17 Preventing corruption, encouraging transparency and accountability in the water and sanitation sector: A case study from Kerala, India

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Abstract

Many see corruption as a huge obstacle in undermining development efforts generally and those in the water and sanitation sector specifically. It is mostly agreed that the key to its eradication is through efforts to increase accountability and transparency.

This paper sets out how this was done in a water and sanitation project, Jalanidhi, in Kerala State. It indicates that success was considerable and corruption reduced through the direct involvement of community members in the detail and management of the project. This is despite the fact that opposition was encountered from some sources.

Introduction

Transparency International defines corruption as "the misuse of entrusted power for private gain" (Transparency International, 2008). Corruption is "draining" the water sector. It reduces economic growth, discourages investments, and violates human dignity. It increases health risks and robs poor people of their livelihoods and their access to water.

In the water sector, observers estimate that 20 to 70% of resources could be saved if transparency were optimised and corruption eliminated (Shordt et al, 2006). This would free up most of the resources needed to achieve Millennium Development Goals for sustained water and sanitation services that reach the poor. (Shordt et al 2006).

The harmful effects of corruption have a severe effect on the poor, who are least capable of paying the extra costs associated with bribery, fraud, and the misappropriation of economic privileges. Corruption sabotages policies and programmes that aim to reduce poverty. So, attacking corruption is critical in water and sanitation programmes.

It is widely believed that promoting good governance and transparency will help to stop corruption in the sector. Van Oostrum and Dietvorst (2006) question the assumed relationship between the decentralisation of the provision of Water Sanitation and Hygiene (WASH) services on the one hand and increased transparency and accountability on the other. Bardhan and Mookherjee (2005) also report both positive and negative relationships. But Fisman and Gatti (2000) found indications of a strong negative relationship between more fiscal decentralisation of government expenditures and less corruption.

According to the World Bank, an effective anticorruption strategy needs to address five key elements:

1. Increasing political accountability
2. Strengthening civil society participation
3. Creating a competitive private sector
4. Institutional restrains on power
5. Improving public sector management.

As part of efforts in good governance in the water sector, these elements have been addressed in bilateral and World Bank-supported projects in Kerala. This paper presents the institutional improvement efforts made in transparency, accountability and preventing corruption.

There is a direct link between corruption and accountability. An accepted principal is that if roles and responsibilities are agreed between stakeholders, greater accountability can be created, and so corruption can be substantially minimised. Country surveys on corruption, service delivery surveys, and diagnostic assessments are ways in which organisations can raise awareness of policy-makers and the general public. The Bangalore and Philippines Report Cards are innovative ways through which the voice of the public is brought to the ear of policy-makers, affecting improvements in service delivery and reduced levels of corruption[1].

Simon Zadek, Task Force member and CEO of the think-tank on Accountability, said:
"Multi-stakeholder partnerships are most effective when they create agreed terms for mutual accountabilities between all the players, from one end of the supply chain – donors and private investors – all the way through to the intended beneficiaries on the ground. Accountability deficits almost certainly spell failure."

This case study examines and analyses the experiences of the Socio-Economic Unit Foundation (SEUF) while implementing the World Bank-supported water supply project in Sholapur Gram Panchayat (GP) in Palakkad district in Kerala.

Decentralisation, transparency and corruption

Generally it is believed that decentralisation of the WASH sector will curtail corruption to a large extent. However, van Oostrum and Dietvorst (2006) report that in a study of 6,000 households and 200 water supply agencies in Asthana, India, more customers (51%) of decentralised systems paid bribes, especially to falsify bills, than those of centralised systems (41%).

In the 73rd and 74th Constitutional Amendments, the Central Government of India decentralised 29

[1] http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTPCENGO,,contentMDK:20507680~pagePK:148956~piPK:216618~theSitePK:410306,00.html

development responsibilities, including those for water supply and sanitation, to local governments (Gram Panchayats). The four states that took the lead in implementation are West Bengal, Karnataka, Andhra Pradesh and Kerala.[2] The Government of Kerala transferred many development functions to local self-government institutions and paid 35% of its Plan funds directly to the GPs as development grants. Broad guidelines were set for the use of these funds under each sector - with 10% to be spent on sanitation. A participatory planning process through the People's Planning Campaign was launched to ensure proper planning and utilisation of funds, accountability and transparency.

Recognising the need to improve functionality and sustainability of water and sanitation facilities, the Government of India initiated significant sector reforms. In Kerala, the World Bank-supported Jalanidhi project implemented by an autonomous body (the Kerala Rural Water Supply and Sanitation Agency (KRWSA)) has been able to make a remarkable contribution in demonstrating the viability of cost recovery and institutional reforms by developing a new decentralised service delivery model. The approach had the following features:

1. It was a community demand-driven and participatory process.
2. It changed the role of government from direct service delivery to that of facilitator.
3. It featured partial cost-sharing in capital cost and full operation and maintenance cost by the users.

Implementation was ensured through a partnership between KRWSA, district project management units, GPs, Beneficiary Committee (BC) and Beneficiary Groups (BG). Support Organisations (SO), mostly NGOs recruited through a public process, assisted the GPs and BCs and supported them in planning and implementing the project activities.

