

Restoration of Dignity, Self esteem, Safety and Well being of Women through provision of Toilets: An explorative study in Urban and Semi Urban settings in Odisha

Rashmi Mishra

*Reader in Sociology, NKC Centre for Development Studies, Bhubaneswar,
Email: rashmi_rkm@rediffmail.com

Abstract: Provision of toilets under Integrated Low Cost Sanitation Scheme (ILCSS) to the households having no latrine is expected to inculcate the habit to leave open defecation besides making the surrounding pollution free. The study conducted in five urban local bodies in Odisha highlighted that toilets have been constructed under the ILCS Scheme as these areas were prone to open defecation. Before implementation of the scheme, the women members of the households find difficulty in defecating in the open. The ILCSS toilets gave them a great relief besides giving advantage to children. The households are motivated by family members, health workers etc. to make their ward open defecation free which would have been otherwise for spread of diseases. Majority of the beneficiaries are aware of the occurrence of the diseases due to open defecation. The beneficiaries viewed for increased funding, size and quality of construction etc. are to be improved to bring efficiency to the scheme. In spite of the bottlenecks in its implementation the ILCSS toilets restored the dignity, self esteem, safety and well being of woman as they used the facilities more than the men.

Keywords: Integrated Low Cost Sanitation Scheme (ILCSS), toilets, children, self esteem, safety and well being.

1. INTRODUCTION

Sanitation promotes proper disposal of human and animal wastes, proper use of toilet and avoiding open space defecation. The Integrated Low Cost Sanitation Scheme (ILCSS) is to achieve Open Defecation Free (ODF) urban areas by providing two pit pour flush latrines to Economically Weaker Section (EWS) households having no latrine with due cognizance accorded to the local conditions and geographical parameters. It is expected that with provision of toilets under the scheme the households as well as neighbours will leave the habit of open defecation and shall make the surrounding pollution free. The objectives of this study are (i) to identify the assets created exclusively from the schemes and the benefits accrued (ii) to assess the benefits accruing to the beneficiaries from other related schemes and programmes in addition to ILCSS. The reference points for the study are to identify the implementation process, verify the assets created, assess benefits accruing to the beneficiaries, identify the enabling and hindering factors, map stories of success and struggle, learn lessons for future and suggest direction for the way forward.

The study was conducted in five Urban Local Bodies (ULBs) namely Phulbani, Subarnapur, Burla, Rairakhol and Kendrapara of Odisha state by sampling households having toilets constructed under the ILCS scheme. All the wards of the ULBs having beneficiary households were represented by probability sampling. A total of 500 households were sampled with 27 households from Phulbani, 54 from Subarnapur, 137 from Burla, 174 from Rairakhol and 108 from Kendrapara.

Table 1: Distribution of Households by type of Latrine Facility in the Sample Districts, 2011 (in percentage)

Sl No	District	Total No. of Households (Excluding institutional households)	Latrine facility available within premises	Piped sewer system	Septic tank	Other system	With slab/Ventilated improved Pit	Without Slab/Open Pit	Night soil disposed into open drain	Night soil removed by women	Night soil serviced by Animal
1	Kandhamal	172,004	11.1	0.6	7.4	1	0.9	0.9	0.2	0.1	1.1
2	Kendrapara	327,405	17.8	1.3	11.5	1.2	2	0.8	0.2	0.5	1.3
3	Sambalpur	248,829	22.9	2.6	17.6	0.9	0.8	0.4	0.3	0.1	1.4
4	Subarnapur	152,454	10.3	0.5	7.5	0.7	0.7	0.4	0.1	0	1.4
	Odisha	9,661,085	22	2.5	13.6	1.6	2.1	1.4	0.3	0.3	1.4

Source: Statistical Abstract of Odisha, 2012 Directorate of Economics and Statistics, Odisha, Bhubaneswar.

The latrine facilities available with premises vary from 11.1 percent on Kandhamal district to max 22.9 percent in Sambalpur districts (Table 1). The highest percentage of septic tank per total household is found in Sambalpur district (17.6) as compared to 7.4 percent in Kandhamal district. The verified improved pits are 0.7 to 2.1 percent of the total households indicating the need for critical intervention in this respect. Similar is the situation in the sample district in when toilets are available but with open pit/ without slab. The above indication highlighted that the area was prove to open defecation odd hours and raining days.

