

ACHIEVING OPEN DEFECATION FREE GULARIYA MUNICIPALITY

**EXPERIENCES FROM A PROJECT OF PRACTICAL ACTION AND
ENPHO IN BARDIYA DISTRICT, NEPAL**

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EXECUTIVE SUMMARY

This project details the process and experiences from a two years' project, funded by the Department for International Development, UK, managed by Practical Action, and implemented in partnership with Environmental and Public Health Organisation (ENPHO) to create an open defecation free (ODF) environment in Gulariya Municipality in Bardiya District, Nepal. What is remarkable about the project is that it facilitated the achievement of ODF status across 11 wards, engaging over 50% of the population who were practicing open defecation, i.e. around 30,000 people, in just 6 months. During this period, the project team of around 13 people triggered over 387 people in 54 local institutions to work together with them to influence the local population. 5,385 toilets were built to a high standard. This achievement in such a short space of time is hugely exemplary, and shows what can be achieved with determined effort to achieve a goal.

This document sets out the steps and processes that were used to achieve the above, and reflects on the adaptations made to a standard Community Led Total Sanitation (CLTS) process, to make it applicable to an urban / peri-urban context. This report complements earlier work to document the same process in a very different urban context of Nakuru town in Kenya (Pasteur and Prabhakaran 2015). This work and its documentation underlines Practical Action's commitment to working on issues of water and sanitation for the urban poor, bringing together long-standing expertise in supporting urban poor communities, with innovative WASH approaches and partners. Practical Action remains committed to learning from our work, documenting our experiences and sharing them widely.

As of today, all the 14 wards of Gulariya Municipality are ODF with 60,379 people living in ODF environments. One out of the 6 targeted communities have achieved Total Sanitation. The entire investment for building toilets has been made by the community. The average investment made by each household is reported to be around NR 5000. The project was also able to trigger the Municipality to contribute budgets for sanitation activities and facilities. For example, the Municipality has invested in building a solid waste management plant with an investment of NPR 30-35,00,000. Additionally, they have allocated NPR 22,00,000 to procure suction tanks to collect faecal waste matter from homes to be deposited in the Faecal Sludge Management plant being built by Practical Action and ENPHO. They have also contributed towards building of public toilets (NPR 8,00,000) and in ODF celebrations. Earlier they had contributed NPR 1,00,00,000 towards building of a dumping site for solid waste.

A number of factors have contributed towards the project's achievement of its goals. These are an enabling policy environment, mass community mobilization through government and non-government structures, awareness and capacity building of decision makers and other relevant stakeholders along with strategies to involve a range of stakeholders at all levels in the campaign, effective use of appropriate tools & techniques to trigger behaviour change in the community and consistent and rigorous follow up to ensure the desired results. The national policy of no-subsidy not only provided a clear directive for uniformity but it was disseminated well to ensure that the policy was owned by all involved. From national to municipality to ward to Tole Lane Organization (TLO), all stakeholders were brought on board to achieve the national ODF target of 2017. National campaigns in the form of songs and advertisements involving highest decision makers and influential figures from the government, army, civilians etc were regularly shown on television and aired on the radio

which helped in making sanitation a national movement in Nepal. As a result, the community did not get conflicting messages from different stakeholders and this ensured that everyone's efforts were focused towards a common goal.

An effective partnership between Practical Action, ENPHO and the Municipality was crucial in achieving results. The fact that ENPHO is one of the pioneers in WASH in Nepal with a lot of experience and committed staff ensured that effective strategies were devised to achieve the objectives and that they were seen through till the very end. One of the key strategies was to ensure sustainability of the efforts even after the project was completed and for this the government was involved at every stage right from planning through to implementation. The project managed to achieve its target of ODF in all the 14 wards six months before time. This gives the team enough time to carry out post ODF activities such as Handwashing campaigns and ensuring achievement of Total Sanitation in the targeted communities.

The National Sanitation Policy that underlined no-subsidy was a key factor that enabled the project to achieve ODF. The policy guidelines were effectively disseminated through several channels and were adhered to strictly by all operating partners. This helped in aligning all the activities and strategies towards a common direction and for synchronization of efforts.

The project team did not stick to one approach of community engagement only and implemented a combination of approaches, keeping in mind the specificity of the communities involved and the history of engagement with them in the past. One, was the implementation of CLTS tools and techniques as a strategy to trigger behaviour change. Due to the variations in rural and urban contexts, the application of CLTS also needs to be adapted to suit the specificity of different urban settings. It was found in this project that CLTS tools have been used to mobilise and trigger behaviour change in some communities, but it has not been applied as a uniform approach across all communities. Additionally, different strategies were used to cater to specific community contexts.

Therefore, the key factors for success can be summarised into the following areas:

- **Enabling environment:** The political and policy environment has been hugely empowering to communities and institutions. The involvement of political leaders from national to local levels generated a nation-wide ODF movement which enhanced the momentum and the urgency to produce outcomes.
- **Clear national policy:** A zero subsidy policy approach at the national level has empowered institutions to adopt community approaches to achieve sanitation outcomes. A clear policy guideline facilitated the implementation of a uniform approach by all concerned.
- **Institutional collaboration:** A successful working partnership among NGOs, the Municipality and local institutions resulted in success. Universal messages were regularly repeated by diverse local actors at the community level.
- **Immediate, regular and sustained post triggering follow up:** This enabled reinforcement of messages in a variety of ways (street dramas, clean-up campaigns, sanitation exhibition in local fairs, mass rallies involving children and the community, FM radio jingle broadcasting on sanitation, print media campaigns, musical campaigns (sanitation song), poster campaigns, sign boards, door to door visits, hand washing campaigns, whistle campaigns)

- **Timelines and target:** Sense of urgency and pride to achieve the ODF target date set by the district mobilised all actors to work together towards a common objective.
- **Technology and financial options:** Availability and affordability of hardware, as well as some financial support mechanisms to help poorer households (such as loans from TLOs, payment in instalments from hardware suppliers)

At each stage of the project, gender and social inclusion were themes that were built into the project objectives. Marginalised and vulnerable communities were identified and were engaged in a participatory planning process, focusing on their overall development, not limited to achievement of sanitation outcomes. Specific strategies were devised to include women, children and the marginalised groups in the project implementation by building their capacity and enabling them to access low-cost toilets through different technology options and credit facilities.

However, after having achieved ODF status, there are immediate challenges facing ODF Gulariya Municipality, which need to be addressed for sustaining the achieved sanitation outcomes and for attaining long term benefits in terms of health. One of the key challenges is the absence of a fool-proof Faecal Sludge Management (FSM) system for emptying of the pits. In the communities which had been ODF for some time, toilets were starting to fill up after 2-3 years of usage. The options of informal pit-emptiers and mechanised suction technology are being used variedly by the different households, depending upon the costs and availability of services. However, once the recently built pits fill up, these services will be unable to cover all the households. The FSM plant being established by the Municipality along with the project actors, has been delayed for long, thus prolonging the availability of a long term solution. It was also reported that in the rush to achieve the ODF target and with the pressure felt by the community, many poor households had built their toilets with a minimum number of rings and some of these had already filled up, forcing few households to return to open defecation. These issues need to be addressed urgently by the project and the Municipality. The second challenge that we foresee is the continuation of faecal-oral contamination in the event that hand-washing is not stressed upon as part of the sanitation and hygiene behaviour change outcomes. Currently, handwashing is not included as a criterion for ODF in the national guidelines, leaving it as a further step towards achieving 'Total Sanitation' status.

Having said that, this is a very interesting case of a small but fast growing municipality that is in transition from a rural to an urban context. The benefits of changing behaviours and establishing systems for FSM at this early stage in urban development are huge. It also re-establishes the fact that achieving ODF is not enough. It has to be followed by post ODF activities to sustain sanitation and hygiene behaviour change. As there is further migration into the area, the expectations will already be in place for acceptable sanitation behaviour which will help in establishing a new set of social norms, followed by all in the community. There are thousands of small towns and municipalities like this across Nepal and across the world with similar characteristics such as migration, growing population, etc. that could learn from this approach to addressing the problem early. Another point of relevance is its geographical location, placing it close to the border with India and the frequent travelling of people back and forth leading to wider influence beyond national boundaries. Given the grindingly slow progress towards ODF in India, perhaps this success will have some influence on local governments in nearby municipalities which might adopt the strategies

used in Nepal. Advantage can be taken by sanitation agencies to use the strategies employed in Gulariya Municipality to replicate similar models across the border.

ABBREVIATIONS

CBO	Community Based Organisation
CLTS	Community Led Total Sanitation
CAP	Community Action Plan
D-WASH-CC	District WASH Coordination Committee
DPHO	District Public Health Officer
DWSSO	District Water Supply and Sanitation Officer
ENPHO	Environment and Public Health Organisation
FCHV	Female Community Health Volunteer
FSM	Faecal Sludge Management
GSF	Global Sanitation Fund
HCES	Household Centred Environmental Sanitation
MoUD	Ministry of Urban Development
M-WASH-CC	Municipal WASH Coordination Committee
NSHCC	National Sanitation and Hygiene Coordination Committee
NGO	Non-Governmental Organisation
NPR	Nepalese Rupees
OD	Open Defecation
ODF	Open Defecation Free
PMC	Project Management Committee
PPP	Public Private Partnership
TLO	Tole Lane Organisation
VDC	Village Development Committee
WASH	Water, Sanitation and Hygiene
WATSAN	Water and Sanitation
W-WASH-CC	Ward WASH Coordination Committee

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1 INTRODUCTION

This report is based on a short but intensive field study made by 3 members of the CLTS Foundation in February 2016. The purpose of the report is to share lessons, experiences and challenges relating to the achievement of ODF communities in Gulariya Municipality, Nepal for the benefit of local, national and international stakeholders working in the WASH sector. The aim is to highlight experiences that can be replicated and challenges that can be addressed in future scaling up of community led total sanitation efforts in other municipalities in Nepal and other countries. The study was not an evaluation of the project: this exercise will be carried out towards the end of the project (July 2016).

1.1 PROJECT BACKGROUND

Gulariya is one of the five municipalities and headquarters of **Bardiya district** in the south western part of Nepal, in the southern part of the Terai region (Figure 1). Gulariya Municipality is divided into 14 wards (Figure 2), with a total population of 60,379 equating to around 10,922 households. The project called “SAFA& SWASTHA Gulariya”, a 2 years’ sanitation initiative to achieve an open defecation free (ODF) Gulariya Municipality by 2015, is funded by DFID under UK Aid match funding and is led by Practical Action in partnership with Environment and Public Health Organisation (ENPHO), a national NGO and the Gulariya Municipality. It is a two-year project, running from August 2014 to July 2016. The overall objective of the project is to improve the lives of residents of Gulariya as they gain access to improvements to their sanitation environment. The project achieved its target of an ODF Municipality in May 2015, just 10 months into the project. This report documents the processes followed, the success and challenges of the project towards achieving an ODF Gulariya.

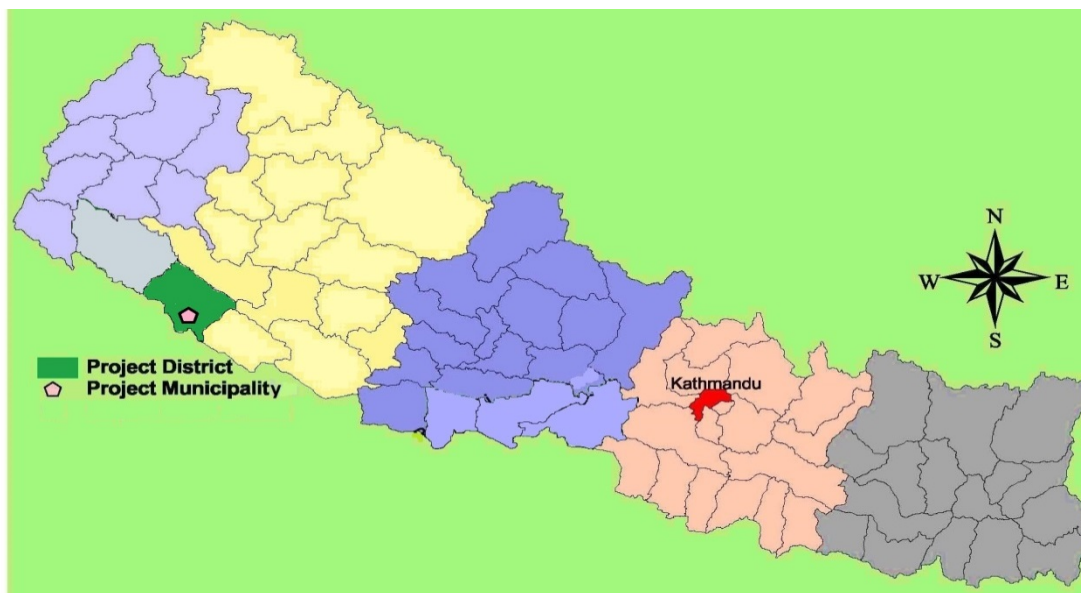


Figure 1: Map of Nepal identifying the project location

capacity of stakeholders to promote sanitation with support from the Global Sanitation Fund. One more ward was declared ODF during this period. The current two years' project which started in August 2014 initiated a new phase of activity and focused energy into the efforts already invested by the various partners in the Municipality over a period of time. The objective was to declare the remaining eleven wards ODF within these two years and thus produce another ODF municipality/district in Nepal. Currently 30 out of 75 districts in Nepal are ODF.

