



social accountability NOTES

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Community-Managed Sanitation in Kerala, India: Tools to Promote Governance and Improve Health

The Kerala Rural Water Supply and Sanitation Project was a pioneering grassroots approach initiated by the government of India. The project aimed to revolutionize sanitation services in the South Indian state of Kerala, with the primary goal of improving public health. An array of social accountability tools instituted in Kerala addressed the significant governance problems that had hindered water and sanitation reforms in local and national programs. Challenges to reform included a lack of accountability and transparency and broad corruption, which made local sanitation and hygiene problems more difficult to solve and accelerated the spread of infectious diseases throughout densely populated Kerala. Corruption therefore affected all segments of the population, particularly the poor and marginalized.

The Kerala Rural Water Supply and Sanitation Project broke new ground by institutionalizing the integration of local communities with Panchayats (local government institutions). By placing communities in charge of their own sanitation, the project supported the sustained delivery of adequate sanitation and water services in rural areas of Kerala's four districts. This case study differs from other cases by focusing on sanitation (particularly household latrines) instead of water, and by focusing on the actions of local government and civic society organizations instead of public sector institutions, such as utilities and boards. The project has improved on other sanitation programs by addressing critical sanitation needs and encouraging further cooperation among and between community members and local government. Moreover, the project has mediated competing

interests, enforced obligations, and prevented capture of resources by elites and unscrupulous vendors and community members.

Finally, the Kerala project institutionalized several social accountability tools. These tools enhance the prospects for improved governance beyond governmental operations to embrace innovative forms of social development—notably community-led management. It also established mechanisms to enhance gender equity and prevent corruption through public-private partnerships between local government, civil society organizations, the private sector, and user communities. As a result, Kerala has enjoyed significant improvements in development and health outcomes.

The Enabling Environment for Improved Service Delivery in Kerala's Sanitation Sector

Government Sanitation Reforms. The Accelerated Rural Water Supply Program, launched in 1972–73, was India's first governmental water and sanitation services effort. It was followed by efforts to strengthen the central public health and engineering departments. Between 1974 and 1975, the Minimum Needs Program contributed to improved public living standards by providing services such as basic healthcare, educational programs, and water supply and sanitation.

Between 1985 and 1986, the Government of India launched the Centrally-Sponsored Rural Sanitation Program (CRSP). The program mandated that the central government and individual Indian states would split the costs of services evenly, while state governments

Box 1. The Panchayati

Panchayats are communities of 25,000 to 50,000. The communities are run by a council, which is headed by a president. Each council member represents his or her ward—India’s lowest administrative and political unit, covering around 500 families. Local government bodies with a tenure of five years are elected at the community, block, and district level. Panchayats have the authority to raise their own funds and to prepare and implement development plans. Women and people from scheduled castes and tribes comprise one-third of Panchayat members.

would retain operational responsibilities. User communities and local governments had little or no influence on the planning, design, and operation of these services—including water and sanitation—and deficiencies in service quality were taken for granted.

In late 1989, the Government of India introduced policy changes to mainstream community-driven approaches to rural water supply and sanitation sector development. This approach emphasized the importance of dissemination of information on sanitation issues; education regarding newer and healthier sanitation practices; and increased community participation in sanitation sector management. In 1992, an amendment to India’s constitution permitted each state the discretion to devolve certain powers to Panchayats. Kerala opted for a broad devolution of power, including critical sanitation responsibilities.

In 1998, community-managed sanitation became a state-wide program. The Kerala Total Health and Sanitation Mission managed the so-called Clean Kerala program under the Rural Development Department. Within three years, it had built 413,000 latrines.

Further reforms and government programs were launched in 2009 with the intent of scaling up the quality of Kerala’s sanitation sector and improving public access to sanitation services. The changes included training masons to build latrines and easing procurement of construction materials for grassroots civil society organizations such as women’s groups and private entrepreneurs. Central and state funding contributed to building the enabling environment for improved sanitation. Ultimately, local

communities and individual households were empowered to make the final decision to install latrines and paid a percentage of the capital costs of construction.

