

## Open Defecation Free Zone and Practice in Joroyal Gaunpalika

Mukunda Raj Pokhrel  
Health Education, NOU, Nepal  
E-mail: mail2mukundag@gmail.com

### Abstract

*The study is based on Open Defecation Free Zone and Their Practice in Joroyal Gaunpalika -4, Doti District. The main objective of the study is to analyze the practice of open defecation free zone. Out of 310 total households, only 150 households were selected for the study. The cluster sampling method was applied to collect necessary information. The study area was divided into 6 clusters and from each cluster 25 households were selected randomly.*

*According to the study, hand wash practice is very high that is 85.3 percent wash their hands with soap and water and 14.7 percent use soil and water. The high majority of the respondents (88.7 percent) said that they maintained the garden and the toilet, 7.3 percent said that they kept the courtyard of the house plain. Most of the respondents (82.7 percent) cleaned the toilet every day. Most of the respondents (70.7) expressed that they defecated in the field, and 28.7 percent respondents said that they defecated along the riverside and remaining others used the road.*

*In this study, the researcher gives suggestions to the concerned department and to possible future researchers. The government and non-government sectors should support such open defecation free zone area ensuring adequate environmental sanitation. The municipality should be made aware of the importance of a good environmental hygiene. Furthermore, such studies should be conducted at the national level.*

**Keywords:** ODF, Defecation, Free Zone, SLTS, CLTS, sanitation.

### Introduction

Despite the gradual achievements in sanitation, still 57 percent of the country's population lacks access to toilet. A gap of 37 percent between people's access to water supply (80.4%) and sanitation (43.04%) facilities stands as a big challenge in achieving the perceived health benefits from water supply and sanitation services. The poor and disadvantaged communities are the most affected, with children and women fairing worst. Solid waste and wastewater problems are growing rapidly in urban areas. [1].

The population comprises over 100 ethnic groups, who speak 92 languages of which the majority have no script. About 80 percent of the populations are Hindus and other 20 percent are Buddhists, Muslims, Christians, Bahais etc. In Nepal, water supply coverage is 85 percent, Sanitation coverage is 62 percent. There are more than 32,000 schools in Nepal. School sanitation coverage is about 60 percent but less than 40 percent has child, gender and differently

abled WASH facilities. In Nepal, diarrhoea is one of the top 2 killers of children under 5 years old after the ARI. [2].

After the UN declaration on WASH (1980), UNICEF initiated sanitation and hygiene program in Nepal in a small scale to reduce the spread of faecal-oral diseases and specifically impacts on diarrheal morbidity and mortality. In 2006, School Led Total Sanitation (SLTS) was initiated in Nepal with the support of UNICEF/Government. Now the Sanitation Social Movement for Open Defecation Free (ODF) is scaled up throughout the country to meet the National Goal by 2017, based on the National Sanitation and Hygiene Master Plan (NSHMP) and Millennium Development Goal (MDG) Acceleration Framework for Sanitation.

Globally, 2.5 billion people – including 840 million children – do not use improved sanitation; 1.2 billion, almost a fifth of the world's population, practice open defecation. In rural areas, this is the case for nearly 1 in 3 people's share of open defecators by country, in

millions open defecation and its public health, social and economic impacts, can create a vicious cycle of illness, high expenditure on health care, lost work and school hours, and poverty.

Attaining 53 percent sanitation coverage with access to safe and hygienic latrines by 2015 and moreover 100 percent coverage of sanitation and water by 2017, if not impossible, has been a daunting and herculean task with more than 30 percent gap in between from 46 and 76 percent at this point of time. [3].

The world remains off track to meet the MDG sanitation target of 75 percent and if current trends continue, it is set to miss the target by more than half a billion people. By the end of 2011, there were 2.5 billion people who still did not use an improved sanitation facility. The number of people practicing open defecation decreased to a little over 1 billion, but this still represents 15 percent of the global population [4]. Nepal has to achieve at least 53 percent toilet coverage by 2015 to meet the sanitation Millennium Development Goal (MDG). The trend of toilet coverage indicates that Nepal will attain the MDG but it needs pragmatic vision, operational strategies, strengthened institutional arrangements, adequate resources and stakeholders' collaborative efforts to achieve the national goal of universal toilet coverage by 2017. Through all South Asian Conferences on Sanitation, Nepal has made firm commitments to develop the Sanitation and Hygiene Master Plan. This commitment was also reinforced through the Nepal Country Plan for the International Year of Sanitation-2008. Considering the existing challenges and barriers to overcome and the commitment needed to meet National and MDG targets, having the Master Plan in place is essential to mainstream efforts of concerned stakeholders at various levels. Hence, the Steering Committee for National Sanitation Action has formulated this Master Plan to expedite the pace of sanitation promotion and demonstrate Nepal's commitment in its sanitation endeavors [1].