The project aimed to achieve the following outputs:

- 1. Increased coverage of sanitation facilities such that the entire municipality is ODF*
- 2. Enhanced capacity of local stakeholders*
- 3. Piloting of innovative solutions in sanitation to improve disaster resilient sanitation facilities and faecal sludge management*
- 4. Promoting inclusive and good governance through a participatory planning approach*

Additionally, the aim was to take the six communities that had earlier achieved ODF towards achieving more than basic sanitation, to include further aspects of household and environmental hygiene and sanitation, termed Total Sanitation in the National Strategy. This brings them more closely in line with new commitments under the Sustainable Development Goals (goal 6 on WASH and 11 on sustainable human settlements). In the earlier phase of the project, Water and Sanitation User Committees had been formed which were used as the basis for mobilization in these communities. The project had also developed entrepreneurs during the first project to produce bio-sand filters to purify water for safe drinking purposes. These entrepreneurs expanded their activity to produce concrete rings and slabs for lining and capping pits, *juthelno* (dish washing platform) and hand pump platform thereby making a market available to respond to the demand that was generated during the current phase of the project.

1.2 PARTNER ORGANISATIONS

Practical Action is an international organisation with decades of experience in supporting poor urban communities and enhancing access to water and sanitation through new technological innovations and partnerships with local governments, using community-led approaches. ENPHO is the largest WASH NGO in Nepal with a national staff strength of around 200 members. This project had a dedicated team from both Practical Action and ENPHO based in Gulariya comprising of project coordinator, field coordinator, finance officer, technical officer and eleven social mobilisers. Key to the success of this project was the long standing experience of the project team and their commitment to community-led approaches in achieving sanitation and hygiene outcomes

Though UN Habitat was not a direct partner in the implementation of this two years' project, its previous work in the Municipality and its role in promoting ODF in the other four Municipalities of the district played a key role in driving efforts towards an ODF Gulariya. Additionally, UN-Habitat continued to support the current project by strengthening the human

resource capacity of the project (Out of the eleven social mobilisers, five were provided by the Municipality and supported by UN-Habitat; the remaining six were ENPHO staff supported by Practical Action).

Gulariya Municipality played a lead role in the planning as well as implementation of the project along with ENPHO and Practical Action. The direct involvement of institutional champions committed to working with partners and trying out innovative approaches in making Gulariya ODF was crucial towards achieving the project target before the scheduled timeline. Around 6 months into the project the district made a commitment to the national government to declare itself ODF by June 2015, which meant that each Municipality had to declare itself ODF by May 2015. Other municipalities achieved this goal sooner so the pressure was on Gulariya to achieve ODF by May 2015.

The success of the project reflects a winning partnership between the different organisations involved in championing sanitation in Gulariya Municipality and in the district. The implementing partners were able to capitalize on the close working relationship they had established with the Municipality and initiatives that had been taken during the first phase of the partnership. Many of the officials at the Municipality continued to be engaged during the current phase as well which gave the project a sense of continuity in terms of leadership and knowledge. There was also a common understanding among the partners about the challenges they had encountered during the earlier phase and this enabled them to devise strategies to take the current project forward.

1.3 URBAN CONTEXT

Gulariya is a Municipality in Bardiya district in Bheri Zone of mid-western region of Nepal. It is located in the southern plains of the Terai region, sharing borders with Baharaich district, in the state of Uttar Pradesh in India. The Municipality is categorized as partly urban and partly peri-urban due to its geographical context and design. The population is considered to be around 15% urban. More than 80% of the area is peri-urban as it represents an interface between rural and urban zones, activities and services. The landscape houses individually fenced homesteads with attached land for vegetable cultivation and animal rearing which provide life and livelihood support for the residents. Additionally, the communities are provided with facilities and services such as electricity, water supply, telecom, roads, schools, university etc. which often form part of urbanization. With further population growth and modifications to the landscape due to human activities, the area will become more urban.

The characteristics of this location make it an interesting example of Community-led Total Sanitation (CLTS) in a small town or peri-urban context. Some of the key challenges of a large town or city have been documented in the case study of Nakuru, Kenya (Pasteur and Prabhakaran, 2015), characterized by: extremely high population density, reliance on landlords to provide sanitation hardware, existence of toilets but limited space for another pit once one is full, and a weak system for pit emptying. Gulariya has a much lower population density, but some of the characteristics are beginning to become apparent, i.e. some migrants to the area are living in rental accommodation, space is limited for digging additional pits, systems for pit emptying are weak, etc. Whilst the two contexts do not immediately seem comparable at the moment, over time the urban challenges in Gulariya will become more obvious.

1.4 SANITATION POLICY CONTEXT IN NEPAL

The Constitution of Nepal (2015) has included people's right to safe water and sanitation as the fundamental right under the health right. In 2005, the Government of Nepal set out a target in its National Water Plan to achieve universal coverage of water supply and sanitation by 2017. The government also developed a Sanitation and Hygiene Master Plan, launched in 2011, to create an enabling environment for the achievement of the national sanitation goal through collaborative efforts of the government, local government bodies, UN Agencies, bi-lateral agencies, I/NGOs, schools, private institutions, media and civil society organizations. It also aimed to set national and district level milestones in terms of toilet coverage; to strengthen the resource pooling and cost-sharing arrangements at action level; to help ensure equity, inclusion and sustainability through participatory planning processes; and develop a mechanism for ensuring access of poor, disadvantaged, and other socially excluded groups to toilets and other hygiene behaviour (Steering Committee for National Sanitation Action, 2011).

Community Led Total Sanitation (CLTS) and School Led Total Sanitation (SLTS) were introduced in Nepal from around 2005 to increase ODF communities, school catchment areas or Village Development Committees (VDCs). However, these are not the only approaches proposed in the National Master Plan (2011), which also mentions Basic Sanitation Package (BSP), School Sanitation and Hygiene Education (SSHE) and Integrated WATSAN as potential options. Of critical importance to the success of community led sanitation, is the stipulation of a no-subsidy approach in line with the wider national policy in the Master Plan.

Community Led Total Sanitation (CLTS) is an innovative methodology for mobilising communities to completely eliminate open defecation (OD). Through a series of participatory exercises, communities are facilitated to conduct their own appraisal and visual analysis of OD and take collective action to become Open Defecation Free (ODF). For further details of this methodology please refer to Kar with Chambers (2008)

The National Master Plan has recommended permanent toilet structures at least up to the plinth level (pour flush toilets or dry ecological toilets). The Plan aims to unify stakeholders' efforts and harmonize working procedures through promoting the guiding principles set out in Box 1. Though, whilst government and WASH sector stakeholders consider ODF as the bottom line in all sanitation interventions, universal toilet ownership (rather than ODF community) is the key indicator for measuring this outcome.

BOX 1: GUIDING PRINCIPLES OF THE SANITATION AND HYGIENE MASTER PLAN

- ODF should be the bottom line of all sanitation interventions.
- Ensure universal access to sanitation in the water supply and sanitation project areas.
- Communities should have informed technological choices for household toilets.
- Local bodies should lead all sanitation sector activities.
- VDC and Municipality should be the minimum basic unit of all sanitation program interventions.
- Locally managed financial support mechanisms should be promoted.
- Mandatory provisions of sanitation facilities in all institutions.
- Mandatory provision of toilets in new built up buildings.
- Focus should be laid on hand washing with soap and hygiene behaviour promotion.

Another notable feature of the government sanitation strategy is that it distinguishes between ODF (elimination of open defecation) and Total Sanitation (sustained ODF, hand washing with soap and water, food hygiene, waste management, institutional adoption of the above etc.). ODF is to be achieved as a first phase, and Total Sanitation following with further campaigns once ODF is achieved.

1.5 INSTITUTIONAL STRUCTURES FOR LOCAL GOVERNMENT AND WASH

As a wide range of different governmental and non-governmental institutions are involved in all of these processes, the following sections outlines the relevant players and portrays their relationship to one another in a useful diagram.



Figure 1: Formal institutional structures set up by the government.

- Tole Lane Organisations (TLOs):** The lowest administrative unit are the embedded in the community with a clear structure and mandate. Members from each Tole elect three office bearers i.e. President, Secretary and Treasurer who are the link with their respective Ward and Municipality officers. One member from each household are part of the General Committee of the TLO. The office bearers are responsible for holding regular meetings in their respective toles involving all the households and for rolling out any programmes or schemes introduced by the Municipality. The average number of households in each tole is 50 and there are a total of 243 TLOs in Gulariya Municipality.
- Ward:** A number of toles are included under the next administrative unit which is the Ward. There are a total of 14 wards in Gulariya Municipality and the average number of TLOs under each ward are around 10-30. Each ward is headed by a Ward Chairperson. Each Ward has a Ward WASH Coordination Committee (W-WASH-CC).
- Municipality:** Gulariya is one of the five municipalities in Bardiya district. The Mayor will be the elected head of each Municipality. However currently in Nepal, the municipality is led by a CEO who is a government officer. The municipality has a Municipal WASH Coordination Committee (M-WASH-CC)
- District:** The district unit is led by a District Development Committee headed by an elected District President or Zilla Sabhapati. The district has a District WASH Coordination Committee (D-WASH-CC)

W-WASH-CCs have around 25 members each made up of representatives from the toles within the ward, representatives of public services, schools, community health volunteers, WATSAN volunteers, self-help groups, etc. The committee holds monthly meetings. 33% are women as per national guidelines for female representation. Some of the issues discussed at the W-WASH-CC meetings include construction and usage of toilets, monitoring, total sanitation indicators etc. There are 14 W-WASH-CCs in Gulariya Municipality, one for each ward

M-WASH-CCs have around 20 members, made up of W-WASH-CC members, who are either the chairpersons or members from each W-WASH-CC and ENPHO team members.

D-WASH-CCs have around 35-40 members with representatives from all the 5 Municipalities, district level stakeholders such as District Water Supply and Sanitation Officer (DWSSO), District Public Health Officer (DPHO) and members of District Development Committee (DDC). A senior ENPHO member is also represented in the committee meetings.

Informal / non-governmental structures

- **Female Community Health Volunteers (FCHVs)** work under the District Public Health Office and are involved in health and sanitation promotional activities in the community.
- **Self-help groups** (or Mother's Groups) are embedded within the community and who provide the link for follow up and advocacy for various issues.
- **WATSAN volunteers** work under the Municipality on water and sanitation activities.
- **Ward Citizens Forum and Citizen Awareness Centres** are two informal structures created under the Local Governance Community Development Programme (LGCDP). Both were created towards empowering citizens and communities for active engagement in local governance and development processes.
- **Badaghars** are social leaders (in Tharu communities).
- **Child Clubs** formed in schools as a result of, as well as to take forward social mobilisation with the community.

2 PROJECT APPROACH AND APPLICATION OF CLTS

The project had a short time frame of just two years during which to achieve its objectives. In addition, the start of the project was hampered by delays in recruitment and national holidays with the result that relationship building with other stakeholders did not start until October 2014 and wider orientation and institutional triggering activities did not start until November 2014. As triggering in communities did not start until January 2015, the achievement of municipality-wide ODF by May 2015 is quite remarkable. The following table provides an overview of the key activities in the project approach and their timeframes.

TABLE 1: OUTLINE OF THE PROJECT TIME FRAME

August 2014	Project start up
October 2014	Recruitment of project staff
November 2014	Relationship building in municipality and establishment of Project Management Committee
December 2014 onward	Orientation and institutional triggering of M WASH, W WASH and other stakeholders
December 2014 onward	Training of M WASH, W WASH and other stakeholders
January – March 2015	Orientation and triggering in TLOs
February – May 2015	Post triggering follow up in TLOS
January – May 2015	ODF verification and certification of TLOs
May 2015	ODF Gulariya achieved
November 2014 onward	Ongoing support to Community Action Planning in 10 communities
June 2015	Ongoing support to Total Sanitation in 6 communities
December 2016 onward	Design and construction of FSM plant
February 2016	First community celebrated Total Sanitation status.
July 2016	Project ends

The key activities of the project are described in the following sections. These follow the pattern of stages of a CLTS approach from institutional and other pre-triggering activities, to post-ODF activities.