The Kerala Water Authority (KWA) created four socioeconomic units (SEUs)—one each for the northern, central, and southern parts of the state, along with a coordinating body in Kerala’s capital—to assume responsibility for providing on-site rural sanitation, for which the KWA had no clear mandate, and to address the social development implications of rural sanitation, with which KWA had little expertise. The SEUs piloted activities in Kerala’s water and sanitation sector in partnership with the KWA.

The SEU pilot programs tested sanitation strategies implemented by the Panchayats, local NGOs and semi-governmental institutions, and the SEUs themselves. Each strategy focused on providing effective, low-cost, on-site sanitation mechanisms, particularly the twin-pit pour-flush latrine. A 75 percent subsidy available to qualified households enhanced the accessibility of sanitation services. A key goal was to provide at least 40 percent of the subsidies to poor households.

In 1989 an independent evaluator, the Gandhigram Institute of Rural Health and Family Welfare, found that Panchayats achieved the best results at the lowest costs. The study also indicated that the program-implementation period should be extended to increase involvement by the community, the local health department, and regional CSOs, which could simultaneously monitor maintenance and use.

The SEUs implemented programs at the community level. They sought to transfer some authority to poor sectors of the community by including them in ward water and sanitation committees (WWSCs), which are voluntary groups of seven community members, including at least three women. The WWSCs provide essential oversight and manage quality control for sanitation throughout the Panchayat. They have responsibility for:

- Selecting poor households that qualify for a subsidized latrine and inviting non-poor households to receive a latrine at full cost
- Organizing meetings on hygiene promotion and latrine operation and maintenance for participating households

- Monitoring the quality of latrines and implementing community-level drainage improvements.

At the Panchayat level, umbrella committees known as sanitation implementation committees (SICs) were established to manage latrine construction and to oversee subsidy funds released from the state and raised from communities. A mandate required the inclusion of at least one female member elected by the women of the WWSCs in each committee.

Challenges Faced by Kerala's Water and Sanitation Sector

Water and sanitation programs are particularly susceptible to corruption. These programs necessitate complex planning, construction, and oversight processes; they use large sums of public money for procurement; and they involve many actors on several levels from project inception to delivery. The complexity of project development provides many opportunities for unscrupulous participants to divert public funds for personal gain. Development experts estimate that Southern India suffers from broad corruption in its sanitation sector: up to 30 percent of funds and materials earmarked for sanitation development are diverted for private gain.

CRSP Fell Short. The Centrally-Sponsored Rural Sanitation Program faced persistent challenges. The New Delhi-based Social Institute and Multiple Action Research Group identified several reasons why health outcomes did not improve under the CRSP:

- Insufficient dissemination of information on the importance of hygiene, which resulted in a lack of demand from community members unaware of the need for sanitation.
- A significant communication gap concerning the utility of the latrines and resulting improvement in health outcomes. Only 3 percent of the government subsidized latrines were used for the purpose for which they were built. Instead, latrines were converted into storerooms or kitchens.
- Total absence of community participation in planning, determination of cost ceilings, construction, and other critical areas that were centrally managed.

- Insufficient supply chains that prevented necessary materials and skills from being used or available locally.
- Malfeasance by elites, who captured the benefit of subsidies at the expense of deserving households.

Evidence also indicated that overreliance on a traditional supply-driven, subsidy-oriented government program was hampering private initiative in rural sanitation. Further evidence demonstrated that in states in which the CRSP had not been implemented, private initiatives filled the gap in sanitation services. A 1998 evaluation by the U.K. Department for International Development found no evidence that the high subsidies offered under the CRSP were promoting uptake of latrines among the poor. In fact, the CRSP appeared to reinforce the tendency to promote high cost options. The evidence suggested that the subsidy could be reduced, and private construction could assume a more prominent role (Saxena, 2004).