Nationally, 41 percent of the population uses an improved type of sanitation facility (improved or shared) while 50 percent defecate in the open. This leaves some 9.1 million children under 18 years old without improved sanitation; of these children, the majority practice open defecation. This has severe

impacts on the overall health of the country's children, who experience high morbidity and under nutrition, and one of the world's highest rates of stunting, at 43 per cent among children under five. Diarrhoea and acute respiratory infections are the leading causes of under-five mortality, with 10 million cases of diarrhoea occurring annually. Likewise, the socio-economic effects of poor sanitation are significant. The Nepal State of Sanitation Report 2004 reveals that the country continues to bear a loss of some 10 billion rupees (US\$1.33 million) each year due to loss of productive labour resulting from inadequate hygiene and sanitation. [5].

Nepal adopted the approach of School Led Total Sanitation in 2006 and for the first time introduced the concept of "Open Defecation Free" communities and villages. The approach was successful in triggering the school children and school community to adopt healthy habits by ensuring that each child and school community build and use toilets and adopt healthy sanitation practices. It entailed changing social norms around sanitation by facilitating community to analyze their sanitation profile and act to address the issues identified. The program was limited in the sense that it could not be widely scaled up across a wide geographical area and was more a project than a "movement". The programme evolved as a "movement" in 2009 when the Mid and Far Western part of the country was hit by a massive cholera outbreak that affected more than 70,000 people across 25 districts and around 400 people lost their lives which were mostly children [4].

However, the bitter truth still remains that almost ten million people in Nepal defecate in open spaces every day and this is a major threat to public health. The practice is more widespread in the Southern part of Nepal where the coverage is less than 19 percent. However, it is prevalent among all socio-economic groups though the bottom two wealth quintiles bear the heaviest burden.

Despite rapid economic growth, inadequate sanitation and hygiene remain significant problems in the East Asia and Pacific (EAP) region with many countries off-track to reach their Millennium Development Goal (MDG) sanitation target by 2015. Around 100 million people in the region continue to practice open defecation, with three EAP countries – Indonesia, China and Cambodia – among the 12

countries in the world that have the largest populations practicing open defecation. [6].

In August 2013, a UNC researcher collected data for the CLTS Learning Series in Nepal with support from Plan International Nepal. This report describes Plan International Nepal's CLTS implementation approach, focusing on the roles and perspectives of local actors at each phase of CLTS. The most commonly cited enabling and constraining factors for successful implementation are also discussed, along with implications for Plan International Nepal's CLTS approach. This report does not capture CLTS activities funded by other organizations, nor does it comprehensively cover the Government of Nepal's sanitation strategy. It is intended to serve as a case study describing the roles of local actors in Plan International Nepal's CLTS program areas.

Progress in Nepal's sanitation coverage has been very impressive during the past one decade which has risen from 6 percent in 1990 to 62 percent in 2011. As of May 2013, over 1,300 VDCs, along with 13 municipalities and 13 districts have now been declared as Open Defecation Free (ODF). However, there is still much to do to achieve the national target of 100 percent sanitation coverage by 2017, particularly in some low coverage areas such as the 8 districts of central and eastern Terai (Parsa, Bara, Rautahat, Sarlahi, Mahottari, Dhanusha, Siraha and Saptari), where only 19 percent of households have toilets. Furthermore, some of the households that have reported to have ordinary toilets or have not stated the type of toilet, may have unimproved or temporary toilets, which need to be improved. The Census data indicates that only 41 percent of the households nationwide and only 13 percent of the households in the 8 Terai districts have flush toilets connected to septic tanks or sewage system. In this context, there is an urgent need to address the issues in Terai flat lands.