The World Bank-supported Jalanidhi community-managed water supply and sanitation projects were piloted in four districts in Kerala from 1999 onwards. The project was later scaled-up to seven districts primarily based on the demand from GPs. This report shows how the community element of this project contributed to a reduction in corruption.

Methodology

To study, document and assess the impact of measures developed by local communities to ensure transparency and prevent corruption in the Jalanidhi project, a community-managed water and sanitation project was selected in Sholapur Gram Panchayat. It was in a remote, poor and marginalised area of Kerala. The project was completed 18 months prior to the selection. This could give insight into the sustainability of the community-managed project after the withdrawal of support organisations from the Panchayat. The willingness and active cooperation of the GP Panchayat and SO was also ensured.

The study combined a literature review and in-depth participatory methods to highlight what measures were taken in the Jalanidhi project to minimise corrupt practises.

Mindful of the need for careful analysis and handling when dealing with sensitive issues of this nature, the study team:

- visited the project area
- interacted with 18 community members (BC members and common users, 12 women, 6 men)

[2] http://www.mng.gov.pk/icfd/presentations/10%20-%20India%20Mr.%20Methew%20-%20Panchayati%20Raaj.ppt#256,1,Slide

- had discussions with BC members and BG office bearers such as the president, secretary, joint secretary, treasurer and the elected representatives
- had discussions with support organisation team leader and team members
- had discussions with Panchayat members and the Panchayat president
- verified records like the minutes book, cash book, account book, agreements and contracts.

Background

Jalanidhi Project - philosophy and approach

Demand-driven approach - Unlike the supply-driven approach hitherto followed, this project was implemented based on the needs of the people. This is why it's called "demand-driven". The Project was introduced only in areas where interested groups of people showed their willingness to participate and were willing to abide by cost-sharing conditions. These groups were then assisted to set up a legal body by registering themselves. Only then could they proceed with the rest of the project planning and implementation. The source selection, technology selection, purchases, contracting and implementation was done by each registered BG with technical help from the SO. As reported, this was to felt to create a sense of ownership.

Cost-sharing – A total of 15% of the capital costs was borne by the beneficiary community. For scheduled castes and tribal communities this was 10%. Of the remaining, the Gram Panchayat bore 10%, while 75% (80%) was borne by the Government through a World Bank loan.

The GP contributed Rs. 2,000 per household to each one without a toilet. This was a combined contribution for both India's Total Sanitation Programme and the Jalanidhi project. The amount was used to buy material in bulk and pay for transport and masons. The funds covered the construction only up to base level; households paid funds for the superstructure.

Information on technology and superstructure options was shared with the group members. Because the families chose their own superstructures, unit cost varied from Rs. 3,500 to Rs 6,000.

Cost recovery - The BGs meet 100% of the recurring costs of operations and maintenance. This lightens the burden on the state exchequer, helping the Government to utilise this money for other priority needs, like in the health sector.

Integrated approach - The objectives of the project included attaining sustainable supply of safe drinking water, sustainability of source and operations, regularity and adequacy of supply and quality of water. These were met through well-integrated components. The sustainability of the water source was ensured through recharge measures. There was also a mix of sanitation and hygiene promotion and infrastructure construction such as latrines and compost pits. It was envisaged that sustainability would be ensured through community empowerment, capacity building, women empowerment and social mobilisation.

Pro-poor approach - Special efforts were taken in the project design to include the poor and vulnerable while selecting the user groups. As noted above, the project was designed to incorporate beneficiary contributions of 10 and 15% capital costs; this was done either through cash or in kind

- as labour. Intra-group subsidisation and even inter-group subsidisation was permitted at the request of and under the total responsibility of the beneficiary groups. Thrift and credit schemes were promoted in the BGs as "self-help groups" operated by women of that community.

Women development initiatives - Women are the most affected, both directly and indirectly, by poor water supply and sanitation, especially during water shortages. The project made conscious efforts to mainstream the women users in planning and decision-making activities. "Thrift and credit groups" helped households to make payments towards the recurring expenditures of the water supply system. In addition, the project gave groups of women financial assistance and skill development training to start viable micro-enterprises of their choice.

Community empowerment - Capacity building and equipping the community to operate the project was a major way of getting users themselves to plan, design, implement, own and manage the service. This ensured the involvement of the people and also initiated a new community-based approach for meeting any local needs.

Community contracting - Users themselves were fully involved in all the activities. They identified water sources and households without toilets, decided on the technology they wanted to implement, dealt with community contracting and implementation and with the operations and maintenance aspects of the water supply schemes. All contracting of goods, works, and services was done at a user level itself for which adequate training was provided and guidelines were made available.

Utilisation of available resources - Schemes already operational in the project areas were repaired and handed back to user groups. It is hoped that this will be the most efficient way to make use of the investments that was made.

Merging with decentralised planning - The project was put into practice through the Gram Panchayats and the BGs, thereby acknowledging and strengthening the efforts of decentralised planning.

The first (pilot) batch of community projects under the Jalanidhi project were implemented in 30 months. The second batch took 24 months.

