

TOWARDS ACHIEVING A CLEAN ENVIRONMENT
THROUGH SANITATION:
A STUDY ON ILCSS TOILETS IN ODISHA

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Integrated Low Cost Sanitation Scheme (ILCSS) is not only about construction of toilets but about ending open defecation and the ILCS is an environmentally safe method prohibiting dry latrines in the towns thereafter, as dry or bucket latrines constitute a threat to health and hygiene causing neighborhood environment pollution. The scheme (ILCSS) is specifically designed to cover the economically weaker sections of the society, the EWS households where there is prevalence of dry latrines or who have no latrines and defecate in the open in urban areas. The scheme envisages improvement in overall sanitation in the towns.

The special feature of this two-pit pour flush toilet is that it has two pits instead of one. The reason is being that, such leach pit units are appropriate, only if they can be dislodged mechanically by a vacuum tanker, since their contents are not pathogen free. In a two-pit system, the filled pit can be cleaned manually even by the household occupant himself, because of long period of digestion which makes it free from foul smell and also safe for handling.

The problem of scavenging is closely connected to the social problem of national concern namely the problem of scavenging, the problem of the manual disposal of human excreta. By implementation of the scheme, the scavengers are expected to be liberated enabling them to seek alternative dignified occupation.

The objectives of the study include (i) to assess the design and implementation of the scheme and (ii) to identify the assets created exclusively from the schemes and the benefits accrued and environmental issues addressed

The study was conducted in five Urban Local Bodies (ULBs) namely Phulbani, Subarnapur, Burla, Rairakhola and Kendrapara by sampling households having toilets

constructed under the ILCS scheme. All the wards of the ULBs having beneficiary households were represented by probability sampling. A total of 500 households were sampled with 27 households from Phulbani, 54 from Subarnapur, 137 from Burla, 174 from Rairakhol and 108 from Kendrapara.

I

The study revealed that the Scheduled Caste (SC), Scheduled Tribe (ST) and the Other Backward Caste (OBC) beneficiaries constituted 81% of the sample beneficiaries. The marginalized sections got the benefits of the ILCSS. Approximately one-third of the beneficiaries came from joint families and two-thirds from nuclear families with an average of 5 members per family.

The average annual income of the households was about Rs. 95,000 and 97% of the 500 sampled beneficiaries belonged to Economically Weaker Section (EWS) and Below Poverty Line (BPL) category that constituted the groups for which the ILCSS was primarily meant.

Integrated Low Cost Sanitation Scheme (ILCSS) of Government of India has been planned to extend benefits to the Economically Weaker Section (EWS) living in the urban area. It aims to have clean sanitation facility and to improve the overall environment of the town. Planning, implementation, monitoring, and Information Education and Communication (IEC) are interlinked and inter-dependent components of the project. Planning is followed by implementation and monitoring is in between and the knowledge gained at the time of implementation can be incorporated in the revised planning. In implementing the scheme, a demand driven approach, emphasizing on Information, Education and Communication (IEC) for increasing awareness among the people, results in generation of demand for sanitary facilities. The IEC is essential for the success of the project. The beneficiaries as well as implementing officials are to be informed about the objectives of the project. The fulfillment of the objectives of the project is given the utmost priority.

II

2.1 Planning and Implementation

Planning is an essential ingredient for success of any project. Before implementation of the project, planning is necessary. The feasibility analysis of the project is made to know social acceptability, economical/financial viability and environmental sustainability. In the planning

phase, a SWOT analysis is made to identify the strengths, weaknesses, opportunities and threats. Whether plan is followed or not is monitored regularly at specific time intervals. Planning is done taking different aspects into consideration. Under this project, the types of structures suggested are to be made suitable to the local site conditions like type of soil, ground water level etc. The scheme envisages construction of pour flush latrine with provision of two offset soak pits. The targeted beneficiaries are very much enthusiastic towards this ILCS project as most of the households have no latrine.

2.2 Design and Nature of the Project

The essential part of this type of latrine is a squatting plate having a steep pan (40 degree slope) fitted with a trap providing 20 mm water seal and a soak pit (leach pit). This requires minimum water, i.e. 1.5 to 2 liters to manually flush the excreta after each use.