2.1 INSTITUTIONAL TRIGGERING

Institutional triggering is increasingly being recognised as a hugely important element of the Community Led Total Sanitation approach. Without institutional buy in and commitment, efforts in support of ODF communities can be short lived. Institutional triggering is a mechanism to bring about a positive change in attitude amongst institutional actors, enthusing and inspiring them to commit their efforts and political will to support CLTS. It

involves evoking strong sense of responsibility for the death, suffering, harassment and financial losses experienced by the population, mainly women and children, as a result of controllable diseases such as cholera (CLTS Foundation, forthcoming).

Whilst the project did not term their actions as 'institutional triggering', ensuring institutional buy-in was clearly placed at the forefront in the project process. This was achieved in two key ways:

- 1) Establishment of a Project Management Committee to oversee the project process and build ownership for the activities during implementation, involving key external stakeholders, for example from the Municipality.
- 2) Working through the existing WASH Coordination Committees at District, Municipal and Ward levels, as well as a whole range of other local institutions to ensure internalisation of activities within local governance structures, aiming for continuation of commitment and action beyond the life span of the project.

2.1.1 PROJECT MANAGEMENT COMMITTEE

A Project Management Committee (PMC) has been established for the duration of the project. This consists of the CEO of the municipality (chair of PMC), the ENPHO project coordinator (secretary of PMC) along with representatives of schools, the media, two W-WASH-CC members, one M-WASH-CC member and three further members of Gulariya municipal government. The aim of this group is to oversee and guide project implementation and to enhance ownership of all the initiatives in order to improve long term sustainability and continuity of activities.

Establishing the PMC structure was a crucial step both as a project implementation strategy as well as post project sustainability measure. Every activity implemented at the field level was endorsed by the PMC thereby ensuring their complete involvement in the activity. This led to the Municipality taking ownership for funding many of the project activities. The Municipality contributed 50% of the funds for ODF celebrations and the project put in the remaining. Similarly, the Municipality also contributed substantial funds (NPR 8,00,000) towards the construction of one public toilet initiated by the project in the market area. Additionally, the project was able to get the full support of W-WASH and M-WASH CC members and other government institutions – both formal and informal - because of clear directives from the Municipality.

2.1.2 WASH COMMITTEES AND OTHER INSTITUTIONAL STAKEHOLDERS

Alongside the Project Management Committee, the project worked through the already existing WASH Coordination Committee structures, TLOs and the range of informal and non-governmental organisations outlined in section 2.1. WASH-CCs existed before this project but they were not active and had not been for at least a year. The project has contributed towards bringing different stakeholders together in the committee and motivating them to become more active, meet more regularly and move the municipality towards achieving the district ODF target. A key strategy of the project team was to identify key actors within these structures and build their capacity in order to influence actions within the structures or committees. It has been found that many such champions were successful in re-energising

and giving a concrete direction to the committee's efforts. The project worked collaboratively with the D-WASH-CC but was not involved in any capacity building at that level.

A total of 86 FCHVs, 14 WATSAN volunteers, and other selected W-WASH and M-WASH members were trained by the project (total 145). The project followed a sequenced plan to build the capacities of institutional actors.

The first step was to hold a one-day Inception Workshop for key political, administrative and civil society stakeholders to secure their buy-in during the process of initiating the project. They involved actors such as political leaders, Department of Public Health Officer (DPHO), Department of Water Supply and Sanitation Officer (DWSSO), Education Officers, members of the Chamber of Commerce, Zila WASH stakeholders, the Local Development Officer, Chairpersons and members from each W-WASH-CC, NGOs, CBOs etc. The stakeholders were explained about the project overview and objectives. Additionally, through films on faecal oral transmission, they were given an orientation about WASH issues. Discussions were initiated on the national and district sanitation plan and status, followed by a discussion on community led approaches and tools to achieve improved sanitation. The facilitation was done by ENPHO staff involving a few district officers who were roped in as resource persons. For e.g. the DWSSO spoke about safe drinking water and the DPHO drew links between sanitation and health for the rest of the participants. At the end of this workshop, each Ward Chairperson made a plan for their respective wards including dates for visiting all TLOs and a list of all the activities to be conducted at the TLO. It was decided that a group of W-WASH-CC members would go to each TLO triggering along with the project staff.

The second step was to hold a one-day orientation for the FCHVs and WATSAN volunteers following the above agenda. The third step was to hold orientations at each ward level, involving representatives from the respective TLOs under each ward. The Ward Citizen Forum members were also involved during this orientation. Discussions revolved around the issues of sanitation in their particular wards and how they could contribute towards achieving the objectives of making their ward ODF.

Once the knowledge and capacity of the TLOs and Wards were built and buy-in was secured from the district stakeholders, the fourth step was to hold a detailed 2 days' orientation workshop for all the key sanitation and other department officers of Gulariya Municipality along with the W-WASH-CC members. The orientation started with an overview of the national policy and progress towards sanitation across the country, moving into detailed information about sanitation issues. This included a simple animation video about faecal oral transmission (also used in community triggering), and a video about the national policy framework. Importantly, some CLTS tools, such as 'shit calculation' were used in the orientation session to challenge people in the same way as done in the community triggering processes. Some participants became angry when they calculated the real extent of the problem, and this successfully triggered them towards taking action. Discussions about the national policy framework and action plan also helped to get W-WASH-CC and others on board, as they came to realise their own responsibility in the implementation of that policy. They began to view their role within the context of a national strategy, rather than in the context of 'just another project'.



Photo: Orientation Workshop

2.1.3 CASE STUDY: SURENDRA KUMAR YADAV. TLO MEMBER, W WASH CC CHAIR, WARD NO 2.

This W-WASH-CC has been particularly active in triggering and post triggering follow up in order to make their ward ODF. The Committee has 35 members in total with around 11 members being the most active. Mr Yadav, a farmer by profession, recalled that the greatest contribution of the committee members was in terms of time and everybody contributed in whatever way they could. He said that though the committee had existed before, it was the active involvement of the project team and the Municipality with a clear target and action plan that motivated the Committee members to get engaged again. The ward was declared ODF in April 2015.

Mr Yadav said that the role of the W-WASH-CC included organising meetings in the toles and mobilising households to attend the same; organising triggering exercises in the community and doing consistent post triggering follow up. The strategies that worked most effectively with the community were the street drama, films and house visits. He said that the success of achieving ODF in the ward could be attributed to rigorous follow up after the triggering. The ward committee members along with M-WASH-CC members and the project team made it a point to go door to door following up on the TLO plans made by the community and offering any assistance to families that faced problems in building a toilet within the committed timeline. Another activity that was diligently followed by them were the monitoring visits. "We would go for monitoring visits at 4 a.m." Those found to be violating the norms of stopping open defecation in the community were fined NPR 500/- which was collected by the committee and would be used for sanitation related activities in the future.

Mr Yadav stated that monitoring was self-motivated and everyone took it upon themselves to ensure that their villages remained ODF. The ward members were strategic in their planning and used women's groups especially girl students to monitor women who were violating the norms. What is remarkable is that the community's understanding of ODF was very clear;

that it was not about the presence of individual toilets but to ensure that nobody in the entire village defecated in the open. Mr Yadav cited the story of a wedding procession that had come from across from the Indian border of Bahraich district in the state of Uttar Pradesh. Used to not having a toilet at home, some members of the Indian family defecated in the open. “A group of committee members went and confronted them asking them if they had not seen the board that the village was ODF and nobody was supposed to defecate in the open. We told them that this applied to everyone, even the guests. Later we fined the owner of the house as we could not fine the guests but the rules were strictly enforced.”

2.2 PRE TRIGGERING IN COMMUNITIES

Pre-triggering in communities followed swiftly on from the orientation and training of W-WASH-CCs and other institutional actors. During the W-WASH-CC orientation, plans were drawn up for the process of entering each of 186 Toles within the 11 wards that were not yet ODF.

Pre triggering activities involved meeting with key actors within the Tole, including TLO committee members, Badaghar (Social leaders in Tharu communities), religious leaders, etc. The meeting was facilitated by one to two members of the W-WASH-CC, a member of the M-WASH-CC, FCHVs and WATSAN volunteers. It consisted of an orientation to the key stakeholders and arrangement for a triggering meeting with the whole community.

2.3 TRIGGERING IN COMMUNITIES

A number of different strategies were employed for triggering in communities depending on the nature of the intended intervention and the extent of open defecation in the communities. Regarding the nature of the intended intervention, in most communities the aim was to achieve ODF. Additionally, 10 marginalised communities (covering around 15 toles) were selected to facilitate a participatory planning process to achieve wider development goals. The different intervention styles can be summarised in the following table:

No of Toles	Status	Approach
57 toles	Already ODF	No triggering
15 toles (10 communities)	Marginalised	CLTS type triggering alongside participatory planning process
85 toles (around 30 communities)	Low levels of toilet coverage	Greater focus on CLTS type triggering tools plus Household Centred Environmental Sanitation (HCES) approach
86 toles (around 30 communities)	High levels of toilet coverage	Mainly household centred environmental sanitation. Less use of CLTS type triggering tools. Use of street theatre and video where necessary.

2.3.1 DISCUSSION AND VIDEO

The initial entry point in every community was a discussion at a TLO meeting. This discussion raised the issue of sanitation and the target for the Municipality. In all cases a video documentary was shown outlining the faecal-oral pathway. There were visits to every household to assess the existence and / or status of the toilet. In some communities, this discussion alone was enough to ignite community members to build toilets, change behaviour and achieve ODF status.

The video that was shown in these initial discussions was about 4 to 5 minutes long. Around half the film consists of written explanations of faecal oral transmission routes of drinking water that becomes contaminated through open defecation washing into water bodies, through flies that sit on faeces and then on food or drink, and through fruit and vegetables that become contaminated due to OD in fields. The second half of the film is an animation clearly illustrating the first two of these transmission routes. Although the film is very simple, the animated part could have a significant impact on those watching it as it involved a mother feeding her child contaminated food and milk. During community discussions some people mentioned this animation as having triggered their behaviour change. The team found the film on YouTube and are not aware of the developer. It can be viewed at: <https://www.youtube.com/watch?v=JSoUH2s0eio>

2.3.2 CLTS TOOLS

In some communities there was resistance to change, typically based on an expectation of subsidy. In these communities, the more typical tools of the CLTS approach were used. The triggering exercises were typically held for a cluster of Toles which formed a larger community. Thus, in covering around 85 toles, close to 30 triggering events were held. In these cases, the methodology was similar to a typical triggering with the use of the following tools:

- Creation of community map
- Mapping of typical open defecation sites
- Faecal oral contamination routes, including “food and soda” exercise.
- Shit calculation
- Calculation of medical expenses

The CLTS tools were used more or less the way it is described in the CLTS Trainer’s Training guide written by Kamal Kar (2010). The facilitators noted that they preferred more women attending the triggering meetings as they understood the issues better and would pressure their husbands to build a toilet and educate their children around behaviour change. At the end of the triggering session they would encourage the community to set a date to become ODF, usually within two and five months. The expectation to achieve ODF in a short space of time was high, due to the Municipality’s commitment to achieve ODF by May 2015. As most of the triggering was taking place from January to March 2015, this did not leave much time.

In cases where there was difficulty triggering the TLO, the project team would invite an M-WASH-CC member to accompany the project staff for follow-up triggering. They would decide on a case by case basis what strategy works best to achieve change. Once the community had made a commitment, there were a lot of post-triggering visits and activities to ensure that the commitment was met, as detailed in the following section.

2.3.3 SCHOOLS

The project targeted 25 schools in the triggering process. Often they would start working with the school alongside, or even before triggering the community. Work in schools was mainly through existing “child clubs” which received orientation about sanitation, handwashing and personal hygiene. The idea was that these messages would be spread from school to home. The child clubs made banners and took part in marches around the streets to encourage behaviour change. Schools were specifically seen as an ideal starting point in those communities that had achieved ODF and were moving towards ‘Total Sanitation’. Children were trained on the simplicity and effectiveness of using bio-sand filters for safe drinking water. However, schools were also used as a unit for ODF campaigns. It was easy to explain the pathways of faecal-oral contamination to the children who would go back and convey the message to their parents and family members. Pressure was also created through children to ensure their families built a toilet by calling out from the class register, the names of those who have and do not have a toilet. This put social pressure on children who then pressured their family to build a toilet. Additionally, School management Committees and Parent-Teachers associations were also oriented and involved in school campaigns.

