Implementing Sanitary Toilet Complexes in District Bijnor Villages

Introduction:

A sanitary toilet complex is an infrastructure for the use of the community and/or floating population. A sanitary toilet complex takes care of safe disposal/reuse of human waste in addition to the objective of providing a toilet facility that enhances privacy and dignity. Depending on the nature of users, a sanitary toilet complex may be categorized as either a community toilet or public toilet. The design aspect remains the same in both cases. The type of toilet in both cases depends upon the expected profile of users.

Community toilet: A community toilet is a facility which is built when there is no space available or when there are financial constraints for constructing an IHHL. It is used, owned and maintained by community members. It is mostly located within the community, where people reside. A community toilet may also have other utilities such as a bathing facility or a place for washing clothes, depending upon the needs of the community. A public toilet is a facility which is built for the use of the floating population such as migrant workers, visitors, and tourists, etc., who visit the village area frequently because of its commercial, religious or tourist attraction. Public toilets may be owned by the Gram Panchayats, private trusts, Non-governmental Organizations (NGOs), Community Based Organizations (CBOs), Self Help Groups (SHGs), youth clubs, or even private entrepreneurs, who ensure proper O&M of the system. They are not necessarily located within the habitation, but close to the area where the floating population gathers.

Problems and Prospects of Implementing Sanitary Toilet Complexes in Rural Villages

Sometimes, a sanitary toilet complex is a useful way to completely end the practice of open defecation in the village. While community toilets act as a medium to help families who cannot otherwise have an IHHL, public toilets address the needs of the floating population. Overall, sanitary toilet complexes help in ensuring social dignity and privacy, and maintaining the health status of the village. However, O&M of community or public toilets could become a problem as these facilities are used by many, but not owned by the users. Because of a diffused sense of ownership, often no one is willing to take responsibility for maintenance nor can people be held accountable for ensuring the hygienic O&M of the facility. In the case of community toilets, the number of users may be low on a daily basis, due to which the cost of maintaining the facility may end up being high. Lack of adequate income of the Gram Panchayats makes it difficult to provide sufficient funds for maintenance. Also, in rural areas, there may be socio-cultural issues in the use of community toilets because of caste and class distinctions. Therefore, while providing community toilets, this aspect of rural life needs to be considered to ensure that, after construction, all intended users are using the facility and there are no conflicts. In the case of public toilets, because the visitors use the facility for a short time before leaving the area, they are not motivated to take the responsibility of maintaining the toilets, nor is it practical to leave the maintenance to them. Their behavior towards toilet use and hygiene practices also varies widely, so the extent of maintenance and costs required can be high. Given the above issues in O&M of community and public toilets, it is necessary to ensure ways and means for O&M at the planning stage before the facilities are designed or constructed, which has to be done in consultation with the community. The arrangements finally undertaken should have adequate provisions for supporting the marginalized communities in the village such as women, the poor, etc.

Provision of Water: Provision of water in a sanitary toilet complex is an important aspect of O&M of the facility. Water is needed round the clock for the sanitary toilet complex to operate and be maintained properly. In most villages, adequate water supply may not be often available. Choice of technology which does not use water or uses limited water may be considered in the design phase in such villages. A hand pump is one of the most suitable options if the installation of piped water supply is not possible. Alternative approaches, such as a forced lift hand pump, could also be considered.

Capital costs: After short listing technology options, it is advisable to estimate the cost of available options. This can be done by breaking down the costs into two stages, which correspond to two types of costs:

- ✓ Costs incurred in construction and operationalising the toilet, that is, capital cost.
- ✓ Costs incurred after the toilet is opened for use by the public, that is, O&M costs. Capital costs are the expenses which are incurred only once to make the facility operational and ready for use.

Project management and promotion: This would involve a variety of other costs such as: – Costs incurred by the Gram Panchayat on community engagement in the initial stages to involve them in decision making and raising awareness. This will also include any cost spent on training community facilitators for information gathering; – Cost of training and capacity building of village motivators, local masons and plumbers for the use of technology; – Cost of sanitation and hygiene promotion, Information Education and Communication (IEC) campaigns, BCC; and – Construction supervision and management costs. Of these costs, some are technology-specific and would be different for different technologies depending upon the space/land required, the type of superstructure required, the sophistication of equipment and fittings needed, etc. Table 3 provides an indication on how the costs can vary with the selection of technology. It should be noted that the superstructure is of least importance in order to ensure safe disposal of excreta. Its primary function is to provide privacy and protection to the user. Undue emphasis on a costly superstructure in the design of the toilet can be easily avoided. The cost may vary depending upon the type of superstructure decided on. Locally available material such as bamboo, mud, bricks, wood, plastic, etc., can be used for the superstructure and can cut costs. However, sustainability and durability of the material used and its maintenance requirements must be taken into account

Sale of treated waste water: The water from baths and washing areas can be treated and can be sold at a nominal cost to those who require large amounts of water such as rich farmers having large tracts of land for irrigation or to industries, if available nearby.