The study Panchayat and its WASH projects

The existing conditions in the Panchayat are shown in Table 1. All families were below the poverty line

TABLE 1 Panchayat socio economic profile of Sholapur

	Details				
1	Name of Panchayat	Sholayur	11	Literacy rate	57%
2	Formation of Panchayat	1963	12	No of houses	5,051
3	District	Palakkad	13	BPL families	3,972
4	Block	Attappadi	14	ST families	2,520
5	Area	150.76 sq.km	15	SC families	287
6	Wards	13	16	Hospitals	5
7	Population	18,977	17	Water supply - number of taps wells	260 273
8	Male	9,842	18	Rivers	2
9	Female	9,135	19	Number of houses with latrines	1,200
10	Population density	119			

(BPL) or were Scheduled Tribes/Scheduled Caste (ST/SC) households. The 5,051 households shared 260 taps; 273 had a (family) well and 1,200 had a latrine.

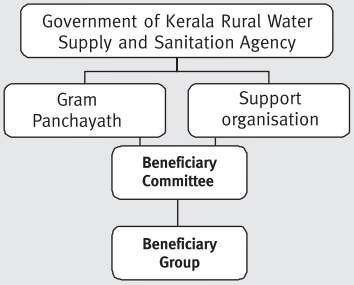
Under the Jalanidhi project, there were two types of community projects in Sholayur Gram: one in the general category (15% household contribution to the water supply) and another with the tribal population (10% contribution). For this study, the general category was chosen in consultation with the GP and the SO. If the beneficiary group was made up of more than 50% tribals, they are considered as a tribal project. The profile of the two water and sanitation projects implemented in 2004 to 2006 studied are given in Table 2.

Both projects were started in October 2004 and were completed on 25 August 2005. All households now have a private tap. Before their only water resource was a spring in the forest. Households used HDP hoses to bring water to the village and their houses, but the supply was constantly disrupted by animals or men, when material fell on the line or when there was rain and wind. The source was not protected and so there were often problems with its quality. In the summer months women faced a lot of difficulties, they could hardly get one pot of water. They had to fetch water through the hilly terrain, going to collect it at unusual hours at night or early in the mornings. The sanitation situation was even worse: only nine of the 79 houses had a latrine and women were most affected by the disadvantages this bought.

Stakeholders / institutional linkages

In community-managed projects, people have direct control over key project decisions as well as the management of investment funds. The aim is that poor people are recognised as human resources and partners in the development process and that their institutions and resources are built upon. Figure 1 shows the institutional set up of the Jalanidhi project.

FIGURE 1 Institutional set-up of the Jalanidhi project



Under the project the World Bank provided financial assistance to the GP. The GP was the focal point for project activities in its surrounding area. GPs were responsible for:

- seeking assistance with the project following a self-selection process
- preparing the implementation phase proposal during the planning phase
- facilitating project implementation by BGs during the implementation phase.

GPs provided counterpart funding to BGs as a percentage of infrastructures building costs. During the post-implementation phase, GPs monitor the sustainability of scheme operations and ensure that the BGs satisfactorily discharge their Operation and Maintenance (O&M) management function. This includes levying and collecting user charges from the beneficiaries to fully recover the O&M costs. SOs support the GPs, BGs and BCs on a day-to-day basis in planning and implementing the

TABLE 2 Characteristics of the implemented community water and sanitation projects

Particulars	Details WSS1	Details WSS2
Name of "firm"	Subhash kudivella suchithva samithi (Subhash drinking water supply and sanitation committee)	Santhinagar kidivella suchithva samithi (Santhinagar drinking water supply and sanitation committee)
Ward number:	6	8
Support organisation:	Socio Economic Unit Foundation	Socio Economic Unit Foundation
Number of houses in BG:	36	43
Population covered:	125	138
Total expenditure of WS; (TS amount)	3,58000	7,30,000
Government share	80%: - 2,86,000	80% - 5,84,000
Panchayat share	10% - 35,800	10% - 73,000
Beneficiary share	10% - 35,800	10% - 73,000
Capital share of beneficiaries	9,944	16,977
Water per person per day	70 lpcd	70 lpcd
Technology	Gravity flow	Gravity flow
House connections	36	43
O&M costs/hh/month	Rs. 30	Rs. 25
No of latrines	33	36
Chosen technology	Double pit pour flush toilets	Double pit pour flush toilets
Unit construction cost	Rs. 3,500 - 6,000 according to the superstructure households preferred.	Rs. 3,500 - 6,000 according to the superstructure households preferred.
Household contribution	More than 50%	More than 50%

project's activities. They also provide support to BGs during post-implementation to stabilise scheme operations.

The BGs were responsible for:

- planning
- technology selection
- constructing their Rural Water Supply and Sanitation (RWSS) facilities
- providing their part of the capital cost contribution
- managing O&M of the improved facilities
- levying and collecting sufficient user charges.

Representative BCs were set up by each of the participating BGs. Their composition, functions, method of selecting members, by laws, legal framework and relationship with the GP and KRWSA, were agreed in advance.

The project made vigorous efforts to maximise women's representation and management role in the BCs. The project rules required that membership of BCs would be at least 50% women, and 20% from socially disadvantaged groups. At least one of the top management positions of the BC (president or treasurer) was to be held by a woman.

Both BGs had a nine-member committee: five women and four men. All committee members belonged to Below the Poverty Line (BPL) families.

