involving Self Help Groups (SHGs) through linking up microfinance activities. Indeed this approach might be an alternative in future.

## Appendix

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### Supporting Information

**Table 1: Percent of Households with sanitation facilities (2001)**

Sanitation Services	Karnataka			All India		
	Total	Rural	Urban	Total	Rural	Urban
Type of latrine within the house						
Pit latrine	13.38	9.48	20.70	11.5	10.3	14.6
Water closet	18.64	4.67	44.86	18	7.1	46.1
Other latrine	5.48	3.25	9.67	6.9	4.5	13
No latrine	62.50	82.60	24.77	63.6	78.1	26.3
Type of connectivity for waste water outlet						
Closed Drainage	17.26	4.28	41.64	12.5	3.9	34.5
Open Drainage	33.97	31.11	39.33	33.9	30.3	43.4
No drainage	48.77	64.61	19.03	53.6	65.8	22.1

Source: Census 2001

**Table 2: Source-wise Distribution of Actual Contribution across Districts (in %)**

District	House Holds	Grama Panchayats			Local Leaders	Cooperatives	Shops & Industries	Fairs & Festivals	Contractors
		Loan	Grants	Auctions					
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	-
Average	56.3	0.9	2.0	2.8	16.9	1.9	1.3	0.5	19.4

**Table 3: Distribution of villages by Source of Contribution**

Class Intervals (per cent 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 have been included.

**Table 4:Households Using Water and Environmental Sanitation Services (in Percentages)**

SI No	Name of the Village	Water supply	Bathing cubicle	Washing platform	Cattle troughs	Street Bins	Sullage drainage	Individual-latrines*	Indvl. 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	Kembliganhalli	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	<b>NA</b>	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.

### **Approach and Methodology:**

The multiple sampling method was adopted to select the villages. Of the total villages under the programme, two sets of samples were selected: 1) Ten per cent of the 1104, project villages were selected randomly, 112 villages spread across 12 districts; 2. Purposively all the nine pilot phase villages spread across the state were selected. The required secondary data were collected from Village Water Supply Committee (VWSC), NGOs and Gramapanchayats; the primary data were collected from selected households. Households selected by grouping villages into two; the first category of the villages consisted of less than five hundred households each; and the second set of villages consisted of more than five hundred households each, to have equal representation from both the groups, 30 and 15 per cent of the households were selected randomly. The tools chosen for data collection, in addition to questionnaire and group discussion, participator method was considered. As the programme based on the process of resources, deals more organisation capability of the institutions, hence some of the villages documented as case studies.

## Responsibility of Different Actors