The water seal performs three important functions:

- It prevents access to flies and mosquitoes into the soak pit.
- It makes the latrine free from foul gas and no order nuisance. The soil is good absorbent of gases and no need for vent pipe.
- Once latrine is flushed, no longer excreta are visible in the pan, keeping the environment pleasant.

2.3 Precautions during construction

- The soak pit should be constructed about 10m away from the existing drinking water source like open well /shallow tube well.
- The toilet should be close to the house or inside house for easy access and convenient use during day and night.
- The site should be preferably chosen to allow easy and safe excavation of pit as well as removal of digested excreta in future.

- The bathing, kitchen, rain water should not be allowed to get in to the soak pit to avoid overflow.
- The minimum distance between two pits should not be less than 1m otherwise the sludge in the other pit will be moistened and de-sludging will be a problem in future.
- No water supply pipe/sewerage line should pass across the soak pit.

2.4 Extra benefit to the beneficiary

The advantage of latrine with super structure is that the beneficiary may like to construct a bathroom facility by utilizing a side wall of the latrine to make it more convenient for their family use with less cost of his own.

As the work is to be executed by the beneficiaries apart from the permanent super structure of the latrine, with less investment they can construct water storage tank adjoining the wall of the latrine, take electric connection for night use, etc. with convenience.

Working Life time: Considering pit dimension of 0.9 m width and 1.2 m depth soak pit, a family size of 5 to 6 persons, can conveniently use this latrine for about 10 to 12 years without any major repair i.e., even without changing/cleaning the soak pit. In this type of pour flush latrine with offset soak pits, the toilet water is absorbed in the soil and fecal matter is decomposed and converted to gas and cell tissues by anaerobic action which occupies little volume and settles at bottom of pit.

2.5 Project Description

Design Criteria: The following factors have been considered for designing the toilets under the ILCS Programme:

- Affordability of the beneficiary contribution
- Average number of users per family
- Type of soil and soil absorbing capacity

- Depth of groundwater table
- Availability of local material and skill
- Availability of water supply facility

Under these conditions, it is proposed to construct pour flush latrine with provision of two offset soak pits. Considering a family size of 5 to 6 persons in average, 0.9 m dia and 1.2 m depth size soak pit has been suggested in the scheme. It is expected that each soak pit shall absorb 40 to 50 liter of water per day in this area. In pour flush latrine with offset soak pits, the toilet water is absorbed in the soil and fecal matter is decomposed and converted to gas and cell tissues by anaerobic action which occupies little volume and settled at bottom of pit.

The benefit of offset type soak pits is that the soak pits can be cleaned/ repaired in due course without damaging the toilet and its super structure.

2.6 Drawing:

Latrine room size: 1.0m*0.9m (inside) Soak pit size: 0.9 m (ID) * 1.2m depth i.e., four Ferro cement rings of size 0.9m (ID)and 0.3m height each. Inspection chamber size (internal dimension):0.3m*0.3m*0.45m.The detail specifications for pour flush latrine with offset soak pits are provided in the drawing: The cost estimates have been worked out on the basis of schedule of rates

– 2008 (SOR) of PWD Dept. of Odisha and for some items not covered under SOR, the local market rates have been considered for preparing the estimates. The detail of estimates has been provided. Several aspects of the project need to be considered and the work is divided into different units and those are identified and implemented. Those are detailed below.

- **Awareness campaign:** Awareness campaign on different sanitation measures including ILCS programme shall be taken up creating mass awareness among beneficiaries, elected representatives of local bodies, school children, self-help group, general public through conducting different programmes like quiz competition, essay competition, drawing

competition, slogan writing competition, padayatra, folk song and dance, workshop, advertisement etc.

- **Household survey for beneficiary identification:** Household survey for beneficiary identification has been completed through the NGO.

- **Collection of beneficiary contribution:** In collaboration with the municipality staff, the NGO shall take up the job to facilitate for collection of beneficiary contribution.

- **Operation and maintenance arrangement of units:** The NGO shall arrange training programmes of pour flush latrine with offset soak pit and other issues related with the ILCSS for some suitable persons among the beneficiaries preferably two to four persons from each ward for capacity building in the initial year, and arrangement for maintenance by skilled persons shall be taken up.

