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Ecological Sanitation in Low-Income Countries: Assessment of Social Acceptance and Scope of Scaling Up.



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Outline

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2. Methodology
3. Results and Major Findings
4. Concluding Remarks
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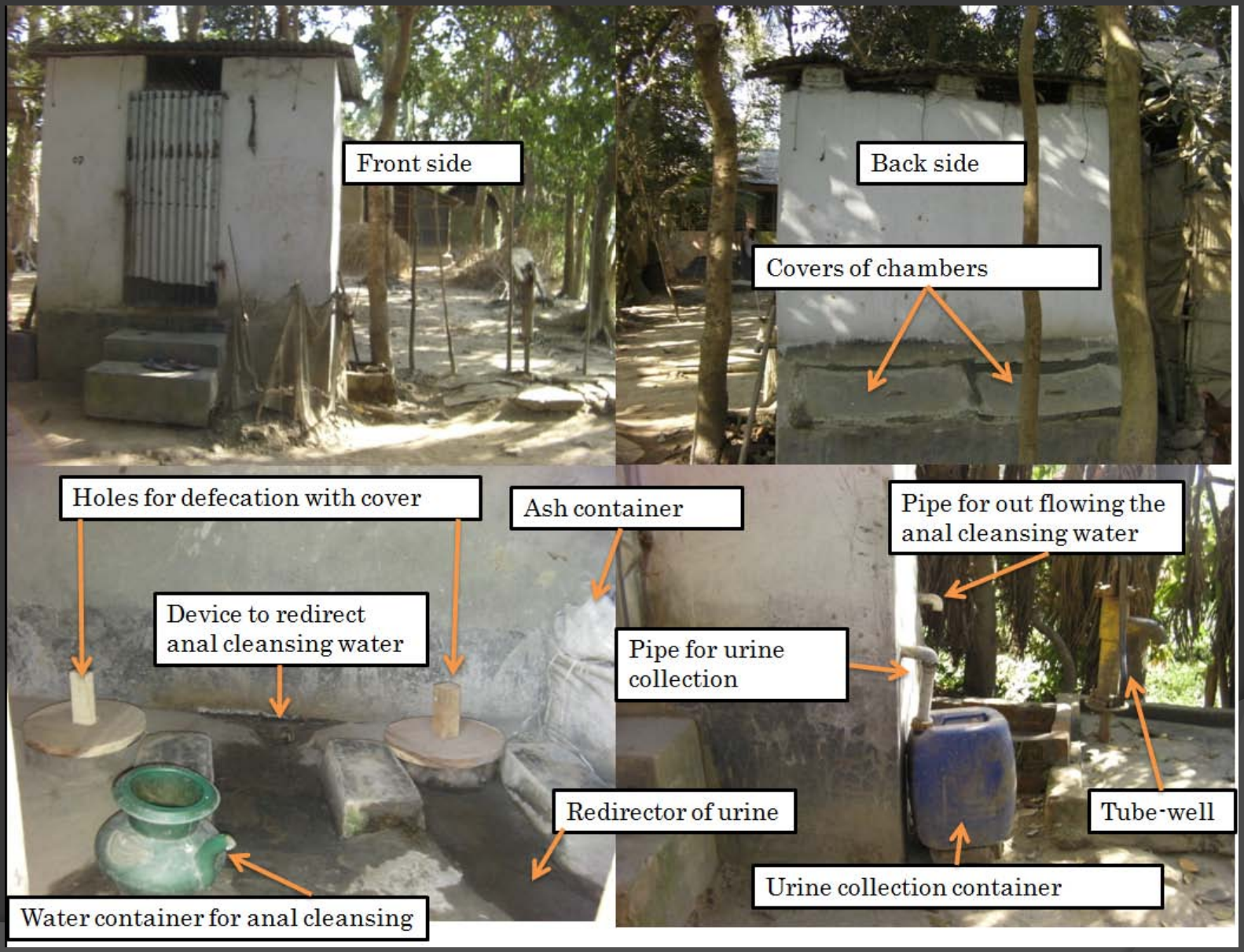
Introduction

- The principle behind a Urine Diversion Dehydration Toilet (UDDT) is to prevent human urine from mixing with the feces and storing them in two separate storage systems.

- Locally available materials such as ash/dry soil/ other liming materials is then sprinkled on the feces after defecation to help in dehydration.