Table 2: Use of Toilets in Households with Toilet Facilities (in percentage)

ULB/NAC	Beneficiary HHs	Toilet use											
		Used daily		Using Percentage of men		Using Percentage of women		Using Percentage of Children		Additional toilet needed		Views of Open defecation Even if with additional toilet	
		Yes	No	Use	Not Use	Use	Not Use	Use	Not Use	Yes	No	Yes	No
Phul bani	27	66.67	33.33	62.96	37.04	74.07	25.93	40.74	59.26	51.85	48.15	33.33	18.52
Subarnapur	54	92.59	7.41	77.78	22.22	87.04	12.96	50.00	50.00	46.30	53.70	16.67	29.63
Burla	137	60.58	39.42	54.01	45.99	59.12	40.88	40.15	59.85	8.03	91.97	3.65	4.38
Rairakhol	174	38.51	61.49	33.91	66.09	37.36	62.64	25.86	74.14	36.78	63.22	27.01	9.77
Kendrapara	108	94.44	5.56	79.63	20.37	91.67	8.33	44.44	55.56	25.93	74.07	12.04	13.89
Total	500	64.00	36.00	55.60	44.40	62.40	37.60	37.20	62.80	28.40	71.60	16.60	11.80

Note: Figures in the parentheses indicate percentages.

Source: Field Study

After the construction of ILCSS toilets by the beneficiaries, an attempt has been made to analyse the use of toilets by the households having toilet facilities. The results (Table-2) reveal that beneficiary households use the toilet daily (64.0 percent) while 55.6 percent of male members of households use the toilets as against 62.4% women. The women members find difficulty in defecating in the open due to so many reasons and use the toilet in higher number as evinced from the result.

However, in case of children, only 37.2 percent of them use the toilet as against 62.8 percent not using. As bathing facility is available in nearby river/pond site they prefer to defecate in the open followed by a quick cleaning and bathing. It is to note that 28.4 percent of households need additional toilets other than the existing ones and 16.6 percent of households are willing to leave open defecation if additional toilets are provided. All the ULBs exhibit more or less some pattern in use of toilets. It is inferred that ILCSS toilets are a great relief to women and children. The women feel dignified using the toilets and the children find it convenient to use it to save time for the study.

Table 3: Regarding Motivation of HH to use the Toilet

ULB/NAC	Beneficiary HHs	Motivation for use of toilet								
		Self	Family member	Local representative	Media	NGO	Health worker	Anganabadi Worker	Ashakarmi	Any other
Phulbani	27	13 (48.15)	0 (0.00)	13 (48.15)	02 (7.41)	07 (25.93)	0 (0.00)	01 (3.70)	0 (0.00)	0 (0.00)
Subarnapur	54	23 (42.59)	0 (0.00)	35 (64.81)	0 (0.00)	02 (3.70)	0 (0.00)	0 (0.00)	54 (100.00)	0 (0.00)
Burla	137	112 (81.75)	35 (25.55)	68 (49.64)	03 (2.19)	110 (80.29)	0 (0.00)	06 (4.38)	0 (0.00)	0 (0.00)
Rairakhol	174	88 (50.57)	01 (0.57)	112 (64.37)	03 (1.72)	05 (2.87)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)
Kendrapara	108	88 (81.48)	24 (22.22)	80 (74.07)	0 (0.00)	02 (1.85)	0 (0.00)	13 (12.04)	07 (6.48)	0 (0.00)
Total	500	324 (64.80)	60 (12.00)	308 (61.60)	8 (1.60)	126 (25.20)	0 (0.00)	20 (4.00)	61 (12.20)	0 (0.00)

Note: Figures in the parentheses indicate percentages.

Source: Field Study

The beneficiary households were asked to give their views on who motivated them to use toilets. The results indicated (Table 3) that self-motivation is reported by 64.80% of the respondents. As a matter of fact, the members were feeling uncomfortable to defecate in open field. It has equally lowered their dignity. They got rid of this problem when become beneficiary of ILCSS. Again 61.60% of the respondents get motivated from the local representative who explained them to make the ward open defecation free. The households are also motivated by family members, health workers, NGO, Anganwadi workers and Ashakarmi. ULB wise variation exists in terms of motivation of households to use toilet. The local representative in concerned ULB played a crucial role in motivating the inhabitants to use toilet.