Two strategies were effective in school led total sanitation efforts. One, was in employing children as change agents in drawing parents to the school. Through the child clubs, regular cleanliness and hygiene programmes were organised in which the parents were engaged. This ensured that the messages were internalised by the parents who would not only bring about changes in their lives but would also champion the cause in their own and neighbouring communities. Secondly, the project focused on building the capacities of teachers as champions as they are respected figures in the community and would have a greater influence on the parents. Additionally, the selection of teachers was done strategically. Those who were actively involved in the community as WATSAN volunteers or as part of the Ward Citizen Forum were chosen, and the school campaigns were dovetailed into regular clean up campaigns organised by the Municipality in different communities. Working with teachers who were integrated into the community in responsible roles ensured that they would be able to exert greater influence in reaching out to a wider audience and help achieve the desired outcomes. This would also help in developing champions in the community. The municipality contributed a token amount of NPR 1000-15000 and the schools put in a matching amount to carry out sanitation activities designed by the Child Clubs during the year.



Photo: Handwashing station and Child Club

2.4 POST TRIGGERING FOLLOW UP IN COMMUNITIES

A wide range of tools and techniques were used to sustain the pressure on communities to achieve ODF. Some of these tools could be considered ongoing repeat triggering – in fact, often facilitators returned to communities to use CLTS tools again if the initial triggering was not effective. In some toles they conducted 45 to 50 meetings. This section details the follow up techniques used.

2.4.1 DOOR TO DOOR CAMPAIGNS

The principal follow-up technique was door to door campaigns by project staff (social mobilizers) and Female Community Health Volunteers (FCHVs) or WATSAN volunteers. FCHVs were existing sanitation actors working with the Child and Maternal Health Officer under the District Public Health Office based at one of the 3 Health Posts in the Municipality. Eighty-six FCHVs were engaged in the project. They had all previously been engaged in this role and their remit had covered a broad range of issues including immunisation, pre-natal care, post-natal care, handwashing, sanitation, etc. WATSAN volunteers, who were found to be more men, were attached with the Municipality and were engaged primarily to promote the water and sanitation activities of the Municipality. It is important to note here that even before the project the Municipality had been involved in a range of activities related to sanitation in the community. The project helped support the ongoing efforts of the Municipality and gave it a fillip in terms of strengthening capacity of health and community volunteers and equipping them with skills and techniques for community engagement, which helped the Municipality achieve the ODF.

Project staff, particularly social mobilizers, Municipality staff, FCHVs, WATSAN volunteers and W-WASH-CC members paid regular visits to households that had not yet built their latrine to encourage behaviour change. They used a variety of discussion techniques to

encourage change, such as talking about how using a toilet improved women's safety and dignity and how flies on the food caused their children to get sick because they have previously been feeding on shit.

Door to door campaigns can be viewed as being a feasible strategy in urban and peri-urban areas due to the somewhat higher density of the population. This means that volunteers or mobilisers can move easily from house to house by foot without need of additional transport. FCHVs and WATSAN volunteers often lived in the same or nearby communities to where they worked, whereas social mobilisers mainly came from Gulariya town by bicycle or motorbike.

2.4.2 STREET DRAMA

Street drama was considered to be an important triggering tool. A professional street theatre company was engaged to develop a drama that would highlight key issues in sanitation that would provoke behaviour change. The drama was adapted for the three cultural and linguistic groups: Nepali, Madhesi and Tharu. The 30-minute show would be advertised a week in advance and would be preceded by songs about sanitation. The drama targeted not only households who did not have toilets but also those who were not using the toilets given by the government or NGOs earlier. Around 34 drama events were organised in the project duration.

During a discussion in a Muslim community, the street theatre was raised by several people as being the factor that had the most impact on them. Kisum Gupta recounted that: *"In one scene a lady takes a pot of water and goes out to defecate. A man is watching her. I realised that we have no dignity going to defecate outside. A Muslim woman covers her face with a scarf to maintain her dignity but if you go to defecate in the open you have lost that dignity. This was a powerful message to me."*

2.4.3 FILM "CHARPE BIHE" – TOILET MARRIAGE

A film called "CharpiBihe" (Toilet Marriage), produced by the national government for sanitation promotion purposes, was shown to the community members in every Tole as part of post triggering. Filmed in the Nepali language and set within the cultural background of the country, this comedy involves a love struck couple whose desire to marry is thwarted due to the continued open defecation by the girl's father, until he is finally convinced to build a toilet. They finally marry and the ritual wedding dance is performed around the new toilet! The film was successful in connecting people to the issue of sanitation in an informal and entertaining way. On community visits, many of the community members spoke about this film.

This film can be viewed on YouTube at: https://www.youtube.com/watch?v=PIp1x8zp_EE and https://www.youtube.com/watch?v=7r4fg0ye_9A

2.4.4 HOARDING BOARDS AND POSTERS

The project used a range of visual communication techniques for promoting good sanitation and hygiene practices. Posters were produced which were placed in public and community buildings at municipal and tole level. Some of the same images were reproduced as large

hoarding boards which were placed on roadsides mainly at junctions where they would be seen by the maximum number of people.



Photo: Hoarding board showing good handwashing practice

Hoarding boards were also produced once a ward became ODF. These boards served as a motivating factor for non ODF communities as it became public knowledge which communities were lagging behind and holding the Municipality back from ODF declaration. This put social pressure on those communities to act fast to meet the challenge. During the study visit, it was great to see an ODF sign board in every community and the community members very proudly pointed it out to us.



Photo: Hoarding board welcoming people to ODF Ward 6.

2.4.5 SANITATION CARD AND OTHER SERVICE-BASED INCENTIVES

A highly significant incentive for behaviour change across Gulariya Municipality has been the introduction of a “sanitation card”. Households were issued a sanitation card by the Municipal government once they had built a toilet that met the acceptable criteria. However, without this card household member were unable to access most municipal services, e.g. they were unable to register for a citizen ID card or passport, they were unable to receive

any financial support from the Municipality and in some cases they were unable to enrol their children into school.

This idea was introduced in January 2015, quite early in the project, when only around 50% of households had a toilet. It proved to be one of the strongest household level incentives for change. The idea was replicated from other parts of Nepal. However, this strategy has also raised questions about the appropriateness of pressurising people to build a toilet through making service access dependent on having a toilet. The CLTS methodology aims to stimulate motivation for improved sanitation based on an internalised understanding of a need to change behaviour. Methods such as this use external pressure to bring about change. Whilst it is successful in achieving the tangible result of toilets being built, it may not have stimulated the necessary change of attitude towards open defecation. Furthermore, this approach may put unnecessary pressure on more vulnerable households. The Municipality officials and the project team stated that sanitation cards were used as a pressure technique only to cover the last mile. According to them, more than the vulnerable groups, it was many of the economically better off people who were refusing to change their sanitation behaviour and construct toilets. This was also reported in our interaction with ward committee members. It would be worthwhile to explore this issue in more detail in the future as it was not possible within the time frame of the study.

Whilst the sanitation card incentivised change at the household level, whole communities were also incentivised by the holding back of any municipal support until community wide ODF status was achieved. As the Municipality receives central government allocations for road building, extension of the electricity grid, drainage, etc. they decided to offer these services as a reward to Wards upon achievement of ODF. As some wards became ODF and started receiving municipal support, the incentive to other communities and wards became even stronger as they too wished to benefit. The W-WASH-CC was designated as the body to receive the award and to coordinate the resulting infrastructure activities, thus strengthening their role, reputation and influence within communities.

The project also used the platform of 14 Ward Citizens Forums and 23 Citizen Awareness Centres in Gulariya to mobilise people and work with them in forwarding the sanitation agenda led by the Municipality. These spaces were used not only as a forum to get people together and engage with them but also all development activities were linked to WASH and support was extended on priority, based on people's adoption of sanitation and hygiene behaviour practices.

2.4.6 TOLE LEVEL FINES AND FINANCIAL INCENTIVES

Examples were given where TLOs had used a variety of financial measures to incentivise toilet building. Fines were the most common form of financial driver for behaviour change, where anyone found to be defecating in the open was fined around NPR 500. The fine would be given to the W-WASH-CC who were planning to use the money for future WASH activities.

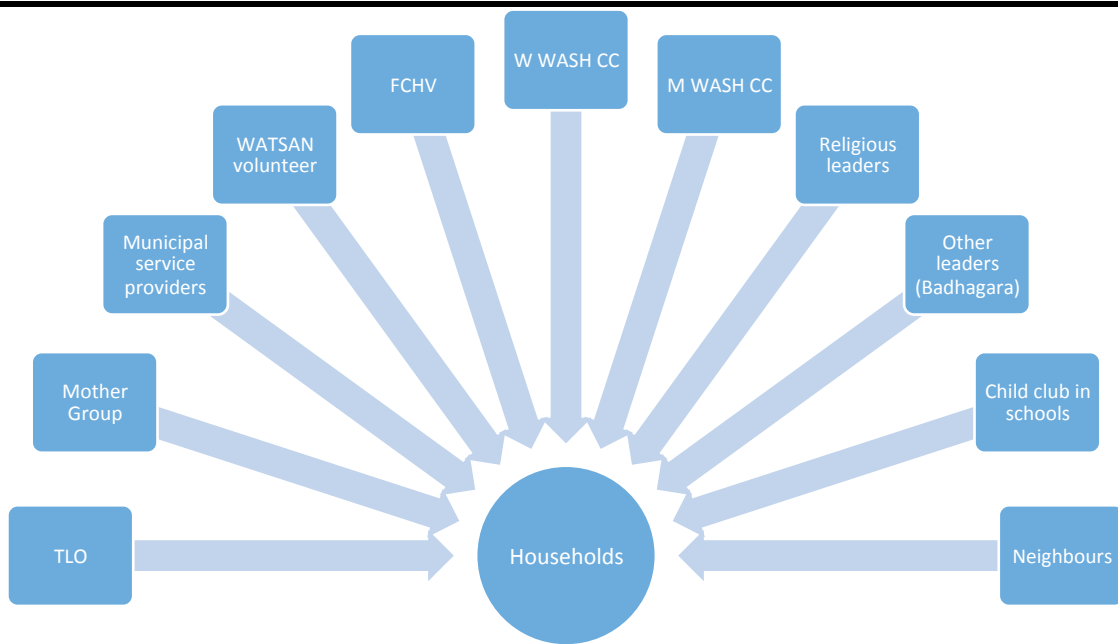
In other wards that were affected by flooding in 2014, the district government had awarded NPR 10,000 to affected households. Some TLOs held back all or part of that allocation until the household had built their toilet.

2.4.7 SOCIAL PRESSURE

In discussions with community members during the field work, it was notable that many people said that the motivator for change was 'social pressure'. Most people said they had been aware of the reasons for ceasing open defecation and building and using a toilet prior to the project, but the motivation to take action had been lacking. Social pressure for change came from a number of sources: neighbours, TLO committee members, children bringing sanitation and hygiene message from school, FCHV and WATSAN members visiting door to door, messages of religious leaders, influence of social leaders such as the Badhaghar etc. The united message of a whole range of institutions and individuals proved to be highly effective in affecting change. To give an example of how social pressure worked in communities can be cited from one of the villages called Khairapur, where a person had sold his mobile to build an expensive toilet model. After that, the entire village aimed to have a similar standard of toilet and anything less than that was seen as undesirable.

2.4.8 WHISTLE CAMPAIGNS

The children were also encouraged to do "whistle campaigns" in their communities, i.e. blowing a whistle whenever they saw someone practicing open defecation and politely explaining to them that this was not acceptable behaviour. Another technique used was taking photographs of people doing OD and revealing them in public to motivate them to stop the practice. A few community members raised objections to these techniques in the beginning, but they later agreed that this was an effective way to get people to change their behaviour. During some of the ODF celebrations, the community members even appreciated the efforts made by the children. The project was however mindful of the gender sensitivities involved and ensured that girl students were engaged to follow up on women and that boy students followed up on the men practicing open defecation. This was to ensure that monitoring activities did not become a space where women felt harassed or violated and prevailing gender norms were re-inforced. Though these measures have proven effective in a number of countries, caution should be exercised in employing them, as they can be misused to deepen existing social inequalities and divisions.



