The Promotion of Sanitary Toilets in India

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Focusing on the pivotal role that safe drinking water and sanitation play in the progress of the people in any location, this article discusses the use of sanitary toilets in the context of the Joint Monitoring Programme Report (2012) for Water Supply and Sanitation

BACKGROUND

The threat to human health from water-related issues is linked to, both, its scarcity and quality. Also, most of the water quality concerns are linked to faecal contamination, resulting from open defecation. Lack of access to safe drinking water and sanitation, therefore, prevents sustained progress in public health, globally. Drinking Water, Sanitation and Hygiene (WASH), as a sector is, therefore, the foundation upon which health facilities/infrastructure and other initiatives to address malnutrition need to be based. The challenge of laying WASH as the foundation for public health inputs to succeed are, however, quite daunting as is the challenge of meeting the Millennium Development Goals (MDGs) at the global level. The magnitude of the challenge is documented in the Joint Monitoring Programme (JMP) report, published every two years.

THE JMP REPORT (2012)

The WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (on the progress on Target 10 of the MDG 7) reports on the access to drinking water and sanitation globally. The Target 10 of the MDG 7 aims to "halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation." The base year for all the MDGs is considered to be 1990. The latest report of the JMP, published in 2012, states that the target of halving the proportion of people not having access to safe drinking water globally was met in 2010, five years ahead of time. During 1990 and 2010, over two billion people gained access to safe water worldwide and, currently, about 11 per cent of the people are using unimproved sources. Also significant is the fact that almost half of these two billion people, who have gained access to safe drinking water between 1990 and 2010, live in India (522 million) and China (457 million).

The JMP 2012 report also states that the world is unlikely to meet the MDG sanitation target even though 1.8 billion people have gained access to improved sanitation between 1990 and 2010. An estimated 2.5 billion people still lack basic sanitation facilities and, if the present trend continues, 2.4 billion people will still be without sanitation facilities by 2015. In 2010, about 63 per cent of the world population had access to basic sanitation facilities and, at the given rate of progress, about 67 per cent of the population will have access to sanitation facilities by 2015, which is less than the target of 75 per cent. Once again, India (251 million) and China (593 million) contributed significantly to the global gains in the access to sanitation; however, the progress in India, noticeably, has been comparatively low. The JMP 2012 reported that 814 million out of 2.5 billion, who do not have access to improved sanitation, live in India as against 477 million in China. Interestingly, the JMP report also indicates that nearly 1.53 billion people resort to open defecation globally, of which 626 million (60 per cent) live in India, compared to only 14 million in China. Evidently, progress in sanitation in India and China will determine the prospects of the world reaching the MDG targets.

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There are many complexities and challenges in the compilation and comparison of WASH data across nation states. Nonetheless, the report analyses several issues pertaining to the disparity in access to water and sanitation facilities between the rich and the poor, and also between the urban and the rural areas. Complications involved in defining and comparing acceptable standards of toilets and safe water across countries, as well as accessing data on water quality, are some of the challenges faced in compiling the JMP report. An interesting component in the JMP report, which has a significant implication for programming in India, is the definition of different categories of toilets.

DEFINITION OF TOILETS AND ITS IMPLICATION IN THE PROGRAMME IMPLEMENTATION IN INDIA

The JMP data indicate that, in India, 814 million people access unimproved toilets of the global aggregate of 2.5 billion, which is the MDG sanitation target. Of these 814 million in India, 626 million practise open defecation, implying that about 188 million people are using some form of toilet, which is not of acceptable standards. Many of these people live in urban areas as indicated in Table 1.

Table 1: Status of Sanitation in India

Categories	Improved	Unimproved		
		Shared	Other Unimproved	Open Defecation
Urban	58	19	9	14
Rural	23	4	6	67
Total	**34**	**9**	**6**	**51**

Source: Progress on Drinking Water and Sanitation 2012 Update—WHO/UNICEF

In urban India, only 14 per cent practise open defecation as against 67 per cent in rural India. Shared or other unimproved toilets are mostly found in urban areas and are rare in rural India (only 4 per cent shared and 6 per cent other unimproved). In fact, progress in the reduction of open defecation in sub-Saharan Africa may be attributed to people resorting to shared or unimproved toilet facilities. In China, for instance, it is observed that only two per cent of the people practise open defecation in rural areas whereas about 56 per cent have access to improved toilet facilities, suggesting that about 42 per cent of the population accesses shared or unimproved toilets.

Table 2 shows the definitions of improved and unimproved toilets as documented in the JMP report.

Evidently, the challenge of the MDG goal in sanitation, globally, is to convert the population using unimproved toilets to improved toilets; and within that domain, to address the menace of open defecation. For India, this implies that the sanitation programme will need to address the following issues:

a. To promote the use of sanitary toilets amongst 67 per cent of the rural population practising open defecation and to convert about 15 per cent of the rural population from using unimproved toilets to improved toilets

b. To convert the toilet use of 28 per cent of the urban population from unimproved source to improved source and to promote toilet use amongst 14 per cent of the urban population practising open defecation

IMPLEMENTATION STRATEGY IN RURAL INDIA WITH RESPECT TO TOILET DESIGN

To address the sanitation needs in rural India, the government-sponsored Central Rural Sanitation Programme (CRSP) was implemented in all the states in 1986. In addition, the Total Sanitation Campaign (TSC), launched in 1999, provided a major thrust to the sanitation sector. It had strict implementation guidelines at the national level, supplemented by fund allocations both at the national and the state levels. In 2011, the Government of India (GoI) restructured TSC, introducing several modifications in the programme components as well as increasing budget outlays. The key highlights were an increase in the subsidy for the construction