The planning of ILCSS toilets was done basing on the suitability of the locality and majority of these were single-pit toilets as against the stipulated provision of two-pit toilets. Nearly 50% of the toilets were completed and the rest were either incomplete or in the process of being completed. 85% of the toilets were located outside the house for convenience. Majority of the beneficiaries were happy with the provisions created under ILCSS but had problems with toilet walls, roof or depth of the pit. Majority of the beneficiaries (57%) reported the quality of construction as average to good, while 43% rated the construction quality to be poor or very poor. While majority of the beneficiaries were satisfied with the ILCSS toilets, about one-third were dissatisfied because of delay in execution of work, small sized toilets, low budget, poor quality construction etc.

Table-1: Requirement of Beneficiary Households on Structure of Toilets

| ULB/NAC | Beneficiary HHs | Requirement of households on structure of toilet | | | | | | | | | | | | | |
|------------|-----------------|--|----------------|---------------------|----------------|--|----------------|------------------------|----------------|---------------------------------|----------------|----------------------------------|----------------|---|----------------|
| | | At least one roof/Wall/Door | | Roof, Door required | | Wall, Door required and problem with pit depth | | New pan is to be fixed | | Floors and wall to be renovated | | Another pit is to be constructed | | Whether ILCSS latrine fulfilled your sanitation requirement | |
| | | yes | No | yes | No | yes | No | yes | No | yes | No | yes | No | yes | No |
| Phulbani | 27 | 12 (44.44) | 15 (55.56) | 13 (48.15) | 14 (51.85) | 11 (40.74) | 16 (59.26) | 12 (44.44) | 15 (55.56) | 10 (37.04) | 17 (62.96) | 13 (48.15) | 14 (51.85) | 07 (25.93) | 20 (74.07) |
| Subarnapur | 54 | 7 (12.96) | 47 (87.04) | 06 (11.11) | 48 (88.89) | 08 (14.81) | 46 (85.19) | 07 (12.96) | 47 (87.04) | 20 (37.04) | 34 (62.96) | 13 (24.07) | 41 (75.93) | 28 (51.85) | 26 (48.15) |
| Burla | 137 | 78 (56.93) | 59 (43.07) | 77 (56.20) | 60 (43.80) | 81 (59.12) | 56 (40.88) | 49 (35.77) | 88 (64.23) | 89 (64.96) | 48 (35.04) | 56 (40.88) | 81 (59.12) | 75 (54.74) | 62 (45.26) |
| Rairakhol | 174 | 137 (78.74) | 37 (21.26) | 81 (46.55) | 93 (53.45) | 28 (16.09) | 146 (83.91) | 42 (24.14) | 132 (75.86) | 139 (79.89) | 35 (20.11) | 45 (25.86) | 129 (74.14) | 52 (29.89) | 122 (70.11) |
| Kendrapara | 108 | 24 (22.22) | 84 (77.78) | 20 (18.52) | 88 (81.48) | 23 (21.30) | 85 (78.70) | 08 (7.41) | 100 (92.59) | 07 (6.48) | 101 (93.52) | 36 (33.33) | 72 (66.67) | 87 (80.56) | 21 (19.44) |
| Total | 500 | 258 (51.60) | 242 (48.40) | 147 (29.40) | 353 (70.60) | 151 (30.20) | 349 (69.80) | 118 (23.60) | 382 (76.40) | 265 (53.00) | 235 (47.00) | 163 (32.60) | 337 (67.40) | 249 (49.80) | 251 (50.20) |

Note: Figures in the parentheses indicate percentages.

Source: Field Study

The finding presented in Table 1 reveals that 30.20% of households require roof, door, and wall have problems with pit depth apparently. Either the new toilets have no such provisions

or needs renovation. While new pans are to be fixed in 23.60% beneficiary households, 53.00 % of them expressed that floor and wall are to be renovated. On the whole, 49.80% of the beneficiaries feel that their sanitation requirement is fulfilled by ILCSS toilets.