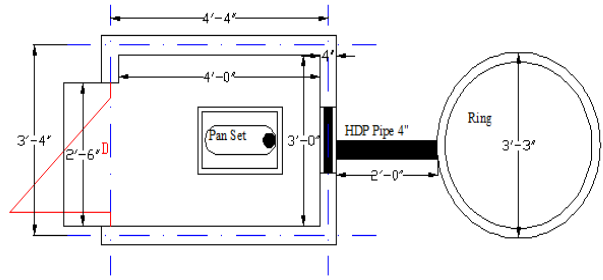
2.5 TECHNOLOGY OPTIONS

Based on the minimum requirement of a permanent sub-structure prescribed by the National Sanitation Strategy, the project promoted a number of different technology options to households. These were:

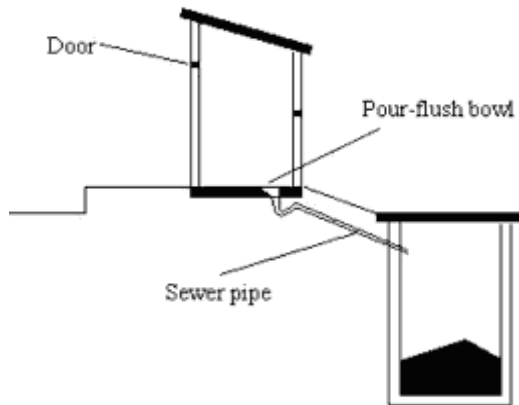
1. Offset, lined, ventilated pit latrine
2. Latrine with septic tank
3. Biogas toilet
4. EcoSan (urine diverting, composting) toilet

In practice the vast majority of households constructed offset, lined and ventilated pit latrines (>90%). A small number (<5%) constructed toilets with a septic tank, principally due to higher cost and space requirements. Biogas toilet construction was principally limited to one or two communities (mostly Tharu), which had been offered a subsidy from a biogas company providing materials only for the construction of the biogas generator, skilled labour, external material including fittings to the value of around NPR 20,000- 24,000. Households had to provide local/non local materials, labour, pan sheet and the superstructure. This support was provided to Tharu communities and other marginalised households due to their relative vulnerability. Very few households adopted the Ecosan technology, due to unfamiliarity and the additional cost of having to dig and line two pits and build a larger superstructure.

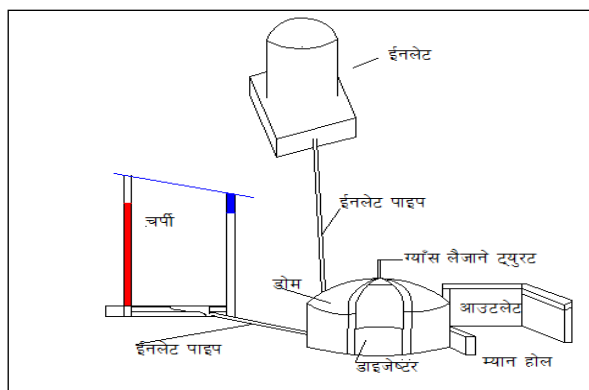
1. Offset, lined, ventilated pit latrine



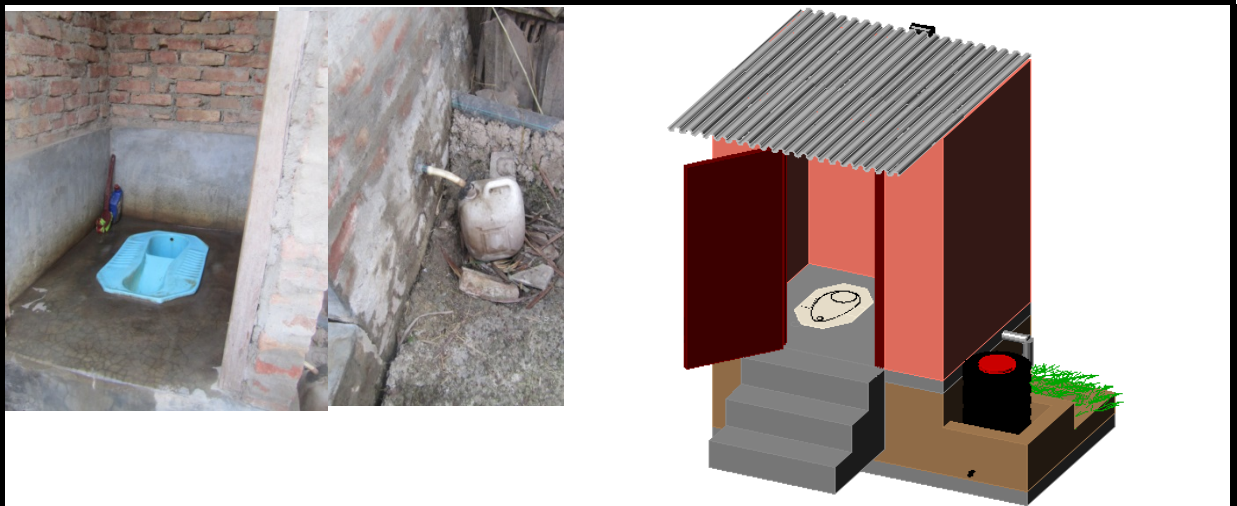
2. Latrine with septic tank



3. Biogas toilet



5. Ecosan (urine diverting, composting) toilet



2.5.1 FLOOD PROOFTOILETS.

A further technology being promoted under this project was the “flood proof” toilets. Many communities in Gulariya Municipality are prone to regular flooding during the monsoon season, and have also been subject to some extreme flood events, particularly in early 2015. The community mobilisers encouraged householders in flood prone areas to build a raised concrete platform of around two to three feet above the pit so that the flood water would not enter up to this level.

In June/July 2014 there were very bad floods, reaching up to four or five feet in some communities, and many toilets were destroyed (superstructure washed away and pit filled with soil and sand). However, due to the recent mobilisation of communities and awareness of the importance of sanitation, households quickly repaired or rebuilt their toilets. Residents of Dipendranagar said that people even rebuilt their toilet before repairing their houses or replacing other lost goods as they realised that poor sanitation would only exacerbate their bad situation.



Photo: Raised, flood proof toilet.

2.5.2 SANITATION MARKET DEVELOPMENT

As a result of the increased demand for sanitation materials, the market for these products grew naturally during the project period. Local producers of clay and concrete products such as roof tiles, plant pots, pump stands, etc. were also producing a small number of rings and slabs for toilet construction prior to the project, however, sales were limited at the time. With the promotion of the sanitation campaign, demand grew massively and those two or three producers in the municipality expanded production to meet the demand. This occurred without any specific inputs from the project team.

2.5.2.1 CASE STUDY: AYODHYA PRASAD GODIYA – SANITATION ENTREPRENEUR

Forty-year-old Ayodhya has been engaged in masonry since the tender age of thirteen. Initially having worked under other experienced masons, once he learnt the tricks of the trade, he started his own business. His initiation into the project began during the 2009-2012 period when he was trained by ENPHO to make water and sanitation products, that were promoted by the project, such as bio-sand filters for water purification, rings, platforms with attached pans etc. that were being promoted by the project at the time. Ayodhya recalls the initial project period when the national policy supported the distribution of subsidies to promote toilet usage. “Four years ago, only about 5% of the rings that I made used to get sold. I used to make only about 100-150 rings in a year. But in the last one year, the scenario totally changed.” Ayodhya says that since 2014, the demand for rings increased drastically. “Last year, I made and sold at least 20-25 rings in a day. I had to hire three more persons to help me out to meet the demand. The interest generated in people was almost unbelievable. Many other masons also shifted to making rings during this period and their business received a big boost.”

Ayodhya stated that the benefits of the ODF movement has gone beyond sanitation, positively impacting his overall standard of living. “I constructed a house last year. I was also

able to purchase a bike. But again, it's not only about income generation. Today I get recognition and respect from the Municipality. My children feel proud of the work that I have done. They get recognition in their school. I am involved in their school committee. I was also selected as the TLO President of my tole. Today I am able to even secure a loan from the bank. This was not the case earlier."



Photo: Ayodhya Prasad Godiya – Sanitation Entrepreneur

2.6 BEYOND ODF - POST ODF ACTIVITIES IN COMMUNITIES

Post ODF activities supported by the project can be divided into two groups. Firstly, the project worked in 6 ODF communities (22 TLOs) to achieve what the government has termed 'Total Sanitation', and which involves achieving a number of further hygiene and sanitation related outcomes beyond ODF. Secondly, the project carried out a process of participatory planning in 10 communities (15 TLOs) which had been identified as vulnerable, in order to achieve wider development goals through increasing the community's capacity to access services from the municipal government. This process actually took place in parallel with ODF activities, and achieving ODF was consistently the first goal of the planning process. Once this was achieved, the project supported progress towards achieving additional development goals identified in the process. These two groups of activities are described in this section.

2.6.1 TOTAL SANITATION CAMPAIGN

The National Sanitation Directive has set out a two phased strategy for achieving Total Sanitation. The first phase involves achieving ODF communities and the second phase, entitled Total Sanitized Post-ODF Situation, has a number of further water and sanitation related goals. The second phase encourages the achievement of five key hygiene and sanitation behaviours at the household level (Box 2), and also focuses on Institutional Sanitation (Box 3).

BOX 2: FIVE KEY HYGIENE AND SANITATION BEHAVIOURS

- 1 Use of toilets;
- 2 Maintenance of personal hygiene (practice of hand washing with soap or cleaning agent at critical times, regular nail cutting, bathing, clothes washing, daily combing, tooth brushing etc.);
- 3 Safe handling and treatment of drinking water (e.g. Point of Use treatment) at households level;
- 4 Use of safe/hygienic food; and
- 5 Proper solid and liquid waste management in and out of the home.

Source: National Sanitation and Hygiene Coordination Committee (2016)

BOX 3: INSTITUTIONAL SANITATION

- All institutions should have users-friendly clean, hygienic toilets with hand washing with soap station and proper waste management facilities.
- All schools must have Child, Gender and Differently-abled (CGD) friendly water, toilet and hand washing (with soap station) facilities including menstrual hygiene facilities.
- The schools must have garbage pit facilities within the school premise.
- All institutions should keep their premises in clean and hygienic condition.

Source: National Sanitation and Hygiene Coordination Committee (2016)

The project pursued achieving these Total Sanitation goals in 6 communities covering 22 toles that had already achieved ODF status prior to the start of the project. The aim was to demonstrate a process of working towards Total Sanitation that could then be pursued by the M-WASH-CCs and W-WASH-CCs after the project had ended. It would also create islands of success which other communities could aspire towards replicating.

The mechanisms for achieving Total Sanitation were also door to door campaigns and visual communication material such as posters. An additional tool used was a household sticker with 5 segments depicting the various goals outlined in Box 2. Each household was given a blue sticker at the outset and as each of the goals was attained, they could be ticket off. Once all five were achieved, the household was given a green sticker (illustrated below) indicating that they were a Total Sanitation Household. This visual display encouraged householders to keep up with or to encourage their neighbours and made improved the ease of monitoring by volunteers and mobilisers.



Photo: Total Sanitation Achievement Sticker and displayed outside house.

2.6.1.1 CASE STUDY: ACHIEVING TOTAL SANITATION IN DEPENDRA NAGAR

The declaration ceremony of Total Sanitation was celebrated in Dependra Nagar Tole on 2nd Feb 2016. During this ceremony the District Local Development Officer (LDO) and chair of the D-WASH-CC was present as the most senior member to confer this honour. Also present were members of the M-WASH-CC and W-WASH-CC and all community members. A banner was read outlining the commitment of the community to sustain practices associated with Total Sanitation and several prizes were awarded to community members for having the cleanest homestead. The atmosphere was very positive.

But how did this community achieve this goal in the shortest time? And how did they overcome the challenges they were facing? Interviews with the President (ShobhaThapaBhandari) and Secretary (Sarala Regmi) of the TLO provided some answers.

Dependra Nagar became ODF four years ago. They were the second Tole in Gulariya to become ODF. This was achieved under an earlier project supported by Practical Action with UN Habitat. That project provided subsidised toilet inputs (50% of cost), along with water filters, kitchen racks improved cook stoves, and training in kitchen management and manufacture of stoves. After ODF was achieved, there was a very high flood (over 1 meter) which filled many toilets with sand and washed away temporary superstructures. This was very tough for the community, but even before eating well again they invested everything they had into repairing their toilets.

When the current project started they were back to their status as ODF and ready to work towards Total Sanitation. During this project, project staff and social mobilizers including community health volunteers supported them with regular visits, continually encouraging them to adopt the five aspects of Total Sanitation (safe water, improved sanitation, personal hygiene, kitchen management and solid waste management). In the community the TLO

held regular (twice monthly) WATSAN meetings to plan what needed to be done and who should take action.

At times it was difficult to mobilise some people in this community as they are poor, daily wage labourers. To assist these people, the TLO set up a fund by everyone in the community giving NPR 100 on a monthly basis. This fund was then loaned out to households as a lump sum to be paid back over a number of months. Usually around NPR 10,000 would be required to pay for the bio-sand water filter, hand pump platform, separate washing platform, drying rack etc. that were necessary to achieve Total Sanitation. The loan fund is now at around NPR 400,000.

Another challenge was that some community members rent their homes and therefore did not want to invest in a property that was not their own. However, these people tended to make the necessary investment and then deduct it from their rental payments.

Encouragement by members of the project team, TLO committee and the FCHV was key to achieving the goal. Project team (social mobilizers) and FCHV were very dedicated and came almost daily going from house to house with key sanitation messages. Community members also put pressure on one another, saying that lack of action was holding the whole community back and causing embarrassment. In addition, the support and monitoring visits of ENPHO, W-WASH-CC members and M-WASH-C members also kept up the motivation and the pressure to achieve the final goal.