TABLE 3 Characteristics of BG functionaries in Subhash and Santhinagar BG

Positions in committee	Subhash BG	Education	Santhi-nagar BG	Education
President	Lekshmi	4th std	Papa	4th std
Secretary	John Joseph	8th std	Murukan	10th std
Treasurer	Sarasa	10th std	Papa	5th std
Joint secretary			Radha	7th std

Women and tribal community representations were both represented. The educational level of at least one member was 10th standard which contributed to the proper minute writing and account keeping of BG (Table 3). They were recognised by other stakeholders and supported through different training. Members had some experiences in community activities. The joint secretary has now become the helper in the Anganwadi and thinks that the training she received on this project helped her get the position.

Table 4 shows the crucial role of BG and SO in a Jalanidhi Project. The involvement of BG in all stages of implementation - from planning implementation and full responsibility for operation and maintenance - made the project transparent.

The roles and responsibilities of stakeholders were clearly laid down in the agreement executed by the four parties involved in the project (Table 5). The terms and conditions for transparency and preventing corruption were clearly stated in the agreement. This included criteria for termination of the agreement. The one main criterion for termination of agreement was mismanagement of funds or materials of the schemes, including if the brand names of materials purchased were different from those agreed.

Preventing corruption in the project

While better political accountability, strengthened civil society participation, a competitive private sector, institutional restrains on power and improved public sector management all have their place, curbing corruption asks for more specific measures than these general categories.

Typical types of corruption in the WASH sector

There are a number of different areas of corruption found among different actors in water and sanitation projects:

1. *By the public sector*. It is not uncommon that in the public sector functionaries must pay for positions and promotions that they want or to avoid being given a so-called "punishment post" in less lucrative departments (e.g. training) or districts. They may then regain the money in their new position/location. Local functionaries such as Panchayat members may pay to get a project allocated to their community/constituency.
2. *By and with the private sector*. In interactions with the private sector, involving commercial enterprises, but also NGOs, this sector may pay bribes for information that help them to prepare competitive bids and/or to win tenders. Private sector players may form cartels with illicit price agreements or agree to take turns in offering the lowest bids. Chosen firms may cut corners by reducing materials and/or work, using lower quality materials than contracted and paid for, and/or not or poorly implementing activities and steps. They may ask for authorising signatures from local functionaries and/or consumers that

TABLE 4 Roles and responsibilities of stakeholders in terms of accountability measures

Stakeholder	Responsibility	Measures for accountability
1. Beneficiary committee	Planning	■ Minutes of BG committee - every discussion point recorded
	Technology selection	■ Awareness of costs facilitated by SO engineers ■ Choice by user groups
	Construction	■ Material purchase through quotations approval by committee after comparative study ■ Exploring the local market and companies for bulk purchases ■ Quality checks ■ ISI specifications
	Capital cost collection	■ Participation of all before construction
	Collection of user charges	■ Monthly collection and bank remittance
	Account keeping BG joint account	■ Accounts shared in meetings ■ Joint bank accounts makes committee responsible ■ Monitoring by SO, DPMU and GP ■ Audit by appointed agencies ■ Social audit
2. Beneficiary group	■ Planning ■ Technology choice ■ Collective decision-making	■ Collective decisions ensures transparency
3. Gram Panchayat	■ Planning ■ Monitoring ■ Fund flow	■ 10% Panchayat share makes accountability of the project ■ Close monitoring mechanisms evolved
4. Support organisation	■ Facilitation ■ Engineering and social surveys ■ Plan and estimation ■ Quality checks ■ Monitoring	■ Capacity building of all stakeholders ■ Sharing of findings in BG meetings ■ Cost reduction and appropriate choice ■ Checklists given to BG/BC ■ Ensuring timely corrections
5. District Programme Management Unit	■ Plan and facilitate implementation ■ Supervise and monitor other stakeholders ■ Technical and financial management support to GP and BC	■ Technical support to cost effective methods ■ Monthly and timely meetings with partners and monitoring physical and financial progress

TABLE 5 Roles and responsibilities of stakeholders laid down in the project agreement

Stakeholder	Roles and responsibilities
Kerala Rural Water Supply and Sanitation Agency (KRWSSA)	■ The agency (Kerala Rural water supply and sanitation agency) shall make all arrangements for the timely transfer of funds. ■ The agency shall make necessary arrangements to give training to SO/GP/BG. ■ The agency shall appoint a Service Agency (SA) for construction quality checking. ■ The agency shall appoint auditors to look at funds and statements prepared by the GP, the SO and the BGs.
Gram Panchayat (GP)	■ The GP shall facilitate and co-ordinate the implementation of the project in its geographic area. ■ The GP shall fulfil its obligation for cost-sharing in implementing various components of the project. ■ The GP share will be credited to the BG account as per the project norms or as demanded by the agency. ■ The GP shall recognise the BG as the implementing and operating institution and the owners of the assets created /operated /modified under the project. ■ The GP shall provide necessary support and monitor activities of the SO in order to ensure that the project is implemented in accordance with the Community Empowerment Plan (CEP) ■ The GP shall open a separate bank account at a branch of a scheduled bank for transactions relating to implementation of GP level activities. ■ The GP shall maintain separate accounts and make records for verification, scrutiny and audit available. The GP shall rectify the defects, anomalies or deficiencies pointed out immediately.
Beneficiary Committee (BC)	■ The BC (for BG)*, with the help of SO, shall be responsible for ensuring that all activities take place as planned. ■ The BC (for BG) shall be responsible for procurement of materials and their storage under the guidance of SO. ■ BC (for BG) shall maintain the books of accounts as per directions of KRWSA. ■ The funds shall be deposited in a joint bank account of BG and SO. Cash withdrawal is available for funds only up to Rs. 5,000. Those above Rs. 5,000 should be cheque payments. ■ BC and BG shall be responsible for monitoring the progress of the work, reporting on its implementation and details of the accounts. ■ The BC and BG shall be responsible for the operation and maintenance of the facilities and collection of tariff.
Support organisation (SO)	■ The responsibilities of SO are: the implementation phase, support community strengthening, capacity building of BG and GP, ensure quality of construction, materials, ensuring judicious spending of BG account, timely reporting and constant guidance in implementation.