Nonexistent Oversight. The centrally-managed latrine subsidy of the CRSP did not stimulate more construction or better usage of latrine facilities. Physical coverage—estimated at approximately 17 percent of the rural population in 1997—improved by less than 3 percent by 2002; target coverage was 35 percent for that period. A key reason for the lack of progress was insufficient accountability of public officials. While officials were required to report actual expenditures for comparison to planned figures, the reports were not subject to verification. Additionally, failure to meet goals and standards had few or no negative implications for the officials' careers. Tenure of employment—not merit—determined career advancement, and supervisors could not levy sanctions for substandard performance.

Kickbacks. Malfeasance came in various combinations: among and between private contracting firms, public officials, purveyors of construction materials, craftsmen, civil society organizations, local procurement committees, and consumers, among others. Contractors commonly offer kickbacks to or perform favors for public officials in exchange for help in winning tenders. Consumers also

pay contractors for illegal connections to avoid paying user fees and receive services reserved for other households entitled to subsidies to use the latrines for other purposes, such as storage.

Cartels. Large contracts for latrine construction are quite lucrative. Several contracting firms therefore colluded to form cartels, deciding ahead of time which firm would submit the lowest bid to win the contract in exchange for a fee paid to the other competing firms. The winning contractor then recouped the cost of the fee by over-invoicing, taking construction shortcuts, and using substandard construction materials.

These various forms of graft together comprised a large financial loss, estimated at up to 30 percent of funds reserved for latrine construction.

Responding to Challenges by Implementing Good Practices and Deploying Social Accountability Tools

Kerala's sanitation project—and corresponding measures against corruption—were developed over the five year period from 1990 to 1995 as a response to the endemic development and governance challenges faced by Southern India's sanitation sector. The project deployed social accountability tools and implemented good practices in sanitation to provide poor households with permanent, high-quality latrines in an environment characterized by effective governance instead of ubiquitous graft.

Increasing Community Participation in Water and Sanitation Management. The construction of latrines only marked the beginning of reform of the sanitation sector in Kerala. Community members began to use the latrines correctly, and project implementation was properly monitored for consistency and fair dealing. Efforts to further decentralize decision making on sanitation issues were intensified, and greater transparency was encouraged to reduce the misuse of project funds. Local and international sanitation experts shared experiences, tools, and results with Panchayats, civil society organizations, and community members in an effort to develop a cohesive strategy for improving sanitation through the deployment of latrines.

Financial Accountability. Communities and Panchayats recognized that state-level government managers did not meet the water and sanitation needs of communities. In Kerala, for example, funds released by the state for sanitation development to Panchayats and community-level committees were at risk of being used for other purposes. To mitigate corruption, Panchayats were encouraged to open separate bank accounts for financial contributions earmarked exclusively for sanitation programs. All deposits and withdrawals required signatures from two signatories, one from the Panchayat and another from an NGO staff member, making it difficult for public officials and construction contractors to cut corners or use kickbacks.

Social Accountability Contracts. Ward members and other Panchayat representatives were required to sign accountability contracts with the appropriate SEU. The contracts specified contributions from the Panchayat and individual households, the extent of state subsidies, donor shares, unit costs, and the construction schedule—thus ensuring that each deserving household received a latrine.

Increased Community Engagement. Several additional measures at the community level further inhibited graft in Kerala. Panchayats, committees, and the public were informed of program rules, which included the household entitlement criteria for latrine construction; rules governing who may receive a subsidy; the composition, formation, and roles of the WWSC and the SIC; and regulations concerning construction pricing, tendering of construction contracts, and quality control processes. Local civil society organizations volunteered to survey local households, contracting firms, and public officials to gauge their awareness of sanitation rules. They then provided feedback to the WWSC and the SIC to improve dissemination of that knowledge. Panchayat representatives and civil society organizations executed contracts between themselves, pledging to adhere to the rules and standards governing fund management, construction procurement processes, and delivery of sanitation services. Breach of contract resulted in penalties specific to the violation, such as suspension.

Multiple Tenders Required to Avoid Cartels.