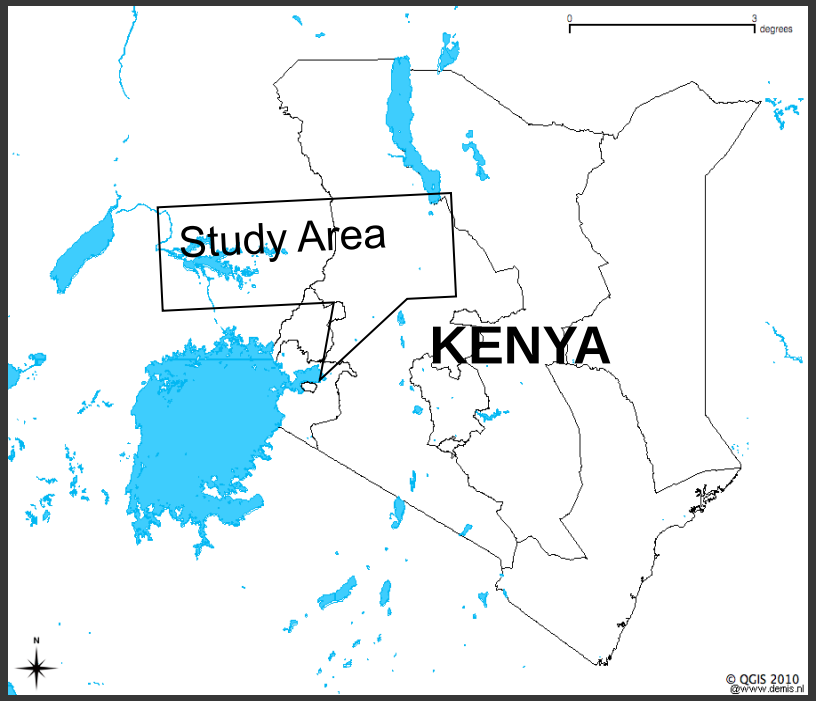
- Storage of feces for up to 6 months helps to destroy pathogens.