III

Solid and Liquid Waste Management

3.1 The Danger

The primitive methods of excreta disposal, especially in urban are causing most of the leading diseases in our country are deeply rooted in the environment. Many diseases result from the careless disposal of night soil. Water borne diseases like diarrhoea, dysentery, typhoid, cholera etc. spread mainly through water collected by the excreta of patients suffering from those diseases. These diseases spread in an epidemic form in urban areas. The watery portion of the night soil containing the germs causing the diseases soaks into the ground and may finally reach water sources like wells, tanks and streams. The people drinking this infected water can contract the disease easily. The waste water generated from various households and other activities in urban area overflows into open surface drains and is ultimately disposed of into nearby ponds, thereby contaminating them. Seepage from pit latrines is also likely to affect the underground water.

Accumulated solid waste clogs drains, causing water stagnation and flooding. Pools of mixed solid and liquid waste, often combined with human feces, create breeding grounds for pests such as rats, mosquitoes, dogs, flies, fleas, and cats. These pests serve as vectors that spread diseases such as malaria, polio, chikungunya, dengue, cholera, typhoid, and schistosomiasis. India's high infant mortality rate is largely due to poor sanitation. According to the Ministry of Rural Development, Government of India approximately 88% of the total disease load is due to lack of clean water and sanitation, and the improper management of solid and liquid waste. The scenario of solid and liquid waste management in the five sample ULBs are detailed below and also data relating to the waste management are mentioned in the Table 4.1 and 4.2.

3.2. Types of Waste

(i) **Solid waste:** Solid waste in urban areas generally includes house sweeping, kitchen waste, garden waste, cattle dung and waste from cattle sheds, agro waste, broken glass, metal, waste paper, plastic, cloths, rubber, waste from markets and shopping areas, hotels, etc. It can further be classified as Biodegradable and Non-biodegradable in terms of its property of getting decomposed or not. Waste which cannot be decomposed by biological processes are further categorised as Recyclable and Non-recyclable waste.

(ii) **Liquid waste:** - This used and unwanted water is of two types, (a) Black Water: Waste water generated in the toilet which contains harmful pathogens and (b) Grey water: Waste water generated in the kitchen, bathroom and laundry.

3.3 Ways to overcome the menace

The only answer to stop the spread of diseases in ULBs is by adopting two pronged strategies:

(i) Using sanitary latrines which refer to any type of latrine constructed for protecting the health of the Community. As has been done in rural areas, non-service type of sanitary latrine like pit latrine hygienically constructed, will surely control the outbreaks of fatal diseases.

(ii) Waste management which is primarily the collection, transport, processing or recycling or disposal, managing and monitoring of waste materials, usually once produced by human activity, in an effort to reduce their effect on human health or local aesthetics or amenity.

Changes in the environment, especially with regard to disposal of waste and human excreta, are of vital importance to keep diseases away as well as to keep the environment clean. The first step in the right direction is to recognize that waste, if managed properly, is a resource of considerable economic value. The cooperation, support and involvement of community, the willingness of the villagers to segregate waste at its source will determine the extent to which ULB areas will begin to reduce, reuse and recycle.

There are a number of concepts about waste management which vary in their usage between regions. One concept is that of "Waste hierarchy". The waste hierarchy refers to the "3 Rs"-

reduce, reuse and recycle, which classify waste management strategies according to their desirability in terms of waste minimization. The waste hierarchy remains the cornerstone of most waste minimization strategies. The aim of the waste hierarchy is to extract the maximum practical benefits from products and to generate the minimum amount of waste having

nutrient values and can be used as compost for agriculture in urban areas or sold commercially in the neighboring city areas where the demand for such organic products is high. Economic growth produces prosperity as well as garbage. The faster the economy grows, the more its people consume, and the more garbage they generate. When economic growth is sustained over a long period of time, garbage starts to pile up at a faster pace. An efficient disposal of this garbage would require creation of an extensive and efficient infrastructure catering to collection, storage, transport, treatment and disposal of the waste. Efficient disposal is costly but essential for public safety, health, quality life and the environment. The cost of garbage management and disposal therefore has to be compared to its social benefits.