Table 4: Awareness on occurrence of health problems in practicing open defecation

ULB/NAC	Beneficiary HHs	Are you aware of the occurrence of health problems in practicing open defecation																
		Anaemia, malnutrition	Ascariasis	Campylobacteriosis	Cholera	Cyanobacteria toxins	Dengue	Hepatitis	Japanese encephalitis (JE)	Leptospirosis	Malaria	Ringworm or Tinea	Scabies	Schistosomiasis	Trachoma	Typhoid and paratyphoid enteric fevers	Any other	
Kendrapara	108 (100.00)	0 (0.00)	02 (1.85)	0 (0.00)	53 (49.07)	01 (0.93)	22 (20.37)	02 (1.85)	0 (0.00)	0 (0.00)	43 (39.81)	104 (96.30)	82 (75.93)	0 (0.00)	01 (0.93)	14 (12.96)	49 (45.37)	
Burla	137 (100.00)	0 (0.00)	0 (0.00)	0 (0.00)	83 (60.58)	0 (0.00)	06 (4.38)	01 (0.73)	0 (0.00)	0 (0.00)	53 (38.69)	137 (100.00)	134 (97.81)	01 (0.73)	0 (0.00)	03 (2.19)	96 (70.07)	
Sonepur	54 (100.00)	09 (16.67)	06 (11.11)	0 (0.00)	46 (85.19)	01 (1.85)	27 (50.00)	02 (3.70)	09 (16.67)	0 (0.00)	35 (64.81)	20 (37.04)	21 (38.89)	0 (0.00)	0 (0.00)	16 (29.63)	0 (0.00)	
Kandhamal	27 (100.00)	04 (14.81)	11 (40.74)	0 (0.00)	14 (51.85)	0 (0.00)	21 (77.78)	02 (7.41)	03 (11.11)	0 (0.00)	22 (81.48)	05 (18.52)	09 (33.33)	01 (3.70)	0 (0.00)	16 (59.26)	0 (0.00)	
Rairakhol	174 (100.00)	04 (2.30)	53 (30.46)	0 (0.00)	118 (67.82)	0 (0.00)	85 (48.85)	01 (0.57)	05 (2.87)	0 (0.00)	120 (68.97)	42 (24.14)	90 (51.72)	0 (0.00)	02 (1.15)	10 (5.75)	0 (0.00)	
Total	500 (100.00)	17 (3.40)	72 (14.40)	0 (0.00)	314 (62.80)	2 (0.40)	161 (32.20)	8 (1.60)	17 (3.40)	0 (0.00)	273 (54.60)	308 (61.60)	336 (67.20)	2 (0.40)	3 (0.60)	59 (11.80)	145 (29.00)	

- Any other – Urine infection, Jaundice, Diarrhoea, loose motion

Note: Figures in the parentheses indicate percentages.

Source: Field Study

Regarding awareness on the occurrence of health problems arising out of practicing open defecation, it is revealed that (Table- 4) at the aggregate level 62.80 percent households are aware of occurring cholera, 54.60 percent on malaria 67.20% on scabies and 29.00 percent on the occurrence of other diseases. It is inferred that the majority of the beneficiaries across ULBs are aware of the diseases like cholera, malaria and scabies occurring due to open defecation while they are least aware of spread of other mentioned diseases practicing open defecation. The variation across the sample ULBs is considerably low.

Table 5: Awareness regarding occurrence of health problems in practicing Open Defecation

ULB/NAC	Beneficiary HHs	Awareness regarding occurrence of health problems in practicing open defecation	
		Yes	No
Phulbani	27 (100.00)	27 (100.00)	0 (0.00)
Subarnapur	54 (100.00)	49 (90.74)	05 (9.26)
Burla	137 (100.00)	137 (100.00)	0 (0.00)
Rairakhol	174 (100.00)	136 (78.16)	38 (21.84)
Kendrapara	108 (100.00)	108 (100.00)	0 (0.00)
Total	500 (100.00)	457 (91.40)	43 (8.60)

Attempt has been made to know the extent of awareness of the sample respondents on the occurrence of health problems in practicing open defecation (Table 5). The results revealed that 91.40 per cent of the beneficiaries are aware of the occurrence of health problems due to open defecation as compared to 8.60 per cent being not at all aware of. It is heartening to know that cent percent of respondents of Kendrapara, Burla and Kandhamal are aware of health problems associated with open defecation as against 90.74 per cent in Subarnapur and 78.16 per cent in Rairakhol.