Table 2: Definition of the JMP Indicators for Improved and Unimproved Sanitation

Improved	Unimproved
Use of: ◆ Flush or pour-flush to: ▪ Piped sewer system ▪ Septic tank ▪ Pit latrine ◆ Ventilated improved pit (VIP) latrine ◆ Pit latrine with slab ◆ Composting toilet	Use of: ◆ Flush or pour-flush to elsewhere (that is, not to piped sewer system, septic tank or pit latrine) ◆ Pit latrine without slab, or open pit ◆ Bucket ◆ Hanging toilet or hanging latrine ◆ Shared or public facilities of any type ◆ No facilities, bush or field (open defecation)

Source: Progress on Drinking Water and Sanitation 2012 Update—WHO/UNICEF

of home toilets and expanding the ambit of eligibility for the subsidy, to include the many socio-economic categories that were outside the domain of subsidies in earlier years.

The merit of enhancing the subsidy for toilets was obviously questioned in the backdrop of the experience of implementing TSC in India, wherein a supply driven approach (though not prescribed by TSC), was adopted by various state governments, constructing large numbers of toilets, which were not used by the people. This discussion was, however, limited to the issue of the definition of a sanitary toilet, as prescribed in the national guidelines.

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PERFORMANCE OF TSC

The Census of India 2011 data has indicated that in contrast to the reports of the Department of Drinking Water Supply (about 65 per cent), only 36 per cent of the rural population use toilets. It clearly emerges that about half the toilets that were built are either not being used or do not exist anymore. Why did the people not accept the toilets provided to them? Experts are of the opinion that the facilities reached the community without adequate inputs for behaviour change. In other words, individual families were not consulted or involved in the implementation process. TSC was rechristened as Nirmal Bharat Abhiyan (NBA) in 2012 with an objective of accelerating the sanitation coverage in the rural areas so as to comprehensively cover the rural community through renewed strategies and saturation approach. NBA, therefore, lays substantial focus on changing the behaviour of the population as one of the key components of the programme.

BEHAVIOUR CHANGE COMMUNICATION AND THE TOILET MODEL

Again, the success of the initiatives to change community behaviour depends largely on the efficacy of the government delivery mechanism to respond to the community demand for toilets, once such a demand is generated.

Evidently, the design and model of the sanitary toilet needs to be discussed with the user community. The guidelines of GoI provide the necessary safeguards to ensure public health security. Historically, GoI has very strongly recommended the promotion of sanitary toilets, that is, a sanitary pan with a water seal, which is connected to a covered leach pit. The sanctity of public health security is protected by these minimal and non-negotiable components. Thereafter, considerations of cost and sustainability come into play to first design the pit toilets and then the off-pit toilets—two leach pits are used alternately; the water seal leads to a junction box, which has two pipes leading to the leach pits. The use of the pits is controlled by a valve in the junction box. This then needs to be supplemented by a strong superstructure of the user's choice.

QUALITY ASSURANCE ENSURES SUSTAINABILITY

An assessment study (Impact Assessment of Nirmal Gram Puraskar awarded Panchayats conducted by TARU, supported by UNICEF) was conducted in 2008 at the national level, to measure the impact of the Nirmal Gram Puraskar (100 per cent toilet coverage—the best-case scenario) under TSC. It indicated that nearly 81 per cent of the households reported having toilet

infrastructure, 66 per cent reported that the facilities were functional and 63 per cent reported that they were using the toilets regularly.

The study further indicated that the primary reason behind people reverting to open defecation was the poor quality of construction (31 per cent). The lack of a superstructure (14 per cent), the poor location of the toilet (5 per cent) and the blockage of pans/dysfunctional status of the toilet (26 per cent) were other reasons cited by people, who were not using the toilets. These findings indicate that proper installation and the quality of construction are the key determinants that ensure sustained use.

The availability of a functional sanitary toilet on demand is the primary factor that determines the sustained use of toilets. The NBA has rightly focused on Behaviour Change Communication as a key component for the advancement of rural sanitation in India

CONCLUSION

The availability of a functional sanitary toilet on demand is the primary factor that determines the sustained use of toilets. The NBA has rightly focused on Behaviour Change Communication (BCC) as a key component for the advancement of rural sanitation in India. Following an effective BCC, providing the prescribed sanitary toilet with a water seal, leach pit and a strong superstructure assures public health security and is in alignment with the global definition of improved sanitation. The national policy is, therefore, comprehensive and on track.

The challenge for rural sanitation in India is to translate the policy into successful implementation. The challenges in programme delivery are enormous–assessing the building capacity of the stakeholders, designing an effective fund-flow mechanism, assuring the quality of construction and ensuring integrity in the process of programme delivery. All these factors are important for the advancement of rural sanitation in India. This discussion paper, being limited to the significance of the toilet model prescribed by the national policy, has not dealt with these issues in detail. However, as the policy prescribes community contributions in the implementation process, both in cash and kind–(an indicator manifesting effective demand), it is important to engage the community effectively and comprehensively in the process.

The article is an excerpt from a Discussion Paper by Samir Dan, Chief Engineer cum Executive Director, State Programme Management Unit, Drinking Water and Sanitation Department (DWSD), Government of Jharkhand