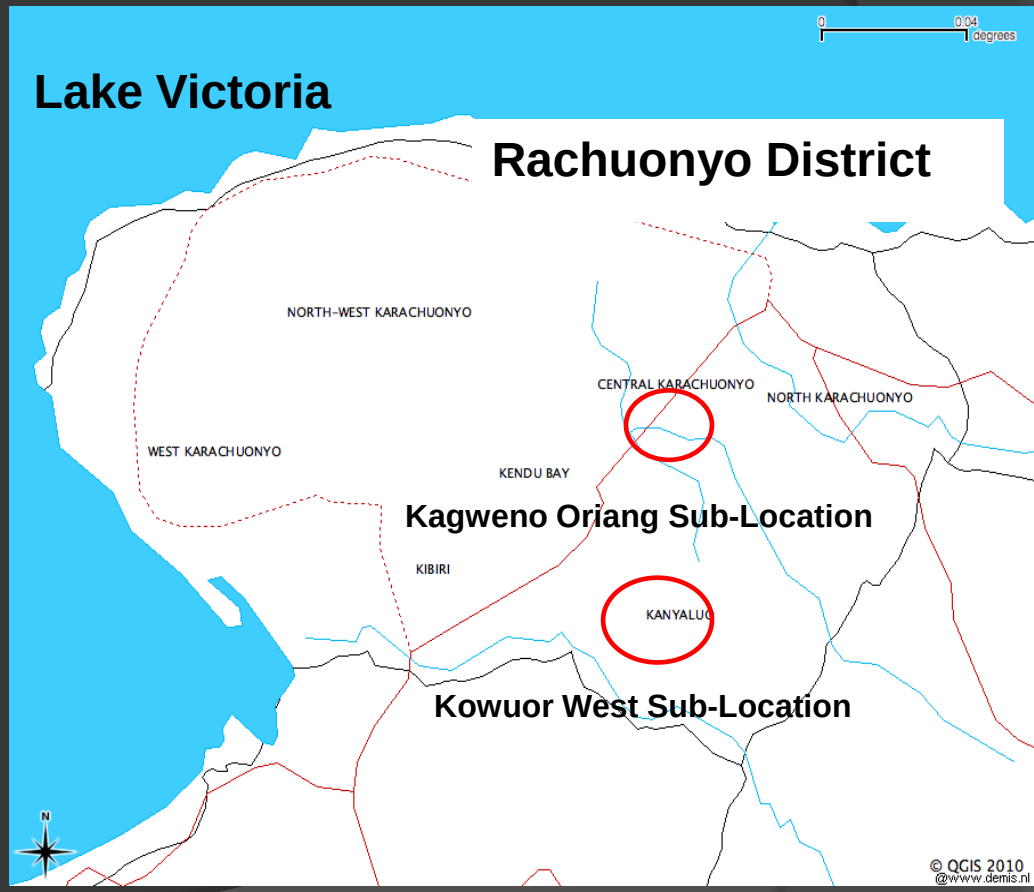
Overview of a UDDT



Methodology

Study Area





Data Collection

1. Primary Data Collection:

Reconnaissance surveys, structured questionnaire surveys, focus group discussions (FGD), key informant interviews and Mass gatherings

2. Secondary Data Collection

Literatures/Case studies, different organizations and local government office

Questionnaire survey and FGD

Interview

Focus group discussion

Meeting with women group

Result and Major Findings

Role of Women Groups

1. Three women groups were the pioneers of carrying out water, sanitation and other environmental improvement activities with the help of NGOs.

2. They conducted a survey from 2002-2009. Their results showed that

   - About 67% of the pit latrines had collapsed.
   - 50-75% of the children were affected by water borne diseases.

User's and non-users' views on the use of their current toilets

- About 50% of the respondents did not have toilets.
- They were interested in installing UDDTs.

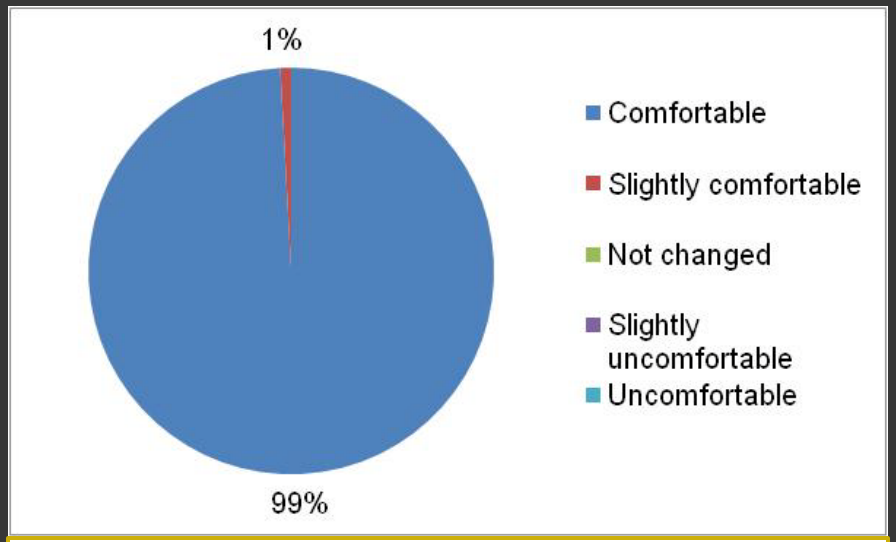


Figure: Feeling of users about the level of comfort of UDDTs compared with previous toilets.

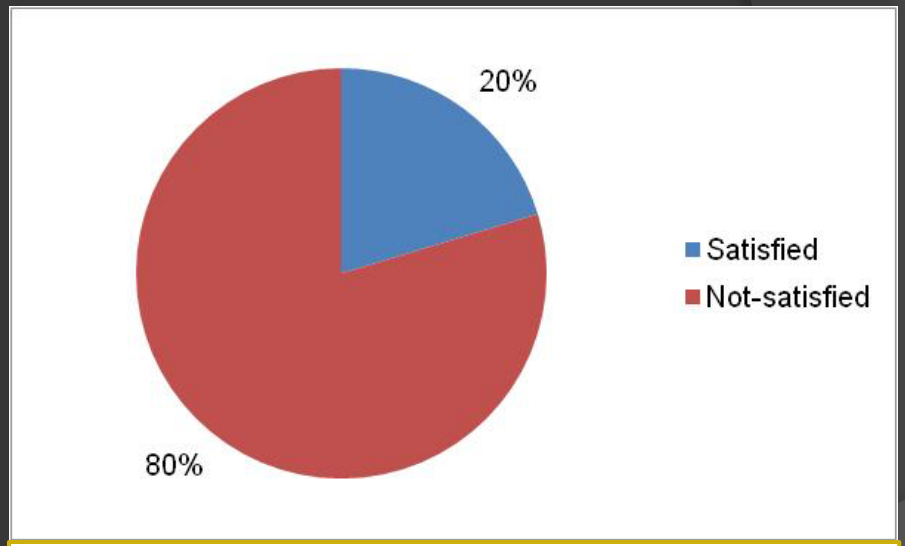


Figure: Satisfaction of non-users in using their current toilets.