Small latrine contracts replaced larger ones, diminishing the incentives for construction contractors to form cartels. Each Panchayat invited at least three tenders from contractors for latrine construction materials. Before undertaking a tender review, members of the SIC analyzed the prices and quality of latrine construction materials by area vendors. This enabled SIC members to identify artificially inflated or deflated price quotes by construction contractors: inflated quotes were a red alert for possible graft, while deflated quotes suggested the use of insufficient or inferior quality materials. Panchayats accepted only written tenders, which were reviewed at meetings that were open to the public and included the SIC, Panchayat representatives, and members of civil society organizations. Agreements were based on either unanimous vote or plurality. If an agreement could not be reached, the decision could be tabled pending further review or the submission of additional information by contractors.

Participatory Monitoring and Evaluation.

Communities were empowered to monitor and evaluate the quality of construction. A range of stakeholders—including masons, supervisors, local committees, and families—had access to a construction checklist, which included simple drawings of the latrine construction process. Stakeholders were trained to use the checklist to monitor the quality of work

Ensuring Quality and Quantity of

Construction Materials. Once stakeholders reached a decision on a contract tender, construction of latrines began. The WWSC monitored contractors' adherence to their tenders and issued reports to the public on the quality and quantity of the construction materials used. Contractors did not receive payment until the WWSC confirmed that the contractor was performing the work as agreed. In fact, the WWSC withheld the final 20 percent of contract funds until after it inspected the final latrine and certified that latrines were built correctly, using good materials, and at the best price possible. The construction of the first two latrines in a Panchayat served as precedents for a workable time horizon for construction and a

cost ceiling for materials. Each Panchayat hired a works inspector to verify that the quality of the materials and construction itself met minimum standards. If standards were not met—such as incorrectly baked bricks or low-grade cement disguised as a higher-grade—the Panchayat returned the materials, demanded a refund, and typically blacklisted the supplier.

Latrine Construction Contingent on Payment in Full.

Administrators feared that some middle- and upper-class households would resort to paying contractors speed money or other kickbacks to obtain services to which they were not entitled. To guard against this, construction of all latrines began only after middle- and upper-class households that wanted a latrine had paid the cost in full, and after poor households had paid their 25 percent share. Every household that had paid for a latrine had to present an initialed receipt to the mason before construction could begin. In addition, households were required to present a signed card indicating that the household attended an educational meeting on the health benefits and operation of latrines. Finally, the mason signed the card. Poor families could pay their 25 percent share in installments, and the very poorest were exempt from payment under certain circumstances. Once the latrines were installed, a WWSC member visited each household at least once—and in some cases two or three times—to verify that it was being used correctly.

Independent Audits and Spot Checks.

Independent audits and unannounced spot checks further prevented corruption. Each community in Kerala was subject to at least one independent audit of the latrines. If the findings did not meet minimum standards, they were reported to the appropriate Panchayat and civil society organizations, which could levy sanctions on the offending household, mason, or other service provider. Unannounced spot checks occurred once every two months to monitor program receipts, storehouse, tenders, household receipts, and government records. Problems were referred to Panchayats and civil society organizations for action. In the event of serious fraud, latrine construction was halted and legal action was taken.

Figure 1. Thirteen-step Process of the Community-Managed Sanitation Program, Kerala

| | | Month | | | | | | | | | | | |
|------------------------|----|--|---|---|---|---|---|---|---|---|----|----|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Steps by the community | 1 | Identify/select Panchayat | █ | █ | | | | | | | | | |
| | 2 | Hold Panchayat meeting | █ | █ | █ | | | | | | | | |
| | 3 | Conduct survey, provide data from Panchayat | █ | █ | █ | | | | | | | | |
| | 4 | Construct model latrines, train masons, explain costing | | █ | █ | █ | | | | | | | |
| | 5 | Secure agreement by Panchayat, map contributions | █ | █ | █ | █ | █ | | | | | | |
| | 6 | Mobilize community for health education | █ | █ | █ | █ | █ | █ | | | | | |
| | 7 | Select households and set contribution levels | | █ | █ | █ | █ | | | | | | |
| | 8 | Technical training on using latrines properly | | | █ | █ | █ | █ | █ | | | | |
| | 9 | Mark and dig pits | | █ | █ | █ | █ | █ | | | | | |
| | 10 | Purchase/distribute materials, begin construction | | | | █ | █ | █ | █ | █ | █ | | |
| | 11 | Technical verification | | | █ | █ | █ | █ | █ | █ | █ | | |
| | 12 | M&E of household use and maintenance of latrine following construction | | | | | | █ | █ | █ | █ | █ | █ |
| | 13 | Documentation | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ | █ |

Source: Kurup et al. (1996).