Nepal's sanitation policy is guided by the Sanitation and Hygiene Master Plan, developed in 2011. The Master Plan established a decentralized system for sanitation programming, recognizing the "leadership of the local government bodies," setting the VDC and municipalities as the basic planning unit for sanitation [1]. The VDC is an administrative unit typically consisting of nine wards, each of which comprise many villages, also known in Nepal as

clusters or toles. The Department of Water Supply and Sewerage (DWSS) in the Ministry of Urban Development (MoUD) is primarily responsible for sanitation. MoUD works closely with other ministries, the primary partner being the Ministry of Local Development (MoLD), which houses the Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR). Two formalized mechanisms exist for coordinating sanitation planning at the national level: National Sanitation and Hygiene Steering Committee (NSHSC): coordinates with relevant ministries; reviews policies, plans, and budgets. National Sanitation and Hygiene Coordination Committee (NSHCC): is responsible for national planning of sanitation activities; implements decisions of NSHSC; supports regional and district coordination committees; monitors ODF performance; organizes ODF campaigns. Similar WASH coordination committees (WASHCCs) exist at the regional, district, VDC levels. ODF status is the primary outcome for sanitation in the Master Plan. ODF is defined as the absence of open defecation and 100 percent access to improved sanitation for households and public institutions. An improved toilet is defined as one that has a "permanent structure up to the plinth/floor level from the point of view of durability and sustainability of structures" [1].

For detailed information on CLTS, refer to the Handbook on community led total sanitation. MOUD was renamed as the Ministry of Federal Affairs and Local Development in 2015. Its emphasis on improved sanitation—while designed to safeguard sustainability—poses a challenge for CLTS practitioners, who encourage people to build toilets with whatever resources are available to them. The government promotes a variety of behavior change approaches to achieve ODF status, including CLTS and School led Total Sanitation (SLTS). According to the Master Plan, "any other innovative approach/campaign will be tied up with the joint plan of action of the respective VDC, municipality and district," so long as the approach does not focus on hardware subsidies (Steering Committee 2011). This strategy theoretically prevents the overlap of different implementation approaches in the same program areas, as all approaches have to be in line with the local government's action plan. The WHO/UNICEF Joint Monitoring Programme

(JMP), which estimates water and sanitation coverage using various national data sources, estimated Nepal's coverage of improved sanitation in 2015 at 56 percent. According to the JMP, rural coverage was 44 percent with 38 percent practicing open defecation. The national census estimates that between 2000 and 2011, sanitation coverage doubled from 30 percent to 62 percent (Government of Nepal 2013). National targets aim for 80 percent toilet coverage by 2015 and universal toilet coverage by 2017 (Steering Committee, 2011). The October 2013 ODF Status Update from GON listed 10 ODF districts, 12 ODF municipalities, and 1042 ODF VDCs. By 2015, 22 districts, 63 municipalities, and 1564 VDCs were reportedly listed as ODF.

Plan International Nepal was one of the first organizations to pilot CLTS in 2004, along with Water Aid Nepal and Nepal Water for Health. CLTS was initially integrated into communities in which Plan International Nepal already had drinking water schemes. Small communities, called clusters or toles, within wards were triggered, and water and sanitation users' committees mobilized communities toward ODF status. An evaluation of their WASH program in 2007, which at the time included hardware subsidies and CLTS, found that CLTS had been more effective at reducing open defecation (Plan Nepal 2007). Therefore, Plan International Nepal changed their sanitation strategy entirely to the CLTS model. In 2011, the VDC became the basic unit of ODF declaration as per the government's Master Plan. As Plan International Nepal was focusing on the cluster and ward level at the time, they had to scaled up their approach to comply with government guidelines. One Plan International Nepal staff member recalled that this transition was challenging because there was no clear strategy in place, and different organizations practiced different approaches within VDCs. As district level planning improved, there was clearer delineation of responsibilities. Plan International Nepal is now responsible for 105 VDCs out of 3972 VDCs in the country. They work in six of Nepal's 77 districts. At the time of this study, all their CLTS activities were funded through their child sponsorship budget and thus were not bound by project timelines. Institutional arrangements for sanitation, as detailed in the Master Plan, are complex and decentralized. The