Degree of Comfort of both users and non-users to handle urine and feces

- 81% respondents (UDDT users) felt comfortable.
- They had overcome the social barriers.
- Educated and trained by NGOs.

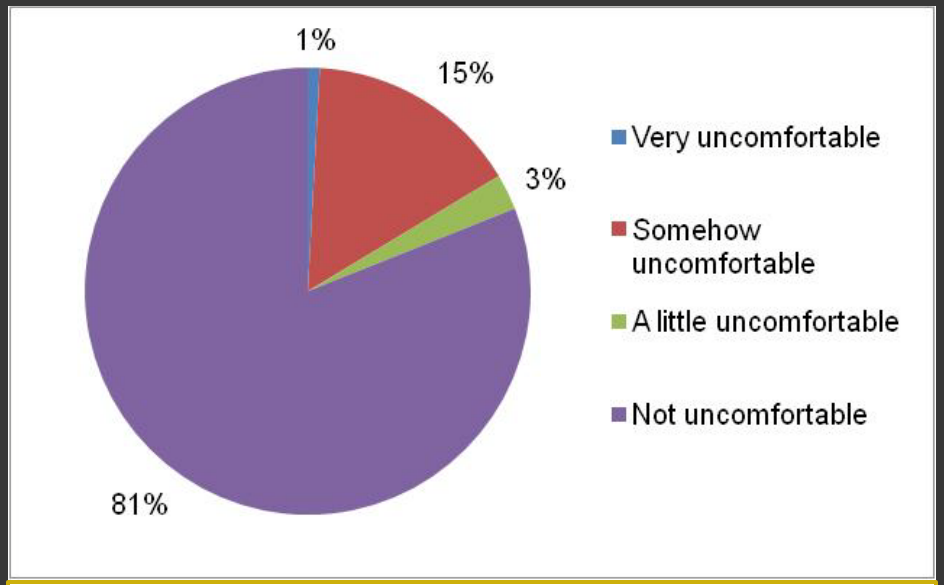


Figure: Rating of users' comfort levels to handling urine and feces.

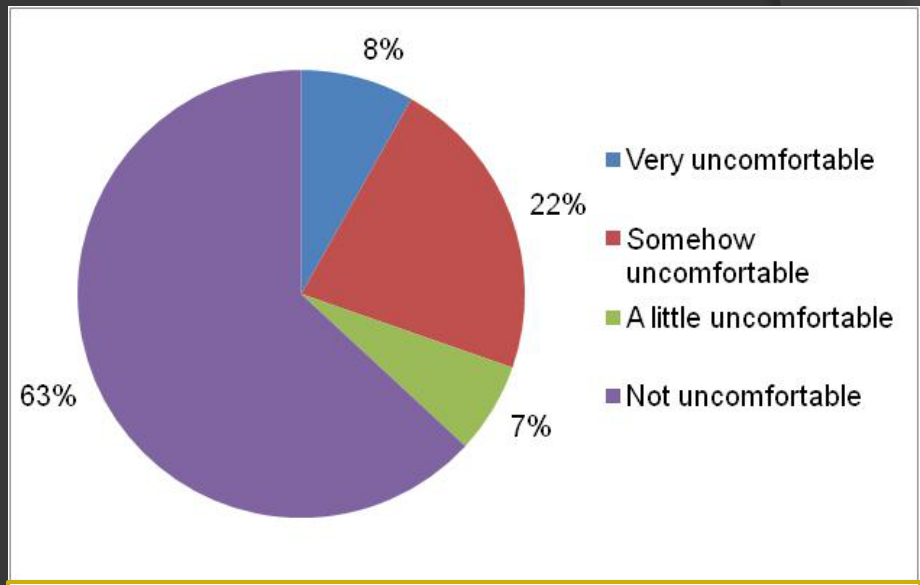


Figure: Rating of non-users' comfort levels to handling urine and feces.

Willingness of both users and non-users to buy products of UDDTs.

•Social status and societal perceptions were key consideration when buying UDDT products.