* Note –
the BG is the general body and for practical administrative /operational purposes the BC is selected and entrusted with tasks

lack information and/or authority to check receipts and completion forms. Those responsible may either keep the resulting gains or share them with fellow firms and/or different functionaries.

3. *By the consumers*. Consumers may pay to obtain facilities, get subsidies for which they are not entitled or which must be shared among more households than funds allow and/or to speed up administration/delivery/construction/repairs (the so-called "speed money").

Measures to prevent and address corruption

Table 6 shows the indicators and tools used to ensure transparency and accountability, prevent corruption and take action in the Jalanidhi water and sanitation community projects. On the left are the indicators. The right-hand column describes the tools that were used and action taken to resolve problems.

A well-coordinated capacity building programmes at various levels was a crucial component of the project. It involved more than the development of skills: it developed also the attitudes, skills, knowledge and experiences of individuals and how they relate to social environment. Table 7 provides an overview.

From the table it can be observed that the project team met community members more than 20 times for the different training programmes. Additionally, they were contacted by the Support Organization frequently for the development of the project on a day to day basis. This made it possible to have a strong relationship between the different stakeholders in the project. These meetings of different stakeholders largely contributed to the building of confidence and mutual trust.

It was important to support the community by offering training on accounting, O&M and proper sustainability because it makes them responsible for the sustainability of water and sanitation facilities. Contracting procedures, agreements, payment schedules, etc were dealt with in detail giving special care to the possibility of exploitation of the community by outsiders.

The following measures were used to prevent and control corruption in the community.

Measures against corruption at a public and private sector level and with user groups:

- Purchase of materials was as stated in the detailed scheme report which was accepted by the District Programme Management Unit (DPMU).
- If excess payments (between Rs. 1,000 and Rs. 3,000) were required, a sanction was needed from the BG Committee. Payments between Rs. 3,000 and 5,000 in excess needed a sanction by the General Body (BC/GP). Any higher payments required the sanction of the DPMU.
- Minutes for all important decisions and purchases were kept by the BC and management was accounted for by BGs and the GP.
- Comprehensive registers were kept: a muster roll, BG registration, stock register, agreement forms, vouchers and receipts, bank pass book, quotation notices and all received quotations and technical verification notes.
- Guidelines on construction works, purchase of materials and audits, including formats for each, were given through training on procedures. Generally, officials handled these details. The community also knew the procedures and handled some of them too.

TABLE 6 Indicators and tools to enhance transparency and accountability and prevent corruption

Indicators	Tools and activities
Demand-driven approach ■ Willingness of Panchayat to participate in programme. ■ All elected Panchayat (local council) members and administrative staff. Panchayat secretary and staff became aware of process and principles.	**Agreed rules on who will get and pay what** ■ Committees and NGO staff met many times to discuss the philosophy, principles and strategies of the programme. ■ Panchayat takes Resolution to participate in the programme. Resolution defines contribution pattern and Panchayat to contribute its share.
Communication and mobilisation ■ Each family of the problem clusters knows about the project principles. ■ Make sure that all households know the rules.	**Users informed on project concept and locations** ■ Special Gram Sabha (community assembly) organised to share the project's concepts with community. At least 10% of the voters in the ward need to participate, but in this area the figure was more than this as both water and sanitation was their priority. ■ The group identified problem areas of water scarcity through discussions at various levels. ■ Awareness of the project at a grassroots level was raised through cluster meetings. ■ Panchayat members and the SO rechecked that families knew about the project.
Coverage, access ■ All water scarce areas covered and take into consideration that all poor families are informed.	**Equitable access for worst water areas and within these areas also to toilets** ■ Community members and SO map socio-economic and technical conditions in the water scarcity areas. ■ Since it is a water and sanitation integrated project, they also map the present sanitation situation (who has and doesn't have sanitary toilets). ■ SO organises education classes on hygiene and sanitation to raise awareness of the need for toilets. ■ Beneficiary Group formed in needy areas to manage W&S project. Groups choose Beneficiary Committee (BC) at Panchayat level to manage the project together with the Panchayat members. ■ BGs agree households pay 10% of water supply and investment in labour and the remainder in cash and that all those without sanitary toilets construct one. ■ The poor contribute labour and the BG can exempt the poorest households from cash payments to water. Poor households got a lump-sum Rs. 2,000 for toilet construction enough to build the below-ground part of a double vault pour flush toilet and superstructure at their own cost from a range of options. The map is based on locally agreed poverty criteria to identify poorest households. ■ BGs sign "agree to participate" and register as a society. ■ BC publicly posts list of poorest households for transparency and verification. BC, Panchayat and SO jointly check any protests and adjust list as needed. BC and Panchayat adopt consolidated list.
Contributions agreed, paid and monitored ■ Local government pays 10% and beneficiaries 10-15% of water construction costs 75-80% of water investment costs covered from WB support.	**Accountability** ■ A joint bank account opened by representatives of SO and BG. ■ Joint signatories on bank accounts: one NGO staff member and beneficiary committee. ■ Agreement signed between Panchayat Support Organisation (NGO), Beneficiary Committee and District Project Support Unit. ■ SO checks bank book to see if all parties have paid.