Photo: Secretary receiving award for clean house during celebration of Total Sanitation in Dependra Nagar

2.6.2 PARTICIPATORY PLANNING PROCESS

The project team facilitated a process of community based participatory planning in 10 communities covering 15 TLOs particularly the more urban / slum dwellers including disadvantaged/marginalized groups such as Tharu, Madhesi and Pahadicommunities. This activity was not strictly post-ODF. It was actually amalgamated with the CLTS triggering process, but it resulted in additional post ODF activities. Achieving ODF is the first activity then it incentivises action on sanitation to achieve other outcomes. The participatory planning processplus CLTS involvedthe following process:

After the pre-triggering stage, triggering in the community involved mobilising the community to gather at a central place and the participatory tools were administered in the community. In some communities, the project team would divide the larger group into smaller groups of men, women and children. But the facilitation was carried out at the same time with all the groups.

The following tools were employed during the triggering process:

- Community mapping – Mapping of all the services and facilities in the community. Discussions around this was directed towards mapping out how many households did or did not have toilets and a record was made of the same.
- Seasonal calendar – To understand the way of life of the community and the pattern of activity taking place in terms of agriculture, employment etc.
- Comparative analysis with other communities – This helped the community analyse how they were placed in comparison to other neighbouring communities and think through on what could be done about the same
- Income and expenditure analysis – This tool was very effective in drawing attention to the point about how people's limited incomes and resources were being drained away through sickness and hospital bills and loss of working days. This helped the community brainstorm on the root causes of their illnesses and what could be done to avoid the same
- Priority wise ranking – This tool was used to understand what was important to the community as a whole in terms of services and facilities and where collective action could be ignited effectively among the community. It is important to highlight that in all the 10 communities in which this process was carried out, it was reported that sanitation ranked as the top most priority by the community.

At the end of this triggering process, a Community Action Plan (CAP) is made by all those present. In it the priority issues are analysed further by using a further tool called the Problem Tree Analysis tool. In all the communities where the Participatory Planning Process was implemented, the Problem Tree helped in analysing what were the root causes for people not having toilets. These issues were discussed and the community came up with strategies to achieve quick progress and also ways to address the challenges that would emerge in the process. The community also put down a definite time line and action points for achieving their target and objectives. For e.g. one of the root causes identified by the community was the lack of awareness by the members. The strategy that the project team devised to address this was to use the CLTS tools to engage the community further, to help them analyse the link between sanitation and health and the pathways of faecal-oral contamination.

In the post triggering follow up phase, the project team along with the FCHVs and volunteers actively engaged with the community leaders, mother's groups and other members to ensure that the timelines were met and the community was supported in achieving their goals.

2.6.3 FAECAL SLUDGE MANAGEMENT

As the national policy has enforced investment in a permanent sub structure, faecal sludge management (FSM) has become a critical issue. Where unlined pits are the norm, the tendency is to dig another pit once the first one is full. However, with a lined pit the

investment cannot be replicated, and therefore the pit has to be reused. Furthermore, in this more densely populated municipality, there is little space to dig further pits around the homestead. If pits fill up and there are no clear mechanisms for emptying, then there is a high likelihood of people reverting to open defecation. In Gulariya, two options have been available for pit emptying. Firstly, one could call a mechanical pit emptier from the nearby town Nepalgunj, who would come with a tanker and suction pump to empty and remove the contents for a considerable fee. Secondly, one might manage to find an informal pit emptier who would dig a smaller pit next to the existing toilet and transfer the contents manually (by hand) then cover it over with soil, for a much smaller fee. Due to the lack of available land, this second option was not satisfactory. Often several small pits were dug to bury the waste and it was not adequately covered, thus causing contamination problems.

The project has invested in addressing the issue of FSM as the above options are likely to be inadequate with the vastly increased population using toilets which are likely to fill up within the coming year or two. They have worked alongside the municipal government to co-finance a collection system and FS treatment plant. The municipal government will invest NPR 22,00,000 in providing the collection tanker, and will appoint a private contractor to manage collection and treatment. The project funds (NPR 27,00,000) are paying for the research, design and construction of an innovative FS treatment plant located around 1 kilometre from Gulariya town where the waste will be treated and turned into a saleable resource (compost). The composting faecal sludge treatment plant is the first of its kind in Nepal. ENPHO and Practical Action have contributed the necessary technical expertise.

The project team is preparing the business plan for the plant, and prices for pit emptying will be based on that business plan. The plant will not have the capacity to cover the whole population, although it will reach all wards. It is being viewed as a pilot, and further development or adaptation is likely to be required based on this experience.

There has been a delay in the construction of the treatment plant due to problems with negotiating access to the land for this which is in a community forestry area. Some of the community forest management committee have opposed the proposal, though now, after 3 to 4 months' delay, this is resolved. Therefore, there are no lessons to date based on operation of this innovative system.

3 SUCCESSES AND CHALLENGES

The principal success of this project was the achievement of ODF within a short space of time. This success can be put down to a number of factors which are discussed in this section, including the supportive policy environment, institutional engagement, the wide range of post triggering tools used, and the different technology options available. However, ODF has only recently been achieved, and success can only be judged in the longer term, taking into account the sustainability of behaviour change. Challenges of sustainability are already being faced within the project location, leading to some concerns. For example, members of the W-WASH-CC and project staff cited examples of slippage back to open defecation in some locations, principally as a result of toilets filling up and there being no easy solution for emptying available to people.

This section discusses a range of issues which have contributed to the successes and challenges of the project, discussed within the context of a number of broad themes. Boxes at the start of each section identify success factors and challenges under each theme.

3.1 NATIONAL POLICY CONTEXT

The policy context in Nepal has been highly favourable towards the success of the project outcome, and clearly demonstrates that a clear policy directive can have a huge impact in a short space of time. The key successes and challenges associated with the policy context are discussed here.

National policy context success factors & challenges

- + No-subsidy approach
- + Target dates
- + High technology standard as minimum
- Handwashing not a criterion of basic ODF
- CLTS not designated as principal approach

3.1.1 NO SUBSIDY APPROACH

Firstly, and arguably, most importantly, the national policy has ruled out application of subsidy for toilets across the entire nation by any agency, whether governmental or NGO. This factor is significant because it immediately eliminates the problem of communities refusing to take action in anticipation of receiving financial or hardware support at a later date. This would certainly have been a relevant problem, as project staff mentioned this as a point of resistance at the start of the project. People would recall that subsidy had been provided in the past, even under previous Practical Action / ENPHO projects, and would complain that they could not afford to build toilets without similar support. However, the fact that the 'no subsidy' approach was reiterated by government at all levels, including the M-WASH and W-WASH committees, meant that communities quickly realised there would be no assistance forthcoming and they would have to manage with their own resources.

3.1.2 TARGETS AND MATERIALS TO SUPPORT IMPLEMENTATION

A realistic target date was set by national government for achieving national level ODF (end of 2017) and districts have in turn been encouraged to set target dates in advance of this. The progress of districts is made available, and achievement of newly ODF districts is widely

publicised, so that competition is generated to achieve ODF status as quickly as possible. Gulariya Municipality was the last of five municipalities within the district therefore it was under pressure to ensure district declaration by its target date of May 2015. Bardiya district was the first in the Terai (lowlands) to become ODF which gave it some kudos. Availability of information about progress of different municipalities, wards and districts towards ODF, and generating competition between them, have proven successful strategies for motivation.

A further motivator to district and municipal staff has been the introduction of performance incentives associated with sanitation and achievement of ODF. Within the Minimum Conditions Performance Measures (MCPM) by which district, municipality and VDC staff are assessed, points are allocated based on acceptable progress towards ODF status.

The production of the Sanitation and Hygiene Master Plan and Implementation Guidelines by the national government has been supportive to project and municipality staff. National government has also supported the production of materials to encourage behaviour change that can be used across the country. These include slogans, jingles, songs, TV spots, a film, images, and a national sanitation song with a video in which various ministers, other public figures and celebrities are filmed singing along. This video has been shown on national and local TV.

3.1.3 TECHNOLOGY FOR SUSTAINABILITY

The national policy put sustainability at the forefront in insisting upon household investment in permanent sub-structure for all toilets as part of its national policy. This is a departure from the typical CLTS approach which aims to ensure affordability above all else to ensure that behaviour change takes place. However, there are many examples of slippage in other countries where sanitation technology has been poor and toilets have collapsed etc.

The minimum standard for declaration of ODF is for all households to have a toilet with a permanent structure up to the plinth/ floor level from the point of view of durability and sustainability of structures. The vast majority consulted in Gulariya have installed an offset lined pit with water seal. The offset pit was encouraged by the project for ease of emptying. The impact of these policy requirements are discussed further in Section 3.6.

3.1.4 HANDWASHING

One serious disadvantage of the national policy approach is that it has not included handwashing as a basic requirement for achieving ODF, it is only a requirement for Total Sanitation which may not be achieved until some considerable time after ODF is attained. As Gulariya has been following the national strategy, neither the project staff nor the WASH committees put much focus on handwashing in the process of working towards ODF status. However, if people do not wash their hands after toilet use, then the cycle of contamination is not fully broken and infections can pass from person to person through direct infection or transfer of pathogens into food.

Availability of water for handwashing did not appear to be a problematic issue in Gulariya as most wards have 60 to 90% household tube well coverage. The issue was merely the lack of emphasis on this aspect of behaviour change. It could easily have been achieved by linking the practice to ODF behaviour change. Although there had been some focus on

handwashing in schools, more emphasis could have been placed on children passing this message to parents and siblings.

3.1.5 IMPLEMENTATION APPROACHES

The National Sanitation and Hygiene Master plan for achieving ODF in Nepal does not clearly state that the CLTS triggering methodology should be used for achieving ODF or wider sanitation goals. CLTS is mentioned as one option amongst a wider range of tools. Whilst other approaches definitely have some benefits, CLTS is a highly effective approach for stimulating internalisation of behaviour change and the development of natural leaders who continue to promote important sanitation messages both within and beyond their communities. There is also no mention in the guidance of the specific challenges of the urban / peri-urban context and ways in which to address those challenges with participatory and inclusive approaches. Further guidance in these two areas would be valuable.

3.2 INSTITUTIONAL ENGAGEMENT

The strategy for institutional engagement for achieving an ODF municipality has been a really successful element of this project, however there is an ongoing challenge of sustaining action by institutions beyond the project to achieve Total Sanitation in all communities. This section outlines the successes and remaining challenges.

Institutional engagement success factors & challenges

- + PMC
- + WASH CC
- + Engaging other local stakeholders
- Poor evidence of sustained activity

The main elements of institutional engagement have been outlined in Section 2, strong oversight by the PMC, with M-WASH-CC and W-WASH-CC involvement at every stage as well as integration of a wide range of additional institutions. This certainly contributed to the speed of transition as there were so many voices speaking in favour of ODF that communities could not ignore the message. A further factor in favour of sustainability is the fact that a concern for hygiene and sanitation has been embedded within local institutions. At the Tole level, the awareness is high amongst the TLO committee and other leaders who play a role in monitoring. As long as they continue the work they have done during the project period, encouraging hygienic behaviour and penalising bad practice (e.g. though fines for open defecation) then behaviour change should be sustained.

Likewise, responsibility for ongoing hygiene and sanitation campaigns has been firmly placed within the hands of the WASH-CC system, at Ward, Municipal and District levels. In the case of the municipality, Mr Mukund is the lead focal person and he has a strong ownership of the issues. He is a local person and is unlikely to leave this municipality to work elsewhere. The municipality has also committed during the project to allocate budget to post-ODF Total Sanitation activities which will assist the continued flow of support. Mechanisms are also being put in place for national level staff of Practical Action to provide ongoing technical backstopping to the process of FSM in the medium term to ensure that actions which have been delayed during the project, will be completed.

“The key to the success in Gulariya has been social mobilisation and the involvement of people through existing community structures. This was followed up by consistent monitoring

and pressure exerted by the Municipality and other authorities. A key strategy has been to bring the ward sanitation committees and other community structures to the forefront as responsible and accountable bodies; strengthening their relationship with the community. Sanitation cannot be the responsibility of the Municipality alone; it needs strong partnerships at various levels with the community being at the core of all activities right from planning to implementation to monitoring. The strategy tried in Gulariya is different from those of other municipalities in the district. Though other Municipalities have become ODF, they do not have a strong community engagement component. In this sense, Gulariya can serve as a learning laboratory for strategies for institutional facilitation and Municipality vision, leadership and administration. Now the challenge for Gulariya will be to sustain ODF and move towards Total Sanitation. This again has to be led at the TLO level by the people with leadership provided by the Municipality”Municipality Officer in charge of Sanitation – Mr Mukund Aryal

One concern was that the M-WASH-CC reported that they had not had any further meetings since ODF status was achieved in Gulariya in May 2015. W-WASH-CC members noted that the M-WASH-CC was no longer supporting them, although the project is still organising regular W-WASH-CC meetings on behalf of the Municipality. However, the drop-off in meetings does not bode well for long term commitment to achieving the broader Total Sanitation goals across the whole municipality once the project team pull out in July 2016.