• Lack of knowledge on UDDT.

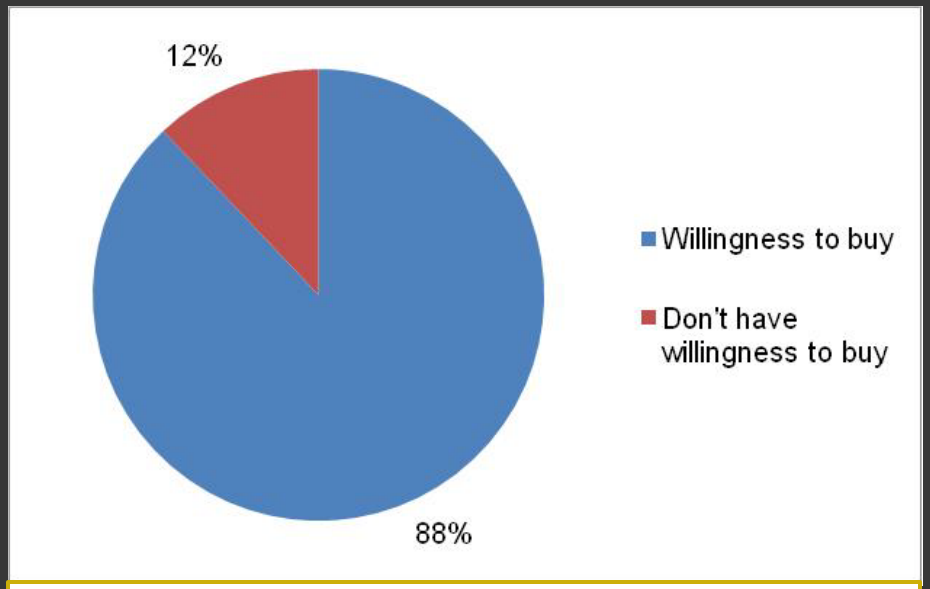


Figure: users' willingness to buy products of UDDT.

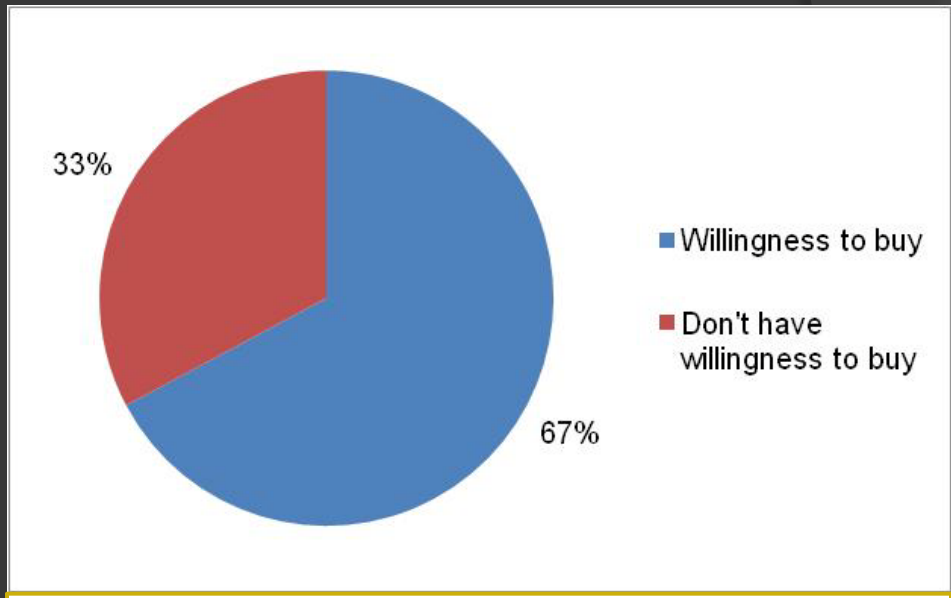


Figure: Non-users' willingness to buy products of UDDT.

Improvement of health and hygiene condition after installing UDDTs

• Almost all the users thought UDDTs help to improve the health and hygiene condition.