TABLE 6 Indicators and tools to enhance transparency and accountability and prevent corruption

■ For sanitation, BPL/SC/ST households pay for superstructures of their choice. ■ Toilet technology is decided jointly in workshops with male and female household heads.	■ SO gives accounts training to committee members ■ BC keeps account books, cash book, bank account, and contribution collection register. ■ BG and BC are accountable to member households and GP for proper implementation and management, including delivery of water services and achieving and maintaining 100% sanitation.
Technology choice ■ Local specific and cost effective technology selected in joint workshop. ■ Representatives (male and female) of all families informed and involved in decision-making.	**Informed choices with understanding of costs and cost-reduction** ■ SO introduces different water technologies and discusses the cost of each and quantity water demand. Attendance is kept and SO makes sure that everyone is informed. ■ Technology options for household toilets are discussed, two pit pour flush latrines with superstructure made of grass or coconut leaves was preferred (households pay superstructure, GoK pays Rs. 2,000 up to plinth level). ■ Source of water and distribution system tentatively finalised. ■ SO prepares the feasibility report and cost estimates. ■ Discuss on the cost reduction and capital cost contribution of community. ■ Operation and maintenance cost discussed. ■ Sign "Agree to Do" document.
Public estimates of costs and construction time	■ Model toilets are constructed as part of masons' training to arrive at the cost of plinth level construction. ■ Detailed estimate of water supply is worked out after finalisation of the source and distribution line. This is shared with the community. O&M cost also discussed since this is a community responsibility. Care is taken to reduce the cost at every stage of implementation. ■ Community also contributes labour and work. Labourers are asked to ensure the quality of materials. ■ Construction work is progressed as planned. There's no rise in the price of materials and construction is timetabled.
Finance and construction rules ■ Local government, masons, suppliers, families follow project rules for payment, purchase and transport honestly. ■ Construction quality is good. It follows agreed specifications and special procedures which are checked.	**Local tendering controls** ■ BC seeks at least three tender bids for materials such as sand, cement, pipes, taps, and bricks for the community water supply and the household toilets. ■ BC checks tenders for the least expensive materials of good quality. BC and SO together select and sign winning tender. **Quality control** ■ An exhibition of construction materials is organised so that all suppliers participate and committee members can recommend good quality materials. ■ Materials are returned if they are not to the prescribed standard. They're not paid for and the supplier is not used again or else the programme is stopped. ■ Standard quality ISI mark is needed for all materials, except sand. ■ A construction checklist is shared in BG meetings. It is used by all groups (masons, supervisors, committees, families). The checklist has simple drawings and people are trained in how to use it. Action: If a complaint is valid, repair is made at no cost. Sometimes the mason is not paid or is blacklisted. ■ Voluntary task manager (one member of the BG) is trained on technical aspects and functions. They oversee construction activities on a day-to-day basis. Action is taken as per suggestions of task manager on quality issues.

TABLE 6 Indicators and tools to enhance transparency and accountability and prevent corruption

	■ Final payments of bills are not made until schemes and toilets have been delivered and BG/BC/SO have checked quality of installation and service. There is no guarantee period after completion. **Signed receipts** ■ Before any payment, BC has to sign the receipt. No receipts are signed unless quality of work/materials has been checked by BC. This is needed for all payments Spot checks of BC management ■ Spot checks by SO staff (at least once every two months) to check receipts, storehouse, tenders, household receipts, and government records. Action: Problems are referred to local government and action is taken. The programme is stopped if there is dishonesty. **Independent audits** ■ An external audit of accounts is done. Action: Bad audit results are referred to local government staff, NGO and to the public. The programme stops. No money released until situation improves. ■ The finance for the project is also subject to the regular Panchayat audit.
Proven education before construction ■ Male and female householders are motivated to sustain improved water supply and sanitation.	**Signatories on household education cards** ■ Mason and supervisor can not begin construction without first seeing attendance card for education meetings. Also spot checks by supervisor. Action: They must sign attendance card to get payment.
Families pay ■ All households in the needy area form the BG. They pay 10% of the capital cost of the water supply and 50% of the toilet investment costs before construction will start. BGs are thereafter fully responsible for all O&M tasks and costs of the water supply. They were informed about this when selecting the technology and agreed to it in the contract.	**Poor families** ■ Since the programme is demand responsive, only needy families organise themselves to form the BG, facilitated by SO and Panchayat. ■ The community itself decides on the type of water supply system that will be used so affordable and efficient systems are selected. ■ Since all unskilled labour like trenching is done by the community, they are able to raise their contribution share and lower their cash contribution. Action: No contribution, no construction. The families who are too poor (fewer than 5%) are included by the decisions of the committee.
Capacity building programmes throughout project ■ Knowledge on technology for both men and women. ■ Creates a feeling of a sense of ownership. ■ Quality of scheme ensured. ■ Sustainability and proper functioning of scheme.	**Trainings** ■ BG officials training. ■ Committee for preparing community empowerment plan. ■ Technology choice workshop. ■ Accounts training. ■ Account writing (hands-on training to ensure control).