Transparent Processes to Choose Households Eligible for Subsidized Latrines.

The main objective of the Kerala program was to meet the sanitation needs of poor families. To accomplish this goal, Panchayat representatives, civil society organizations, and community members devised a transparent process for determining which households would be eligible to receive subsidized latrines. Households in Kerala communities were sorted into low-, middle-, and upper-class families. The program devised household indicators of poverty: Does the family own less than one-half of an acre of land? Is a family member widowed or disabled? What is the household's annual income?¹

1. The key target group comprises households living below the official poverty line, with an income of less than Rs.11,000 (approximately US\$230) per household per year.

WWSC members then visited families that were living in poverty and lacked a latrine. WWSC informed these households about the program and subsidy, and interested families entered into agreements to receive a latrine. The WWSC then posted the list of families chosen for the subsidy in public locations for two weeks for review by the community at large. Occasionally, WWSC received additional information that adjusted a household's poverty status, and that household was either added to or removed from the list. The Panchayat approved the final list of households to receive latrines.

Effective Complaint Mechanisms. If households discovered a problem with the subsidized latrine at any point from construction to delivery,

they were entitled to seek redress through a well-enforced complaint process. The Panchayat investigated the complaint, and if it was found to be valid, the latrine was repaired at no cost to the household.

Gender Equity. SEUs have increasingly trained poor women as latrine masons, who have subsequently been widely contracted for construction projects. An increasing number of poor women have also trained as block makers for latrines. Previously in Kerala, as in much of India, most masons and block makers were male. The gender imbalance is continuing to shift, and qualitative analyses demonstrate a high degree of satisfaction among households with latrines constructed by female masons and block makers.

Social Accountability Tools and Good Practices Checklist. The success of Kerala's sanitation program depended on the deployment of social accountability tools and adherence to a series of good practices. These tools and good practices can be divided into the following categories:

- **Community mobilization.** Panchayat representatives, civil society organizations, and community members should participate in training and educational activities conducted by sanitation experts and SEUs. Community members should collaborate to integrate good practices into sanitation by facilitating community participation in decision making; promoting the correct usage of latrines; educating the community about the health benefits of sanitation; keeping all meetings open to the public to ensure transparency; and soliciting views and advice from all sections of the community.
- **Socioeconomic mapping.** Community members should devise indicators to identify households that should be entitled to subsidies for latrines. This mapping process should be transparent.
- **Public awareness of households eligible for latrine subsidies.** Once a draft list of households eligible for subsidies is developed, it should be posted in public places in the community for at least two weeks to promote public awareness and encourage community feedback.
- **Local government should contribute funds.** Local government should contribute between 15 percent and 25 percent of total sanitation program costs to complement state-level subsidies. The division of funding should be formally outlined in a contract between the community and the local government.
- **Local tendering controls.** Construction materials should be sourced from several vendors for at least two demonstration latrines to ascertain fair market value of materials and labor costs, including training of local masons. The least-expensive materials of good quality should be purchased. At least three tender bids should be sought for latrine construction materials (sand, cement, wood, and bricks). Authorized agents of the Panchayat, civil society organizations, and community committees should assign tenders and execute contracts, subject to public review and comment. In the case of vendor error or malfeasance, construction should cease, and the community may demand a refund in exchange for returned materials; the community may allow the vendor to correct the error, or it may blacklist the vendor.
- **Public awareness of costing estimates and construction time.** All material and construction costs, as well as the proposed timeline for project completion, should be detailed as line items and posted in public to promote community awareness and to allow for community feedback.
- **Construction checklists.** Construction checklists, featuring simple drawings of plans to build a latrine and instructions on how to use it correctly should be disseminated to all stakeholders: masons, supervisors, Panchayat representatives, and families.
- **Contributions prior to construction.** The construction of latrines should be contingent on payment in full by households that want a latrine, with household costs dependent on the socioeconomic map. Panchayats and community committees should keep records of all payments. Very poor households should be allowed to pay