sanitation activities in Plan International Nepal program areas, as they are implemented within the government's sanitation and ODF campaign. At the national level, Plan International Nepal is an important non-governmental stakeholder in sanitation programming. They coordinate activities with ministries and other NGOs through the NSHCC. At the district level, the District WASH Coordination Committee (DWASHCC) is the primary mechanism for coordinating and implementing sanitation activities. Plan International Nepal is a member of the DWASHCC, as are district government offices and other NGOs. The DWASHCC is chaired by the head of the District Development Committee (DDC), which is a central coordinating body for district government departments. The DWASHCC assigns VDCs to different district government departments and NGOs—both international and local—including Plan International Nepal. They also determine funding allocations to VDCs using a combination of funds from the government and from NGOs. In this manner, the district government attempts to lead and coordinate sanitation activities in an inclusive manner.

There are many similarities and differences on custom, cultural and social norms in Nepal due to diversities in castes and geographical regions. Almost 38 percent of the population in Nepal practice open defecation. But in the flat land areas where population density is very high, more than 70 percent consider it as normal and is established as an accepted behaviour and part of custom. Open defecation is thought to be the most convenient and cheap practice. There are some empirical expectations or social norms on use of toilets. Major factual beliefs regarding the open defecation are children stool is not harmful, open defecation is socially accepted and a harmless practice, open defecation in agricultural land increases fertility of the land, going away from the home contributes to clean domestic environment.

In absence of good social norm, people prefer to follow the open defecation practice irrespective of what other people do. Moreover, there are many challenges especially on universal coverage and sustainability such as case and context-dependent, lack of secure sustained funding for social norms-based strategies and broader normative frameworks.

ODF is a bottom line of all sanitation intervention, concerning this thing so many programs were implemented about open defecation free. Joroyal Gaunpalika is one of the Gaunpalika of Doti district of Seti Zone and province number 7. Where there are 3808 household and the total population is 20,824 where the number of males is 10,156 and the female are 10,668. The Joroyal Gaunpalika is became a free from the problem of open defecation.

## Objectives

The main objectives of this study are to analyze the practice of open defecation free zone and to detect the personal hygiene practice among the respondents.

## Research question

- What is the practice of ODF in the study area?
- What is the personal hygiene practice among the respondents in the study area?

## Significance

It will be helpful for the local level governmental and non-governmental organization to plan about health services programme.

## Research methodology

The present study was based on descriptive type of research design and involved quantitative information This study was conducted in Joroyal Gaunpalika of Doti district.

**Table 1.** Distribution of Respondents by Defecation Practices

Description	No.	Percent
Field (Open ground)	106	70.7
Riverside	43	28.7
Road	1	0.7
Total	150	100

Source: Field Survey, 2075

The above table indicates that more than 70.7 percent respondents express their defecation practice in the field and 28.7 percent respondents' opinion is riverside and remaining

In this Gaunpalika woda number 1 the total household was 507. Out of them 150 households were taken as the population of the study. This Gaunpalika has become free from the problem of open defecation.

Among 507 households in Joroyal Gaunpalika, Doti, out of total households, 150 households were selected for the sample. The study follows cluster sampling technique under probability sampling method. The study area was divided into 6 clusters and from each cluster 25 households were selected randomly. After rapport building and creating favourable environment, the researcher administered questions one by one on selected study cluster. He also collected the necessary information through internal discussion.