Table 6: Suggestions given for improving effectiveness of the Scheme

ULB/NAC	Beneficiary HHs	Give Suggestion for improving																	
		Cost to be Increased	Proper Monitoring	Direct account transfer of amount	Size to be Increased	IBC	Water Supply	Treatment	Construction by beneficiary	Construction	NGO not working	Double Pit	Electrification	Maintenance	Proper beneficiary selection	sanitation committee	more awareness required	Drainage	Pit Depth
Phulbani	27	11 (40.74)	03 (11.11)	0 (0.00)	13 (48.15)	03 (11.11)	15 (55.56)	0 (0.00)	0 (0.00)	01 (3.70)	0 (0.00)	0 (0.00)	17 (62.96)	03 (11.11)	0 (0.00)	0 (0.00)	0 (0.00)	03 (11.11)	01 (3.70)
Subarnapur	54	27 (50.00)	04 (7.41)	0 (0.00)	21 (38.89)	06 (11.11)	41 (75.93)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	32 (59.26)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	09 (16.67)	0 (0.00)
Burla	137	59 (43.07)	112 (81.75)	34 (24.82)	07 (5.11)	29 (21.17)	28 (20.44)	0 (0.00)	59 (43.07)	01 (0.73)	05 (3.65)	0 (0.00)	0 (0.00)	0 (0.00)	12 (8.76)	24 (17.52)	37 (27.01)	02 (1.46)	0 (0.00)
Rairakhol	174	127 (72.99)	69 (39.66)	31 (17.82)	64 (36.78)	34 (19.54)	156 (89.66)	0 (0.00)	02 (1.15)	05 (2.87)	0 (0.00)	0 (0.00)	102 (58.62)	26 (14.94)	0 (0.00)	0 (0.00)	0 (0.00)	06 (3.45)	0 (0.00)
Kendrapara	108	64 (59.26)	38 (35.19)	48 (44.44)	03 (2.78)	49 (45.37)	10 (9.26)	02 (1.85)	09 (8.33)	05 (4.63)	05 (4.63)	04 (3.70)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	0 (0.00)	03 (2.78)	0 (0.00)
Total	500	288 (57.60)	226 (45.20)	113 (22.60)	108 (21.60)	121 (24.20)	250 (50.00)	2 (0.40)	70 (14.00)	12 (2.40)	10 (2.00)	4 (0.80)	151 (30.20)	29 (5.80)	12 (2.40)	24 (4.80)	37 (7.40)	23 (4.60)	1 (0.20)

Note: Figures in the parentheses indicate percentages.

Source: Field Study

To improve effectiveness of the scheme, the suggestions of the respondents are presented in Table 3.19. The analysis revealed that the response of the beneficiaries in order of importance include increased funding for toilet (57.6 percent) water supply to toilets (50.00 percent) effective monitoring (45.20 percent) electrification (30.20%) awareness campaign (24.20 percent) direct benefit transfer (22.60 percent), increased size of toilet (21.60 percent), construction by beneficiary (14.0 percent), maintenance (5.8 percent), proper beneficiary selection (2.40 percent), provision of drainage (4.6 percent) etc. The beneficiary households across the ULBs agree to the above suggestions more or less.

2. SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

Majority of the beneficiaries were happy with the provisions created under ILCSS but had problems with toilet walls, roof or depth of the pit. Majority of the beneficiaries (57%) reported the quality of construction as average to good, while 43% rated the construction quality to be poor or very poor. While majority of the beneficiaries were satisfied with the ILCSS toilets, about one-third were dissatisfied because of delay in execution of work, small sized toilets, low budget, poor quality construction etc. The ILCSS toilets provided a great relief to women, who used the toilets more than men and children, particularly for their safety, security and dignity.

All homes in state to have toilets by 2019.