Table-2: Management of Solid and liquid Waste by the ULBs

| ULB/NAC | Beneficiary HHs | Management of Solid and liquid waste by the ULBs | | | | | | | |
|------------|--------------------|--|----------------|----------------|----------------|-----------------|----------------|--|----------------|
| | | Composting | | Vermi-composts | | Biogas generate | | Re use of grey water after recycling in garden /park | |
| | | Yes | No | Yes | No | Yes | No | Yes | No |
| Phulbani | 27 (100.00) | 0 (0.00) | 27 (100.00) | 0 (0.00) | 27 (100.00) | 0 (0.00) | 27 (100.00) | 0 (0.00) | 27 (100.00) |
| Subarnapur | 54 (100.00) | 0 (0.00) | 54 (100.00) | 0 (0.00) | 54 (100.00) | 0 (0.00) | 54 (100.00) | 0 (0.00) | 54 (100.00) |
| Burla | 137 | 0 | 137 | 0 | 137 | 0 | 137 | 0 | 137 |

| | | | | | | | | | |
|------------|----------|--------|----------|--------|----------|--------|----------|--------|----------|
| | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) |
| Rairakhhol | 174 | 0 | 174 | 0 | 174 | 0 | 174 | 0 | 174 |
| | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) |
| Kendrapara | 108 | 0 | 108 | 0 | 108 | 0 | 108 | 0 | 108 |
| | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) |
| Total | 500 | 0 | 500 | 0 | 500 | 0 | 500 | 0 | 500 |
| | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) | (0.00) | (100.00) |

Note: Figures in the parentheses indicate percentages.

In the sample ULBs, it is observed that Kendrapara, Burla, Subarnapur, Kandhamal and Rairakhhol have plans for management of solid and liquid waste of ILCSS toilets but the programme is not implemented. As a result, the activities like composting, vermi-composts, biogas generation, recycling of grey water have not

been undertaken by the none of the ULBs. Attempt has not been made on management of solid and liquid waste in convergence with other programs like TSP, Urban Area Development Programme etc. Due to lack of the above facilities the problems viz. water pollution, spread of diseases etc. reoccur in the ULBs.

Table-3: Waste Disposal and Treatment Characteristics

| ULB/NAC | Beneficiary HHs | Dry units having | Waste disposal and Treatment Characteristics | | | | | | |
|---------|-----------------|------------------|--|-------------|---------|------------------|--|-----------|--|
| | | | Onsite Disposal | | | Offsite Disposal | | Treatment | |
| | | | single | double pits | Flushed | Flushed | | | |
| | | | | | | | | | |

| | | manual collecti on | No pit | pit latrine | latrine | in open drain | in covere d drain | Onsite | Offsite |
|------------|-----|--------------------------|--------------|----------------|----------------|---------------------|-------------------------|-----------------|---------------|
| Phulbani | 27 | 0 (0.00) | 0 (0.00) | 27 (100.00) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 27 (100.00) | 0 (0.00) |
| Subarnapur | 54 | 0 (0.00) | 0 (0.00) | 30 (55.56) | 0 (0.00) | 0 (0.00) | 24 (44.44) | 30 (55.56) | 24 (44.44) |
| Burla | 137 | 0 (0.00) | 0 (0.00) | 34 (24.82) | 103 (75.18) | 0 (0.00) | 0 (0.00) | 137 (100.00) | 0 (0.00) |
| Rairakhol | 174 | 0 (0.00) | 04 (2.30) | 170 (97.70) | 0 (0.00) | 0 (0.00) | 0 (0.00) | 171 (98.28) | 0 (0.00) |
| Kendrapara | 108 | 0 (0.00) | 0 (0.00) | 101 (93.52) | 07 (6.48) | 0 (0.00) | 0 (0.00) | 108 (100.00) | 0 (0.00) |
| Total | 500 | 0 (0.00) | 04 (0.80) | 362 (72.40) | 110 (22.00) | 0 (0.00) | 24 (4.80) | 473 (94.60) | 24 (4.80) |

Note: Figures in the parentheses indicate percentages.

The waste disposal mechanism across the sample ULBs revealed that manual collection which is inconvenient is not encouraged in any of the ULBs. Again only 2.3 % of total ILCSS toilets of Rairakhol have no pit. Possibly the pit has not been dug due to the delay in release of funds to the firm executing the work. It has been ascertained from the ULB that the left over work of pits shall be started soon.