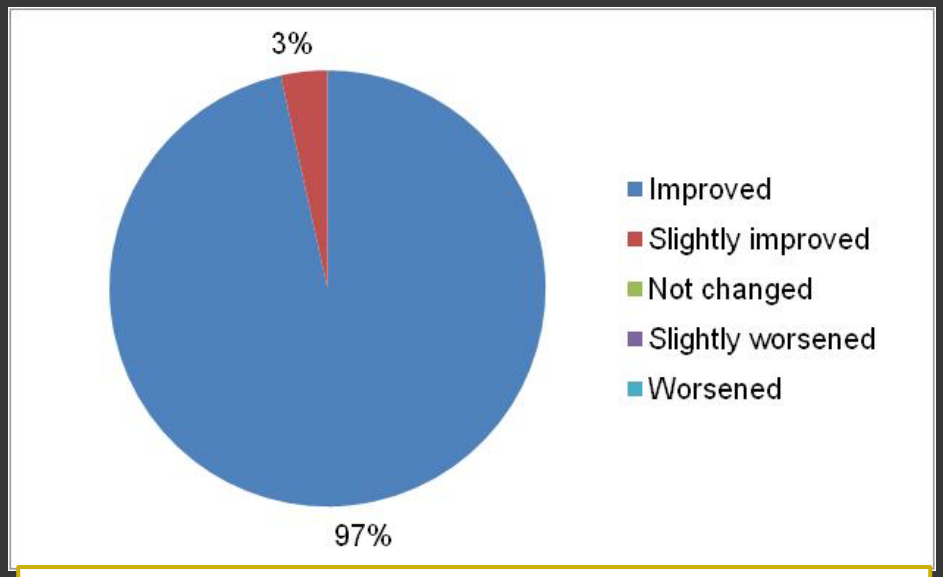


Figure: Improvement of health and hygiene condition after installing UDDTs. (Users' view)

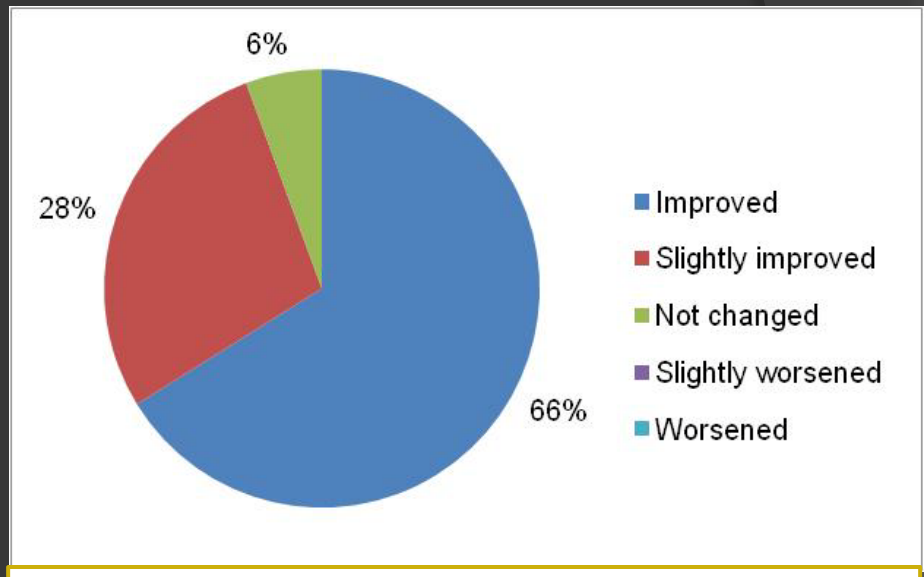


Figure: Improvement of health and hygiene condition after installing UDDTs. (Non-users' view)

Financial Issues

- High quality, but expensive UDDTs.
- Average construction cost of UDDT was $744.
- Contribution from beneficiaries was 30% ($223).
- Average income of UDDT users was $148/month
- Average income of non-users was $50/month.

➢ The recommendation from all respondents was for the construction costs to be reduced.

Concluding Remarks

Major driving forces for acceptance of UDDTs

1. Key role players: local Women Groups and NGOs
2. Focus of the pilot projects on livelihoods
3. Loose sandy soil structure in the study area which makes pit latrines short-lived
4. High frequency of occurrence of waterborne diseases
5. Lack of odor or infestation with flies on UDDTs
6. They need the options of organic fertilizers.

Recommendations

1. Need to assess proper drivers to replicate and accept UDDTs in the study area and beyond.
2. Majority of the people in the study area are poor. They need the cheaper and sustainable UDDTs that can be made by local materials.
3. Creating networks to share global experience and lessons.
4. Training for communities on proper maintenance and market creation for UDDT products.

Thank you for your kind attention