The government will launch an all-out campaign to make the state free of open defecation by October 2019, State Chief Secretary A.P. Padhy said this on Tuesday following a meeting with Union Secretary (drinking water and sanitation) Parameswaran Iyer here.

“Deogarh will be the first district to become open defecation free by December”, Padhy said. Soon after this, all households in Baleswar and Gajapati districts will have individual household latrines (IHL) by March 2017.

Prior to this, the state government had made 106 panchayats open defecation free in 2015-16. This apart, 1961 more panchayats will be free of open defecation in 2016-17.

Of the total 90.20 lakhs households in 2012, only 12 percent had IHLs. Since the launch of Swachh Bharat by the NDA government about 31.53 lakh homes have built IHLs, which accounts for 35%. The remaining households are expected to have the IHLs by 2018-19. This apart, an additional five lakh toilets will be constructed under schemes like the Indira Awas Yojana. The Mo Kudia and the Biju Pucca Ghar, a state government statement said.

Under Swachh Bharat Programme, The NDA government has made an allocation of Rs.1,685 crore for Odisha. The state government in this turn has allocated Rs.1123 crore for 2016-17.

To monitor the implementation of the Swachh Bharat Programme, the government has engaged a third-party agency that will carry out social audit.

(Source: The Times of India, Bhubaneswar, Wednesday, November 9, 2016)

The community taps or hand pump was the major source of water for sanitation, which was not adequate in 50% of cases. Furthermore, the tap water was not connected to toilets. In 8% of households, toilets were combined with bathrooms allowing people to complete their washing and cleaning activities in one go, which was a major reason for open defecation nearby a river or pond, when toilets and bathrooms were not combined. Half of the households across ULBs reported cleaning their toilets daily and the rest cleaned the toilets twice or thrice a week.

The waste disposal mechanism, essential for ILCSS, was not encouraging across the ULBs. Majority (about 60%) undertook the maintenance work by themselves but were willing to pay the charges if done by ULBs or outside agencies. The availability of toilets was inadequate in large-sized families during the hours of increased demand and the households reported requirement of additional toilets to ensure that people do not resort to open defecation. Again 22.40% of total beneficiary households of ULBs went for open defecation due to non-availability of community toilets.

The households were motivated by family members, local representatives, Non-Governmental Organisation (NGO) personnel, health workers, anganwadi workers to leave open defecation. Nearly 70% of the families having toilets did not practice open defecation. Even though open defecation free (ODF) campaign has made impressive progress across ULBs, the problem of open defecation was still persistent – it was more severe in Rairakhol (66%) followed by Phulbani (33%) and was minimum in Burla (4%). The reasons for open defecation were many: (a) financial constraints not allowing construction of toilets, (b) lack of water supply to toilets, (c) lack of awareness regarding ill effects of open defecation, (d) sticking to age-old practice, (e) absence of community latrines and (f) insufficient number of latrines to cater to the requirements of large-family size.

Across ULBs, majority of the beneficiaries were aware of the diseases like cholera, malaria, ringworm, dengue and scabies occurring because of open defecation and were willing to give up open defecation with appropriate provisions being created. A substantial proportion of households associated availability of toilets to better quality life such as having more time for work and income generating activities, reduced medical expenses, safety and security of women folk and improved physical wellbeing.

Policy Recommendations:

(i) The effectiveness of ILCSS Scheme can be increased through right mix of incentives and awareness campaign, inclusion of all poor households in need of toilets, creating availability of water inside the toilet, construction of two pit pour flush toilets, provision of adequate number of community toilets, combining toilets and bathrooms together, constitution of ward-level sanitation committee and technical support for waste disposal. The incentives and awareness are to go side by side to make the programme more successful. There is a mismatch of incentives and awareness across the ULBs. Depending on the locality, the allotment per beneficiary need to be enhanced to minimum Rs.15,000 and to maximum Rs. 25,000/- to have a toilet of better quality.

(ii) The Urban households often prioritize assets such as mobile, television etc. over availability of toilets. Campaign is to be designed for addressing all components such as institutional management, capacity building, financing, monitoring and rewards by the district level officials. District support unit, various Government Departments, Chief Executive Officer, District Coordinator dealing with the sanitation and environment are to supervise and coordinate campaign activities. Achieving the target of ILCSS toilet without creation of awareness among the less educated people may not reduce open

defecation to the desired extent. Effective IEC (Information Education and Communication) intervention emerges as the most important requirement to make the wards Open Defection Free (ODF).