their nonsubsidized share (typically between 15 percent and 25 percent) in installments, but latrine construction should not begin until all payments are made.

- **Latrine education prior to construction.** Masons should be prohibited from starting latrine construction until the designated households display an attendance card or certificate proving that they attended a community-led latrine education seminar.
- **Unannounced audits and spot checks.** Panchayats, civil society organizations, and community volunteers should organize unannounced audits and spot checks at relatively frequent intervals (for example, every other month) to check the progress of latrine construction against the original tender, verify the authenticity of receipts, catalog the construction materials, and update Panchayat records. In the case of error or malfeasance on the part of the vendor, construction should be halted. The community should either sanction the vendor or allow the vendor to correct the error.

Key Results

The Kerala Rural Water Supply and Sanitation Project benefited India at four levels: the village level; the regional level, particularly for vendors and service providers; the local government level; and the national government level. At the village level, increased access to sanitation has greatly improved community health and hygiene. The project emphasized transparent processes and community-driven efforts and is therefore well-suited for sustainable replication in other communities. Moreover, the project empowered traditionally underserved communities, particularly women. Local vendors and other service-providers were rewarded for transparent practices and honest competition. At the local-government and Panchayat level, emphasis was likewise placed on transparency, accountability, and community-driven reforms for local development and public health.

Improved Health Outcomes. Kerala's sanitation project has reduced morbidity and improved hygiene and sanitation in the region. As of 2009, eighty Panchayats had benefited from the construction of more than 68,000

latrines,² including communal or institutional latrines and child-friendly toilets. Based on community-driven monitoring and evaluation of construction and use of these latrines, approximately 96 percent of them were being used correctly for excreta disposal, which significantly lowered household practices of open-air defecation and "manual scavenging." These findings concluded that women used latrines more consistently than men, with women reporting 94 percent usage compared to 59 percent for men. The Socio-Economic Unit Foundation, a Kerala-based nongovernmental organization that works with communities to improve sanitation and hygiene (among other development priorities), contributed significantly to the success of the project.

Empowerment of Women. Women were deeply involved in the participatory planning, household mapping, and capacity development components of the project. Women were trained as skilled construction workers and masons. More than 30,000 community members—many of whom were women—were trained in one of the more than 2,700 training programs conducted during the project. The trainings, along with other efforts to mainstream community women into the project, resulted in higher incomes, higher status within the community, and, according to community interviews, an improved sense of self-respect for women in Kerala. Women throughout Kerala are involved in the operations of the sanitation and water supply systems, which includes attending meetings and voicing opinions at Panchayat offices. This sometimes involves women contradicting their male counterparts and confronting sanitation consultants and NGO representatives when necessary. Most of the water committee treasurers are women.

Low Unit Cost for Latrines. The project's thorough monitoring and evaluation of

2. This figure does not include the more than 24,000 deep pit latrines that were converted into shallow-pit latrines, or the 89,000 environmental management facilities—such as soak pits and compost pits—that were constructed as part of the project and contributed significantly to improved health outcomes. Moreover, 93,000 households in the districts served by the project now receive clean drinking water in their homes.

construction processes, accounting for materials, comparative costing, and rigorous anti-corruption measures yielded a low per-unit cost for each latrine. Latrines constructed in Kerala were approximately 150 percent less expensive than latrines constructed by centralized state programs.