• Production of biogas: Production and utilization of biogas from human waste for cooking, lighting and even for electricity generation have good economic potential in rural areas. In most rural areas, people are dependent on fire wood for cooking since Liquefied Petroleum Gas (LPG) is rarely available. Under such conditions, biogas will prove a boon for the community. Initially, people may hesitate to use biogas for cooking but, since it has direct economic benefits, perceptions can change. Biogas production requires regular maintenance which requires skills; it should be ensured that such skills are available within the community. Also, in addition to the faecal material put in the plant, additional organic material may also be required to be added.

Community management: In this arrangement, the community members may carry out the work themselves, or play a managerial role and pay an outside party (third party), such as an assigned cleaner, to do it for them. The immediate users, that is, the households assigned to use the facility, may form a group and undertake O&M through various ways:

i. Each household can take the responsibility for O&M in turns on a monthly/weekly basis; ii. All households can together hire/contract a cleaner for O&M. In cases where the village has SHGs, the job of everyday maintenance can also be given to them at a nominal cost. This would not only act as a revenue generating source for the SHG but will also ensure that the community's resources are retained within the community. Such arrangements are called community contracting;

ii. Costs for O&M (for daily O&M as well as for repair and maintenance) can be worked out and divided among the community members using the facility. A monthly pass could be given to each family and the person responsible for the maintenance should be assigned to collect the money from families and maintain the system; iv. Where the Gram Panchayat is financially capable, it should assign a person to maintain the system in return for monthly payment and provide the required cleaning material; v. In certain cases, where the number of households using the community toilet is identifiable and limited, the individual seats in a community toilet can be allocated to a few households (typically three or four) by the Gram Panchayat. The door to the individual seat can be kept locked, and the keys given to each household. This means that only these households would be able to use the toilet seats, and it would be their responsibility to maintain the toilet. This ensures that the complex is maintained properly; vi. In some suitable cases, a small shop (or similar commercial use) selling daily household items can be attached to the sanitary toilet complex. This will help community members save time in buying essential household items and also increase the number of users of the toilet complex. The shopkeeper may be assigned to maintain the toilet complex. The Gram Panchayat can charge monthly rental for the shop and take responsibility for the maintenance out of the funds received. This can prove to be a source of income for the Panchayat; and vii. The outer walls of a sanitary toilet complex can be used for advertisement of products used in rural areas. This aspect is more important for public toilets located at public

iii. Places like markets. Income generated from such advertisements can prove to be a good resource for the Gram Panchayat to help maintain public toilets.

NGO/CBO/SHG involvement: The advantage of involving a local collective group (NGO/SHG/ CBO) in the O&M of community and public toilets is their ability to work closely with the community because of the rapport they have built over a period of time. In case of households sharing the facility not having a good rapport with each other, everyday conflicts may result. NGO/SHG/CBO involvement will help in managing communication between households and help resolve any issues that may arise in the use of common facilities. The NGO/ SHG/CBO may entirely operate and maintain the facility for the household users at a nominal cost recovered from them as user fee. In the case of public toilets where the responsibility for O&M cannot be fixed on the floating population because of their short span of use, the NGO/SHG/CBO can take up O&M of the facility. This would also be helpful when the community is not ready to take the responsibility for O&M of a public toilet as they do not directly use it. However, it is important to note that the NGO/ SHG/CBO may have humanitarian objectives, but they need to recover their operational costs which would be slightly higher than the costs that the community would have spend in case of self management. Therefore, the involvement of the NGO/SHG/CBO should be carefully decided.

Private sector participation: Private sector participation in O&M would be useful for specific tasks for which the community lacks financial or skilled human resources such as technology

Support, treatment or disposal of waste, maintenance of sanitary fittings and pipes, etc. that is part of O&M arrangements. Private sector participation can be sought in a number of ways: I. Contracting: The Gram Panchayat can contract out the entire O&M or specific O&M activities to a private sector party. Generally, this involves contracting out those tasks for which skills are not locally available; II. Leasing: In this case, the private sector party will rent the entire facility from the Gram Panchayat (owner) and take care of all aspects of O&M. In return, the private party will charge a user fee to recover its operational costs (including rent) and earn a nominal profit. This kind of an arrangement is potentially more expensive and more suitable for urban areas where the communities are scattered and less willing in managing their own infrastructure.

Independent service provision: In this arrangement, the toilet facility will be developed and maintained entirely by a private sector party through its own resources and then opened for public use. This model is used primarily for public toilets where the floating population cannot assume ownership and responsibility for O&M. Care has to be taken that specific needs of women, the elderly, etc., are not neglected. Religious boards or market committees can create public toilets through this model to enhance the value of their location by offering convenience services to visitors. In this case, the outer walls of the toilet complex can be made available for advertisement purposes to earn money to make the system sustainable.