(iii) In addition to awareness campaign, behavioral change must be affected by creating appropriate social pressure primarily by the peer group. People taking initiative to construct toilet by them is the true indicator of real behavioral change.

(iv) The approach may be holistically inclusive for all poor households. Simply belonging to EWS or BPL group should not be the only criterion for availing the incentives under the scheme. The poor APL (Above Poverty Line) households may also be included as they are unable to construct their toilets due to financial constraints. Compared to EWS and BPL beneficiaries, they would more willingly participate in the scheme and would serve as models for others.

(v) Toilets without water supply are less likely to be used. Water supply or access to an improved water source is expected to positively impact toilet use. Availability of water inside the toilet or near the toilet needs to be ensured. Though the scheme has a provision for two pit pour flush latrines, most of the ULBs have one pit pour flush toilets. Nevertheless, its design is scientific, the low pit depth associated with these toilets often causes dissatisfaction among users. Many of the poor households are not covered under ILCSS. Provision of community latrine will meet their demand and prevent them to practice open defecation.

(vi) The space of the toilets need to be enlarged so as to enable the users for comfortable sitting while defecation. Besides water supply, ventilation and electricity connection will enhance its use by the members with a reasonable convenience. Concerted efforts need to be made by the ULB/Sanitation committee on safe disposal of waste without polluting the ground water and environment. The ULBs are to ensure the availability of trained manpower and materials to provide technical assistance for maintenance of toilets.

(vii) Though most of the beneficiaries feel that using toilets is important for their physical wellbeing, some of them stick to their old habit of defecation in the open field near a pond or river for a variety of reasons. It is therefore, important to change their mindset through effective awareness campaigning.

(viii) To launch a target-driven ODF initiative, it is important that the district administration sets a time frame and makes provisions for adequate number of community latrines. The ILCSS is appreciated by the beneficiaries and they would stand to gain most, if systemic constraints are duly addressed and they are given ownership of the implementation process.

REFERENCES

- [1] Bhan, G. (2009), Evictions, the urban poor and the right to the city in millennial Delhi, *Environment and Urbanization*, 21(1), 127-142.
- [2] Sugam R. and A. Ghosh (2013), Urban Water and Sanitation in India -Multi Stakeholders Dialogues for Systemic Solutions, CEEW Report, Council of Energy, Environment and Water,
- [3] David. J. Edelman, Series Editor, Ed Frank, Netherland(1997),Capacity Building for the Urban Environment: A comparative Research, Training and Experience Exchange – Project Paper No. Integrated Low Coast Sanitation: Indian Experience, Institute for Housing and Urban Development Studies, Rotterdam.
- [4] Govt. of India (2012), Integrated Low Cost Sanitation Scheme, Guidelines, Ministry of Housing & Urban Poverty Alleviation, New Delhi.
- [5] Mulleger, Lanergraber and Lechner (2011), Causes of Insanitation in India and ways of improvement, Cover Story-Indian Plumbing Today.
- [6] Planning Commission, Govt. of India(2002), Water Supply and Sanitation a WHO-UNICEF Sponsored Study: India Assessment.
- [7] Report of the Sub-Group of Chief Ministers on Swachh Bharat Abhiyan (2015), National Institution for Transforming India (NITI Ayog), Govt. of India, New Delhi, www.niti.gov.in.

- [8] UNICEF(2013),Open Defecation free Odisha: Achievable or a pipe dream , An analysis of sanitation promotions in Odisha, India, Breht Anne Mommen & Pravin Santosh More, India.
- [9] WHO/UNICEF Report (2014), Joint Monitoring Programme (JMP) for Water Supply and Sanitation
- [10] WHO-UNICEF (2006),Water and Sanitation: the Urban and Rural Challenge of the Decade.
- [11] World Bank (2006), India Water Supply and Sanitation: Bridging the Gap between Infrastructure and Service, Background Paper Urban Water Supply and Sanitation: India Country Team, Energy and Infrastructure Development, South Asia Region.
- [12] World Bank (2016), Sanitation and Water Supply: Improving Services for the poor.