TABLE 7 Capacity building activities in the project

	Activity	Objective	Period	Participants
1	BG officials training	Role and responsibilities of BG	1	BG members -9 from each BG
2	Capacity building of communities	Community empowerment plan preparation	2	5 BG members
3	Action plan preparation	Action plan	1	BG members
4	Accounts keeping	Proper maintenance of accounts	1	5 office bearers
5	Account writing	Day to day maintenance of records	1	Treasurers
6	Voluntary task manager	Supervision	1	1
7	Micro enterprising	Skill	1	1 / 2 persons
8	Savings development		1	1 / 2 persons
9	Handling of water	Knowledge development	1	1 /2 persons
10	Mason training	Skill development	1	
11	Liquid waste management	Knowledge and practice	1	
12	Personal hygiene	Knowledge and practice	1	
13	Operation and maintenance	Skills in O&M	2	
14	Monitoring team members	Sustainability aspects and arrangements	1	5

Measures against corruption by the public and private sector:

- Usually over-estimation occurs. Estimation was done based on the actual field situation which avoided over-estimation and related corruption.
- People (men and women) knew and checked technical details and the quality standards of materials during construction of the toilets and of the water supply when unpaid labour was used, including the laying of pipes. A trained voluntary task manager from the BC oversaw construction.
- Quality assurance measures included: using (generally) locally available, ISI marked materials, publishing rates on a notice board, ensuring quotations for all main purchases, extracting guarantees for pipes and pumps, ensuring well-written agreements and scheduling payment of a maximum of 80% on delivery and 20% after construction.
- In other projects, such as by State and Local Government, accounts are handled by officials and contractors alone. In this project treasurers chosen by the BGs handle the funds and have knowledge of the detailed accounting procedures.
- Bank accounting was made transparent, verified by SO and audited by external auditors.
- Contractors were not engaged for the whole work, instead suppliers were contracted specifically, for example, to provide materials or to provide skilled inputs. Even then they were directly supervised by trained BG and SO technical staff members.
- Generally “superchecking” is carried out in other schemes. Here superchecks were made possible by many stakeholders.
- Monitoring committees at Panchayat level and the District Programme Management Unit oversaw progress and monitoring.

Measures against corruption by consumers:

- All beneficiaries were paying for the capital cost as well as the full operation and maintenance costs. Costs were publicly calculated and signed for in the agreement. Construction starts after all payments are made. Poor people must pay 10% of capital cost of the water supply and the superstructure of toilets, others pay 15% of the capital cost of the water supply and 100% latrine costs.
- In householders' workshops and BC meetings, participants reviewed technology options, costs and cost-sharing with technicians. Agreements were signed after consensus.
- BCs with special Task Managers (technically trained volunteers) purchased all materials and made and accounted for all payments to user households and GP.
- Only BPL/ST/SC households qualified for toilet subsidy. No money is given, but households get free construction of a toilet up to plinth level by trained male or female toilet masons. Allocations of subsidies are verified by displaying lists for public review.
- Only BCs can exempt poorest households from cash payments to construction by a joint decision. In the project they were less than 5%. Other members then pay their costs in labour and/or cash. Decisions are documented and accounted for.

People's perceptions on corruption

The beneficiaries of the Subhash and Santhinagar water and sanitation projects interacted with the study team members. The President, Secretary, Treasurer and Joint Secretaries of the two projects and 18 other beneficiaries (six men, 12 women) were present at the group meeting. The members shared their happiness in establishing a water and sanitation project in their remote village. Up to then they were not aware of water quality problems and diarrhoeal diseases were common in the village. They recalled that a health education programme was conducted in the village only as part of this project.

The community members unanimously agreed that the project has given them an opportunity to unite for a cause that they'd felt a need for for many years. Now they have water supply in their home every morning and evening for regular hours, decided by their committee. They pay the operator charges as per the committee decision and tariffs are collected by the community. The accounts are maintained in a cash and bank account book.

The people said this project was very different from others of the Panchayat : nobody was allowed to commit malpractice in the community. The water and sanitation project was a special project, as no corruption, speed money or any bribes - in cash or kind - occurred according to Joint Secretary Mrs. Radha.

This is quite different from the usual situation:

- **Speed money to cut red tape** Participants talked about four cases of speed money that the very same beneficiaries had given to housing programmes. GP officials took a cut of Rs. 5,000 (14%) from the total of Rs 35,000 to reduce some of the red tape. The participants said speed money is partly a consequence of government bureaucracy. If the source of funding for a community developmental activity is a regular government fund, the community will automatically stick to set procedures or formalities. If community

members are not willing to pay speed money, they may have to spend days together filling out forms correctly. This may mean people miss out on being paid for working days and have to pay travelling expenses. People pay the speed money to avoid these problems. There will be changes only when some extraordinary people are in charge of these functions.