Consistent Criteria for and Disbursement of Subsidies. The targeting of latrine subsidies to the poorest segments of Kerala's population proved to be consistent. Participatory civic engagement at the grassroots level, such as transparently identifying and mapping Kerala's poor households, and the public listing of households eligible to receive a latrine subsidy minimized the opportunities for elites and other outside actors to influence the selection criteria or otherwise benefit at the expense of the poor. As a result, ownership of latrines by poor families in Kerala increased dramatically.

Community-Driven Project Sustainability and Replication. At the grassroots level, WWSCs play a key role in identifying issues that demand action. They typically comprise seven volunteer community members, including at least three women, each of whom is selected through a process of public consultation. Committee positions are unpaid, and responsibilities include supporting the latrine-eligibility mapping process and site selection for water access points within each community, designing and implementing education programs, and vetting vendors for transparent practices and realistic costing. These committees also monitor latrine use and other indicators of community hygiene.

In general, the committees have been effective: between 85 percent and 98 percent of the latrines in each of districts in Kerala within the project have been judged to be very clean. A further indicator of good hygiene is the availability of soap and its proximity to latrines; in Kerala, the availability of soap varies widely, suggesting significant room for improvement. Between 20 percent and 70 percent of households in Kerala have access to soap within relatively close proximity to a latrine. Fortunately, communities are striving to increase the availability of soap. In several

Kerala districts, for example communities have developed educational health clubs to monitor and encourage hygienic practices in community areas, such as schools and clinics. The clubs disseminate information encouraging the correct usage of latrines, verify that latrines are kept clean, organize community meetings on the importance of hygienic practices such as the use of soap and hand washing, and meet with local vendors to encourage them to dispose of waste correctly.

Other communities in Southern India are seeking to replicate the progress achieved by the districts that participated in the Kerala Rural Water Supply and Sanitation Project. Neighboring communities without adequate sanitation or access to latrines witnessed participating districts' dramatic progress and subsequently pressured their local governments to develop Panchayat-managed sanitation and anti-corruption programs.

Decreased Reliance on National Government. Kerala's sanitation project featured higher financing of latrines by individual Panchayats and low use of subsidies from the national government. This financing scheme enabled poor community members to negotiate directly with local government officials regarding their share of costs before a household latrine was constructed. Each Panchayat could also make ad hoc decisions about how large a subsidy to allocate to poor households. Less than 5 percent of the participating households failed to complete payment. These households either did not receive a latrine or, if they were too poor to afford a latrine but still needed one, received a latrine at no additional cost after paying households received theirs.

Conclusion

Kerala currently has the highest coverage of individual household latrines in India. The state's use of social accountability tools and good practices demonstrates that local organizations can effectively manage their own local sanitation programs with support from outside sanitation experts and technical and social specialists from the SEUs. By transferring responsibility from national agencies to local government and communities, Kerala's

sanitation reforms were driven by community collaboration and oversight, preventing local elites and unscrupulous vendors from benefiting at the expense of the poor. To ensure the sustainability of the new sanitation practices, community members were required to attend lessons on latrine use and on the importance of sanitation and hygiene.

Despite numerous successes, the program still faces challenges. For example, regulations mandating the inclusion of women in water and sanitation sector decision-making processes have been largely eliminated. Moreover, the government's definition of poverty has changed to exclude members of the public who work more than 10 days per month. Many women in Kerala work as agricultural laborers for approximately 10 days per month, and as a result, their households are no longer eligible to receive latrine subsidies.

State funding for latrine subsidies has also decreased by 16.4 percent. The state government of Kerala has adjusted aspects of Clean Kerala, resulting in decreased participation by the public. For example, the state eliminated the position of program coordinator—a position traditionally held by a member of civil society and responsible for the monitoring and evaluation of latrine construction and procurement processes. Government authority in water and sanitation is also on the rise. Despite budget cuts to Clean Kerala, state-level members of parliament are receiving increasing amounts of discretionary funding (currently Rs.250,000, or approximately US\$5,500).

Communities were empowered by efforts to increase transparency and accountability of decisions related to latrine subsidies and construction. Unfortunately, simultaneous efforts to reverse decentralization have had the opposite effect.

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