3.3 APPLICATION OF CLTS APPROACH

The application of the CLTS approach in this project has been mixed. A positive factor is that the project has definitely taken a no subsidy approach and this is a nation-wide approach and is widely publicised. Subsidy had

Application of CLTS approach success factors & challenges

- + no subsidy approach
- + applied tools where they seemed necessary
- + supplemented with strong follow up
- did not follow strict CLTS methodology
- potential for weak internalisation of behaviour change

been offered in the past, even under Practical Action managed projects, so there was some resistance in communities when told there would be no support for even the poorest households. However, as this was a government strategy and all organisations were conveying the same message, the communities eventually agreed to take action on their own.

A challenge, as noted above, is that the National Master Plan does not clearly state that the CLTS triggering methodology should be used for achieving the ODF or wider sanitation goals. In Gulariya, CLTS, SLTS and Household-Centred Environmental Sanitation (HCES) approaches were used depending on the community context. This methodological diversity was not a problem in itself. The challenge was that the CLTS was not used at all in some communities (where toilet coverage was quite high) and in these cases forms of external pressure to build toilets may have had more influence. This results in an external motivation for behaviour change (i.e. driven by punitive measures) rather than an internal desire to eliminate OD for personal and collective health benefits.

In the CLTS methodology, focus is directed squarely at achieving an ODF community in order to achieve collective health benefits, and therefore talking about and counting numbers of toilets is avoided in order to keep the focus on behaviour change. In Gulariya there tended to be much more focus on achieving universal household toilet ownership and use, and the rate of toilet building was strictly monitored. The difference between these two approaches is subtle, but the former leads to a fuller understanding of the shared benefits of behaviour change, a more cooperative approach to achieving the ODF goal, and a greater likelihood of sustained change. The latter approach can lead to building toilets but a later slippage back to OD is possible (e.g. once they are full, or once monitoring of behaviour is relaxed).

3.3.1 CLTS WITH CHILDREN / IN SCHOOLS

The CLTS approach advocates the engagement of children in the triggering activities. It suggests that this is done by working with children separately on the same day as adults are involved in community mapping and triggering exercises. Children are taken to one side and motivated to participate in fun, age-appropriate activities to build their awareness of faecal-oral transmission routes and the importance of eliminating open defecation through tools such as OD transect walk and watching the flies move from shit to water and food. They are encouraged to develop slogans and march through the community. They can also be involved in whistle campaigns where they blow a whistle when they see anyone defecating in the open.

This project did not involve children immediately alongside adults in the triggering process. Rather they worked with children in schools, taking more of a didactic approach to raising awareness of the dangers of OD. They also used techniques of social pressure to encourage construction of toilets by parents, i.e. they marked on a register those children who did or did not have a toilet at home, in order that those who did not, would feel shamed and pressure their parents to construct. As noted in relation to the approach with adults, focusing on social pressure to construct toilets may result in a short lived motivation for change as compared with internalisation of the underlying reasons for behaviour change. The members of Child Clubs in schools were involved in making banners and marching through the streets calling out sanitation slogans and they were encouraged to do whistle campaigns in their neighbourhoods with positive effect.

3.4 SYSTEMATIC AND EFFECTIVE POST TRIGGERING FOLLOW UP

One of the most common problems associated with the application of the CLTS approach in other countries and contexts is the lack of post triggering follow up. This results in the community becoming motivated in the short term, but quickly losing interest before ODF

Post triggering follow up success factors & challenges

- + Immediate and sustained follow up
- + Effective monitoring

status is achieved. For successful change, follow up by mobilisers or support to natural leaders is needed to ensure that the motivation for action is sustained until ODF is achieved, and even post ODF, so that there is no slipping back to OD.

This project was very successful in its ongoing post triggering follow up. Many different techniques were used to positively encourage behaviour change with regular reinforcement

of messages coming from a wide range of influential stakeholders. These techniques included street drama, film showings (CharpeBihe), regular door to door visits, and positive social pressure. Techniques also included penalties or disincentives for failure to act, including fines and inability to access services, as discussed in section 2.4.

Competition between districts was used at the national level as a motivating factor, with a league table of ODF districts available to view on the web. This competitive element also played down to the Ward and staff levels, with everyone trying to ensure that the communities under their jurisdiction became ODF fastest. National pride also became a strong motivator even at the community level, as households were encouraged to see themselves as working towards a national goal for the betterment of their country.

3.4.1 MONITORING

One of the reasons for the success of the project has been the rigorous post triggering follow up and post ODF monitoring undertaken by the project team in collaboration with the Municipality and ward members. Monitoring was undertaken at all the four levels, right from the Tole to the ward to municipality to the district level. The project team (social mobilizers) along with few of the ward members undertook monitoring almost on a daily basis. The M-WASH-CC and W-WASH-CC played a very active role in making rounds in the communities and ensuring that the people were using their toilets. At the district level, two district-based project staff were involved in making regular visits and updating themselves on the developments. There is regular monitoring visit to project areas and back up support to partner team from Practical Action. At the National level, the Executive Director of the NGO ENPHO as well Practical Action staff made visits on a quarterly basis.

3.5 GENDER AND CULTURAL FACTORS

Gulariya is a multi-cultural, multi-caste and multi-language society with largely four different types of communities: Madhesi (44%), Tharu (23%), Muslim (7%), Pahadi (26%). The

Culture and gender success factors & challenges :

- + Staff with different language skills
- + Engaged with local cultural and religious leaders

Madhesi community is the largest community in Gulariya Municipality and consists of landowners (or zamindars) whose primary occupation is farming. Being the landed class, these communities provide employment to the landless or working class from other communities and therefore hold a lot of power. The Tharu community is the tribal community which is very close knit and who follow their own distinct way of living. Many of them are land cultivators but also depend on livestock for their livelihood. The Pahadi community are migrants from the hilly areas. In the communities that we visited, the men had migrated to bigger cities and across the border to India for employment. The Muslim communities form the smallest group in Gulariya Municipality. The Pahadi and the Muslim communities are found to be less economically well off in comparison to the other two communities in Gulariya.

All the four communities are distinctly different from one another in terms of cultural background, livelihoods, way of living, behaviours and attitudes towards sanitation etc. The project team informed us that the intervention was received differently by each community.

The process of engagement and motivation was therefore very well thought out and planned with different strategies adopted for different communities. Additionally, all communication at the time of interaction, triggering, street dramas, films as well as communication material like posters were produced in the respective local languages - Tharu, Abedi and Nepali – to engage each community.

According to the project team, the Madhesi community were the hardest to change in terms of sanitation behaviour and the last of the lot to construct toilets in the Municipality. Being the oldest community in the Municipality, there was a lot of resistance among them to listen to outside authorities. A key factor also was the limited extent to which women in Madhesi communities were involved in the various campaigns. As a W-WASH-CC member informed us, the women from the Madhesi communities had more restrictions in terms of mobility or interacting with outsiders from other communities. This was not the case with the other communities, where women were actively involved in the change process. The project team hired Madhesi staff to engage with the community, especially the women, in order to mobilise them more easily and effectively. The women were reported to have become more active as the project progressed.

The Tharu community was the quickest in adopting sanitation and hygiene behaviour changes. This could be because the community is very close knit and led by a strong social leader, called 'Badaghar', who is selected by the people themselves. The community members informed us that this position is filled by someone who is trusted and respected by the entire community. The person selected is entrusted with responsibility to lead social changes in the community through a collective effort. The person's performance is appraised by the community at the end of the year. This is not a permanent position and fresh selections are made every year. The strategy of the project team was therefore to mobilise the 'Badaghar' to gain access to and engage with the rest of the community.

In the Muslim communities, the strategy was to engage through the religious leaders who had a strong influence in the community. In both the Muslim as well as the Pahadi communities, Mother's Groups were quite well-established and were used as a forum for engagement and follow up after the triggering activities. In the Muslim households, it was reported that initially the male staff were not allowed to go inside the houses to talk with women so the project team assigned women social mobilisers to work in these communities. Over the last 2 years, with the trust gained with the community, the situation has changed and now both the male and female staff have access to the female members of the community.

3.6 TECHNOLOGY OPTIONS AND AFFORDABILITY

Typically, CLTS focuses only on the achievement of an ODF environment, and does not give any instruction around the quality or standard of toilet, as long as it is fly proof (which can be achieved as simply as placing a cover over the

Technology options and affordability success factors & challenges:

- + permanent sub structure for sustainability
- + various technology options offered
- + flood proof toilets encouraged
- + entrepreneurs emerged
- affordability may have been a challenge

hole). However, the Sanitation and Hygiene Master Plan of the Government of Nepal has recommended a minimum standard for sanitation, in terms of a permanent structure up to the plinth/ floor level from the point of view of durability and sustainability of structures. In practice this has meant a minimum standard of concrete pit lining rings (though no minimum number), a concrete cover where the pit is offset, a ventilation pipe, and either a purely concrete pan or a porcelain pan inset into concrete with water seal.

This higher than usual minimum requirement has had a number of advantages as well as some disadvantages. Firstly, it has ensured a good standard of durability which will pay off in the longer run in terms of sustainability of the structure. Particularly in this flood prone area, lining pits ensures that they do not collapse easily during heavy rains. A water seal is also a more effective block against flies than a simple cover.

Secondly, investing more in building a toilet is likely to lead to a high degree of ownership and usage. Simple psychology suggests that householders are more likely to use a toilet which they have invested in heavily, as compared to a simple latrine that cost little more than the time taken to dig the pit. The experience of using an improved toilet is also likely to be more comfortable and enjoyable for the householders.

On the down side, pressure to invest in concrete rings for lining the pit appeared to result in very shallow pits to minimise the overall costs. Thus, some of the poorest families, which tended to have the highest number of members, had built pits with just two to three rings, and therefore just 3 to 5 feet deep, which had quickly filled up. This was resulting in a return to open defecation due to the challenges and / or costs of emptying (see also section 3.8).

3.6.1 AFFORDABILITY

Cost has been the greatest influence on choice of technology. As noted above, the national requirement to build a permanent sub structure has increased the necessary investment in toilet construction to a minimum of around NPR 6,000 and an average of around NPR 15,000. So how did people deal with the issue of affordability? Time was not sufficient to carry out a detailed investigation into this issue, however, all interviewees and staff suggested that ultimately people were able to afford construction although it was a struggle for some. With pressure coming from all sides, investment in sanitation became a high priority for householders and they sought ways to find the finances. Loans were made available through many TLOs, credit was made possible by hardware vendors, and taking on additional waged work days was the most commonly cited strategy for raising cash. To offset the relative cost of the sub-structure, the project team promoted low-cost or no-cost approaches to building the super structure to keep overall costs down, for example, using locally available materials such as bamboo and jute bags.



Photos: Simple technologies for superstructure to aid affordability

Whilst in most instances, households were willing and able to construct their toilet, there were cases reported of poorer households who had felt pressured to build a toilet but did not have enough ready finance, and who had therefore built very shallow pits of just two to three rings in order to reduce costs. These poorer families tended also to be larger in number, and therefore the toilets have filled up in a very short space of time. The cost of hiring a pit emptier is a further cost they cannot easily afford and therefore the most obvious solution is to return to OD. This is a significant ongoing challenge as deepening a pit is not easily done once the structure is in place and regular emptying will be a substantial ongoing drain on household finances.

3.7 INFLUENCING POLICY / PRACTICE

The project has taken some steps to work with others and share experiences. At the local level, the ENPHO project coordinators are part of the D-WASH-CC which is now working on their Total Sanitation strategy, and they share experiences from Gulariya in achieving that goal.

Influencing policy and practice success factors & challenges:

- + efforts to influence policy / practice in Nepal
- + video and blog posts shared online
- + current document also shares lessons

At the national level, some examples of good practice from Gulariya have been shared with the NSHCC and have been published in their WASH Newsletter. The project team also

provided some inputs to the draft Implementation Guidelines for the Total Sanitation Strategy about the inclusion of FSM, solid waste management and flood resilience in the guidelines as there was little focus on these issues.

The project has also shared numerous blogs through the Practical Action Website covering issues such as the story of a man who sold his mobile phone to build a toilet, gender equality and social inclusion in the project, and the ODF declaration in May 2015. These blogs can be viewed at: <http://practicalaction.org/blog/author/devbhata/>. The project has also produced a short video documentary with national WASH stakeholders which is being shared via the internet at: <https://www.youtube.com/watch?v=brgNQqketFk>). The current document is viewed as the principal tool for sharing project experiences, successes and challenges with a wider audience at districts, national and international levels. Successful impact will depend on effective dissemination through a variety of channels.