- **Panchayat deals to take cuts of community services** The Sholayur Gram Panchayat itself is notorious for corruption. For example every year they spend 1-2 lakhs for supplying drinking water in lorries to the villagers. In reality this money is not all put into this purpose. Certain adjustments are made between Panchayat members and suppliers.
- **Opposition to outside support and control** Community members further revealed that there had been strong opposition to the presence of the SO in the project. Although the Panchayat Committee agreed in principle, it indirectly argued that there are certain payments to be made for this kind of work which the SO might not be able to meet. The SO took a strong position that they would not do anything outside the law and would only supply their services if the people agreed that they needed the SO's support. A meeting of all opposition leaders was then convened. All participants agreed that the project would be transparent and demand responsive. In the launch workshop and the following mobilisation meeting, preventing corruption and encouraging transparency and capacity building of communities were the main points on the agenda.

The group said that implementation by committee is a weapon against corruption. When a group of people are engaged in this kind of implementation, chances of corruption are greatly reduced. Some reasons are given in Box 1.

BOX 1 Clean water, clean politics

All BGs said that corruption, which is widespread in state and local governments, has not affected the project. Here are some reasons they give as to why:

1. We have frequent BG meetings during planning and implementation, and this detailed oversight by the community ensures transparency and clean governance.
2. We pay for the water. Because of that, every member is very alert about how the money is being spent.
3. We feel we own the project, it is not a government project, and we take care of what we own.
4. Community contracting in an open transparent manner prevents corruption. GPs often give overly complicated contracts to contractors to facilitate kickbacks. Community contracting prevents this.
5. Big contractors are not interested in our small schemes, so they do not try to use political clout to muscle in.
6. The SO has to sign cheques along with BG office bearers (Only for SC / ST BG). GPs and DPMU have to approve. Unless there is collaboration between all these stakeholders, corruption is likely to be avoided.
7. BGs and SOs are outside the political process, and do not have to extort money for financing election campaigns, as GP members have to.
8. We think BGs are cleaner than GPs. For instance, GPs have to certify poor people as being below the poverty line to get the latrine subsidy. In Agali, villagers say the GP wants a payment of Rs 150 per certification.

Measures employed to prevent corruption - lessons learned

From the above it was learned that corruption is reduced/prevented when:

- The project concepts, philosophy and strategies are known to all BG members.

- Resource and social mapping as participatory activities enrich the knowledge and information of the existing situation and help to plan for the future.
- Information is given to all on quality and quantity of materials needed and purchased.
- People are involved as knowledgeable labourers in the project.
- Community members should be aware how prevention of malpractices reduces the amount they must pay and improves the quality of the work and therefore, the service.
- Disputes/problems were worked out at a grassroots level.
- Funds are channelled through well-laid down processes.
- It is insisted that tenders and quotations accepted through the BC.
- There is a joint bank account system with NGO and BG.
- Technology is chosen by community after thorough discussion on different options.
- Capacity building of different actors for all tasks includes prevention of corruption.
- BG and BC functionaries are accountable to members.
- There are independent audits of financial management.
- Partnership exist between all participating agencies.

Conclusion and recommendations

There is a lot of evidence that corruption has had serious negative impacts on water supply and sanitation projects (see Davis, 2004; Elshorst and O' Leary, 2005). This is likely to have stalled the development of remote and backward areas where marginalised and poor people live. Evidence from this project shows that participation of the people is necessary to eradicate corruption. It shows that organising a strong social movement at a grassroots level boosts anti-corruption drives. This roots out corruption and improves social values.

We believe that government officials, employees and civil society organisations need to be trained and equipped in maintaining transparency in their field operations. It is worthwhile to note here that the Socio-Economic Unit Foundation had faced mammoth opposition from the line departments and the contractors lobby in Wayanad district (SEUF, 2005) when it implemented the community-managed water supply programmes in the tribal populations. However, the schemes were completed within budget allocations (with no rise in cost) and within the prescribed timeframe.

The next step is for politicians and the bureaucracy to recognise that these programmes are meant for poor and vulnerable people and that all the benefits should reach them. Political parties and the bureaucracy need to support the streamlining of community-managed programmes and the elimination of the evils of corruption in society by not interfering in the process e.g. purchase of materials or transportation, loading etc. This will help to avoid unnecessary delays and maintain quality.

The community management initiatives have given courage and inspiration to poor communities to organise and streamline the process to implement water and sanitation programmes in Kerala. Community contracting has typically lowered construction costs by 15 to 40%. The KWA, on the other hand, adds 22.5% as overhead administrative charges, plus a 10% contractors' margin. Community-managed projects constructed below

estimated amounts result in an increase in the number of schemes in project areas.

Scaling up of community-managed projects is still a problem. However a large-scale project costing US$ 4,000 million is now being implemented in Kerala.

A special agency for community-managed water supply and sanitation, the presence of a support organisation and capacitated community groups with constant monitoring mechanisms, are generally absent in community development projects. This may be one reason why decentralisation is a good mode to prevent corruption. This project shows that the actions of capacitated civil society as a watchdog is an excellent way to check corruption in community-managed water supply schemes.

Along with the transparency process, similar projects should institutionalise an internal programme review every three months. The objective of the internal review would be to monitor the progress of programme implementation at all levels. All related information should be gathered and a database should build up various programme indicators to compare them with the stated objectives and concepts, allowing corrective measures to be taken wherever necessary. Process monitoring documentation should be given special importance during the internal review. The outcome of the internal review should be shared among all stakeholders and used as part of knowledge management.

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