Constraints to Success in Sanitation

Governments in general and health ministries in particular cannot play their key roles as facilitators and regulators of sanitation without policies that support the transformation of national institutions into lead institutions for sanitation, with increased focus on household behaviour and community action. It promotes demand creation that enables health systems to incorporate sanitation and hygiene. Other constraints to success in sanitation are population growth and increasingly high population densities in urban and semi urban areas of developing countries.

Although macroeconomic analysis shows that sanitation generates economic benefit, but the benefit does not necessarily accrue to the person who invests in the improved sanitation. So the economics at the household level remains as constraint to success in sanitation, many people are simply unable or unwilling to invest, given all the other competing demands on their money.

Emerging Issues:

- The female members of the households expressed more interest in sanitation and healthcare and use of toilets. But their voice in the locality is relatively weak. It is also stated as an example of the barrier of gender inequality which is referred to in the Human Development Report, 2006(UNDP, 2006)
- Cultural explanation-Due to lack of interest in using toilet, people go for open defecation.
- Household level behaviour- Behavioural changes are noticed among the members of household in adopting good sanitation practices which ultimately reduces high incidence of diarrhoea among children.
- In some of the households, there is lack of awareness among the members on occurrence of diarrhoea and other diseases due to no washing of hands, inadequate facilities for disposal of human waste.

- Unsafe disposal of human excreta facilitating the transmission of diseases, including diarrhoea and intestinal worm infections such as hookworm and round worm.

- People having toilets are considered culturally better off in terms of marriage settlement and other religion practices.

- Poverty is not a big challenge to sanitation. The mind-set of the people and influence from other contribute substantially to prevent open defecation and adoption of good sanitation practices.

- Building toilets and getting people to use them is critical for public health. Sanitation intervention beyond building toilets should focus on engaging the social and economic factors that will lead to toilet adoption.

- Toilet adoption is influenced by providing the right kind of toilet design.

- Attitude towards use of toilet and toilet's connection to sewerage influence the household's decision to use the facility.

- Comfort – The toilet is to be situated nearby the house and must be protected from wind and rain.

- Cleanliness – If a toilet is dirty and foul smelling, no one will use it. Sharing the task of cleaning will ensure its proper use.

- Toilets are to be built at least 20 metres from all water sources such as rivers, well or spring to avoid water getting polluted due to toilet waste.

- Ground water pollution depends on the type of soil, the amount of rain or moisture in the area and the depth of the ground water. Appropriate decisions of toilets are to be made basing on soil condition of the area.

- Under ILCSS, the concrete platforms keep water out and reduce health problems because they are easy to clean.

Policy Recommendations:

- (i) The effectiveness of ILCS Scheme can be increased through right mix of incentives and awareness campaign, inclusion of all poor households in need of toilets, creating availability of water inside the toilet, construction of two pit pour flush toilets, provision of adequate number of community toilets, combining toilets and bathrooms together, constitution of ward-level sanitation committee and technical support for waste disposal. The incentives and awareness are to go side by side to make the programme more successful. There is a mismatch of incentives and awareness across the ULBs. Depending on the locality, the allotment per beneficiary need to be enhanced to minimum Rs.15,000 and to maximum Rs. 25,000/- to have a toilet of better quality.
- (ii) The Urban households often prioritize assets such as mobile, television etc. over availability of toilets. Campaign is to be designed for addressing all components such as institutional management, capacity building, financing, monitoring and rewards by the district level officials. District support unit, various Government Departments, Chief Executive Officer, District Coordinator dealing with the sanitation and environment are to supervise and coordinate campaign activities. Achieving the target of ILCSS toilet without creation of awareness among the less educated people may not reduce open defecation to the desired extent. Effective IEC (Information Education and Communication) intervention emerges as the most important requirement to make the wards Open Defecation Free (ODF).
- (iii) In addition to awareness campaign, behavioral change must be affected by creating appropriate social pressure primarily by the peer group. People taking initiative to construct toilet by them is the true indicator of real behavioral change.

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

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

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

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

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