3.8 FAECAL SLUDGE MANAGEMENT

The FSM plant had not yet been completed at the time of this study and there was no formal system in place for emptying pits. In the communities which had been ODF for some time, toilets were starting to fill up, as after 2-3 years of usage, they had reached their natural capacity. Informal pit

Faecal sludge management success factors & challenges:

- + investment in composting FSM plant
- lack of integration of informal pit emptiers
- delay in construction of FSM plant

emptiers were operating in the municipality but their availability was not widespread and many households did not know about them. It is also possible to contract a sludge remover from Nepalgunj but the cost of this is high. As a result, we were told about instances of people feeling forced to return to OD due to lack of other choices.

Whilst the plans for the FSM plant are commendable, the delayed timing of this element of the project was very unfortunate as little time remains within the project to fully establish the plant and ensure that people are able to start using it during the project period.

3.8.1 INFORMAL FSM

It was observed by the CLTS Foundation team during their visit that the FSM system under development will most probably only be able to serve wider streets due to issues of access of the vehicle. There are likely to be narrow lanes which cannot be reached by the vehicle or the extended extraction pipe. The project had anticipated that the municipal FSM system would incorporate the existing informal pit emptiers, offering them work within the formal system and eliminating their practice of emptying the lined pit contents into a nearby secondary unlined pit that could drain and degrade back into soil over time.

However, it could be beneficial for an informal system to operate in parallel to the formal system in order to reach those less physically accessible pits and also to offer a diversity of options. Cheaper systems will also be more financially accessible to poorer people. Informal, manual pit emptiers could continue to offer the service of transfer of waste to a pit within the compound, or they could remove the waste in a small vehicle (e.g. a three wheeler) for small scale composting to create additional extra income for the pit emptier. The following case of

an existing pit emptier illustrates that the entrepreneurial attitude already exists. With some support from the project team, this could be further developed.

3.8.1.1 CASE STUDY: GORE THARU, MANUAL PIT EMPTIER.

Gore Tharu is 40 years old and married with three children. He lives in Ward 1 and works part time in a hospital in Gulariya town. In his spare time he also works as a pit emptier. He has been doing this over the past three years, and during that time he has emptied around 23 pits. People find out about him through word of mouth. Usually he gets a call when someone's pit is already overflowing and they don't know what to do.

He digs a second pit within the household compound that is usually shallower than the original pit and transfers the sludge from the lined pit to the new pit. A shallower pit of around two thirds of the original depth will suffice because a lot of the liquid matter is absorbed into the soil. It usually takes him around one hour to dig and transfer the waste of a pit around 4 rings deep and he charges NPR 100 - 200 per ring.

He has noticed that demand for his service has increased exponentially over the past 3 years from around 3 pits in 2013, to 6 pits in 2014, and 12 pits in 2015. He anticipates a further rise to perhaps 18 pits in 2016 as the whole municipality is ODF. Currently, he has worked with his wife and son but he is thinking of training up a team to work with him as demand increases. People have already approached him to ask to train with him.

During our discussion it is clear that he sees the potential of the situation: that with a small loan he could purchase a small vehicle, containers and other equipment to expand and improve his business. He says that with the right equipment and a team working with him, he could handle the whole municipality. "Tell people I am here", he says. "I can do it".

3.9 ADDRESSING VULNERABILITIES

Gender equality and social inclusion were elements that were prioritised in the project. Efforts were made to specifically target women and mobilise them in all campaigns. Women were mobilised as active participants in all the triggering exercises and their catalytic ability was nurtured through planned interactions to understand their specific needs and accordingly capacity building

Addressing vulnerabilities success factors & challenges:

- + Focus on gender equality and social Inclusion
- + Engaging poorest communities through participatory planning process
- + Linking vulnerable communities to sanitation entrepreneurs

interventions were organised to address them. Similarly, the project focused on the poorest communities through the participatory planning process and creation of CAPs, to integrate their sanitation needs with other development concerns. In this manner, the project ensured that the most marginalised and vulnerable population were included in the project.

The project additionally linked the vulnerable communities to sanitation entrepreneurs who would either offer discounts or provide the material on instalment or loan basis to enable poor families to adopt sanitation behaviour changes. Similarly, the project encouraged financially disadvantaged families to take loans from their respective TLOs and formed the link between the two to facilitate this process. In the capacity building sessions with TLO

position holders, the project team was conscious about sensitising them about reaching out to the community and offering help in order to enable them to access sanitation materials and facilities.

The project also adopted a low-cost toilet promotion approach called the '7 B' approach, which stands for seven different types of locally available materials which can be used for the construction of super structures. These are: bamboo, bag (jute or plastic bags), bush (hay), bricks, boulders (stone masonry), blocks, and blend (mixture of two or more materials). The objective was to build the knowledge and capacity of the poorest and socially excluded groups to construct low cost toilets with locally available materials and to enable different kinds of users to access toilets.

SUMMARY OF SUCCESS FACTORS AND CHALLENGES

Key elements	Successes	Challenges
National policy context	No- subsidy approach provided for uniform and consistent strategies	Handwashing not included as a ODF criterion poses threat of faecal-oral contamination, defeating the positive health outcomes expected from an ODF environment
	Clear ODF target date was set generating a nation-wide movement to achieve ODF involving all actors	
	High technology standard as a minimum criterion for declaring ODF ensures sustainability of facilities and also sustained use of these facilities	
Institutional Engagement	Establishment and strong functioning of bodies such as Project Management Committee and ward, municipality and district WASH committees	Committees need to be remain active and sustain post ODF activities to achieve Total Sanitation targets. Evidence of this is lacking at present.
	Engagement of all diverse local stakeholders	
Application of CLTS approach	A strict no-subsidy approach was followed	CLTS was one of the approaches recommended among other participatory approaches. In communities where CLTS was not implemented, behaviour change was motivated

		through external campaigns, social pressure etc.
	CLTS tools were used appropriately according to community context and level of motivation required and this was combined with strong post triggering follow up to achieve results	In communities where behaviour change has been externally motivated (not through CLTS methodology), there are chances that behaviour change has been weakly internalised which might not be sustained.
Systematic and effective triggering follow up	Immediate and sustained follow up through innovative techniques and campaigns after the triggering	
	Effective and sustained monitoring as part of post ODF activities is taking place	
Gender and cultural factors	The project staff were carefully selected to cater to different social and cultural groups in terms of sex, language, religion etc.	
	Attention was paid to involve local and religious leaders in all the activities	
Technology options and affordability	Requirement of permanent substructures in the guidelines ensures sustainability	The issue of affordability posed a problem for poorer households, forcing them to construct toilets with lesser number of rings
	Flood proof toilet technology provided as a solution in flood prone areas	
	Sanitation entrepreneurs emerged to respond to the generated demand	
	Mechanisms for financial loans and assistance were developed	
Influencing policy/practice	Project staff on district and national committees will disseminate lessons and good practices from the project widely	
	Project team has provided input on FSM, SWM and flood resilience in the implementation guidelines of Total Sanitation campaign	

		Lessons shared through blogs on Practical Action website for dissemination to the global community	
Faecal Management	Sludge	Investment made by the project and the Municipality in establishing a FSM plant	Delay in completion of the FSM plant leaves little time to have it operational before the project ends.
			No mechanism in place to integrate the informal pit emptiers into the formal system
Addressing vulnerabilities		Women and poorer communities were specifically targeted to be involved in the campaigns and activities	
		Vulnerable communities were linked to sanitation entrepreneurs for financial loans or assistance	
		The project promoted low cost toilets through the '7B' approach to equip poor communities with knowledge about building toilets with different locally available materials.	

4 REFLECTIONS AND RECOMMENDATIONS

The CLTS Foundation team spent around one week intensively working with Practical Action, ENPHO and other local stakeholders to understand, capture and discuss the project process and experiences. This section includes some of the reflections of the group regarding ways to move forward and make further improvements in this project context and in future work in the sanitation sector.

Urban characteristics: One important discussion was around how this project fit within the rural to urban spectrum and the specific lessons that could be drawn from that. Gulariya municipality could best be considered as a small town and peri-urban settlements with agricultural land between. The positive characteristics of this type of location are illustrated alongside the challenges in the following table.

Positive characteristics of more urbanised location.	Challenges of more urbanised location
Concentrated populations in town and settlements has facilitated easier access to communities for triggering and follow up by project and municipal staff as well as FCHVs and WATSAN volunteers leading to more regular contact.	Migration into the area has led to a higher number of people renting who are less willing or able to invest in building a toilet on a property they do not own.
Concentrated population within communities aids the impact of social pressure as all householders can easily see whether others have constructed a toilet yet.	Migration into the area has led to cultural and linguistic diversity which has meant additional strategies by staff for communicating with different groups.
Close proximity of communities has permitted grouping of communities for triggering and follow up (e.g. film shows, street drama)	Concentrated population means that toilets cannot easily be emptied into another pit within the household compound and waste needs to be removed altogether.
Concentrated population will aid the functioning of the faecal sludge collection system, whether formal or informal due to shorter distances for transportation.	The area is a transitional process of increasing urbanisation. Challenges associated with urban sanitation may increase over time, e.g. they may soon be a requirement for connection to piped sewerage systems.
Communities are not far from market centres where they can purchase the necessary sanitation hardware.	

Handwashing: The team recognised that although this is not the national government approach, handwashing should, in fact, be an integral part of ODF, not a later addition under the Total Sanitation campaign. Handwashing is fundamental as pathogens are still not contained until hands are washed and therefore that infection cycle is not broken. The project team committed to thinking about ways to further promote handwashing before the project end. Social mobilisers, W-WASH-CC members, FCHVs and WATSAN volunteers would be encouraged reinforce this aspect of hygiene promotion during the coming months. The district education office could also take on the responsibility to ensure that there are weekly WASH sessions of at least 30 minutes in all schools to reinforce handwashing and other sanitation and hygiene messages.

Monitoring ODF: In order to avoid slippage back to OD as toilets become full or perhaps become degraded or broken, it was recognised that W-WASH-CC should survey all households and rank them green, yellow and red according to status of their toilet. W-WASH-CCs could also play a lead role in ensuring and managing pit emptying systems both formal and informal within their wards. If they are able to provide local oversight and troubleshooting this will aid the smooth functioning across the municipality. Social mobilisers under the project could support W-WASH-CC in this follow up during the remaining period until the project ends.

Informal pit emptiers: The project team recognised an important role in supporting and / or formalising the existing informal pit emptiers alongside the formal FSM system for diversity of cost options and sustainability.

Exit Strategy: As the project end date was fast approaching, there was discussion of the need for an effective exit strategy. For long term institutional sustainability, the M-WASH-CC and W-WASH-CC should be encouraged to develop formal action plans for the coming 2 to 3 years. This should include a strategy for achieving Total Sanitation in all communities post the end of the project. A sustainable business plan should also be in place for FSM including not only a formalised system but also a more affordable informal system that ensures choice and coverage.

Sanitation financing study: During discussions, it was mentioned that the wider community gave considerable support to poorer households to assist them in building their toilets. It would be interesting to carry out a study of how different households obtained the financing to build their toilets: i.e. whether they received full support, partial support or no support; what kind of support (labour, materials, discount, money); the value of that support; where that support came from (family, community, traders, municipality); etc. This will be really useful to show the level of formal and informal support that goes into ensuring a whole community becomes ODF. The project team were encouraged to develop a short questionnaire and collect this data before the end of the project.

Municipal town clean-up: During a walk around the municipal urban centre with members of the M-WASH-CC, it was noted that there is a lot of solid waste lying around the streets. It was discussed that the M-WASH-CC could take leadership in cleaning up solid waste in the town / market area and thus create a striking impression on people coming to the town which would encourage wider behaviour change. Without a wider behaviour change towards all aspects of cleanliness and hygiene the changes in communities can fall apart as they do not see it as part of a wider system. The project team committed to follow up on this idea.

Technology sharing: Practical Action has developed a gulper technology for informal pit emptying in Kenya which may also be applicable in the Nepal context. Other countries are similarly developing FSM technologies, and soon Nepal will have experience to share with its FSM processing plant. Although Practical Action staff do share ideas, more could be done to encourage sharing not only of technologies between countries, but also the process of capacity building, registration and hygiene management for informal workers.

ODF impacts: In other country contexts, the collection of records of the health impacts of ODF have proven to be very useful in further embedding behaviour change. Publicising the statistics detailing decreased incidence of diarrhoea and other water-borne sicknesses, nutritional status of children, stunting in children etc. can be highly effective.

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