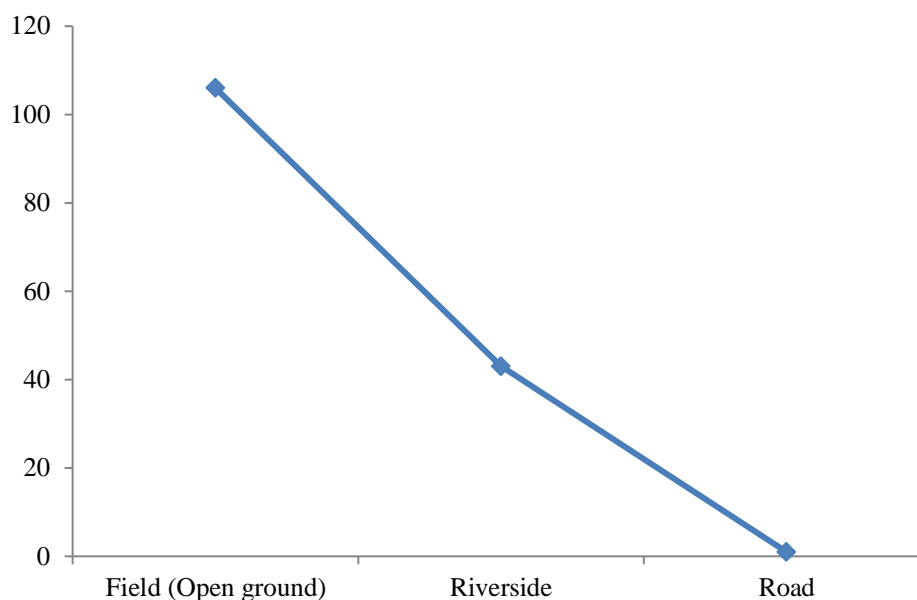
The collected data and information were analyzed and interpreted with quantitative method with the help of simple statistical method i.e., tabulation, percentage etc. According to the nature of data different types of table, figures and diagrams were used to analyze and interpret the information. Further, it is noted that no any inferential statistical method has been in the present study.

## Result and Discussion

### Practice on place of open-defecation

Practice refers to an appropriate application of concepts, principles and actual action of ODF. The defecation practice of respondents in the study area is given below.

others use the road. People still prefer open ground due to their unawareness regarding the bad effects of open-defecation.



**Figure 1.** Distribution of Respondents by Defecation Practices

The ODF refers to when no faeces are openly exposed to the environment. Achieving ODF might involve the use of any form of latrines that prevent exposure of faeces to the environment

with provision for moving up the sanitation ladder. The place of ODF at night is given in table 2.

**Table-2.** Distribution Respondent by Defecation Practices at Night

Description	No.	Percent
At the family garden	132	88.0
Open ground	9	6.0
Road	5	3.3
River bank	4	2.7
Total	150	100

Source: Field Survey, 2075

The above table indicates that 88 percent of respondents defecate at night in their family garden, 6 percent in open ground, 3.3 percent in the road and remaining others defecate on the river bank. They go to their own garden at night because they feel comfortable and safe.

### Practices on Personal Hygiene and Sanitation

Personal hygiene is the standards someone has of looking after parts of their body such as hair, skin, teeth and breath, hands and nails, and

keeping them clean and the sanitation is the practice of being hygienic, especially referring to public hygiene.

### Hand Washing Practice after Defecation

Globally hand wash is a very important aspect of a healthy person. To maintain hygiene, it is necessary to wash hands thoroughly with soap, water every time after going to the toilet. The respondents used different practices while washing their hand after defecation as shown in the table 3.

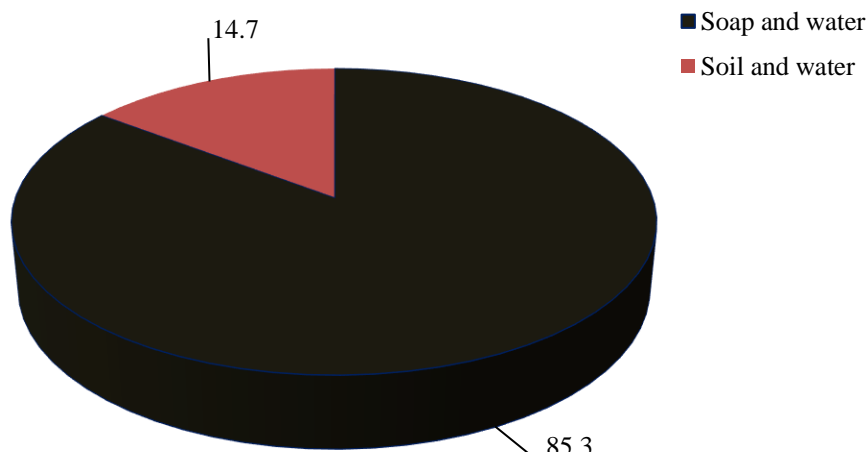
**Table 3.** Distribution of Hand Wash Practice after Defecation

Description	No.	Percent
Soap and water	128	85.3
Soil and water	22	14.7
Total	150	100.0

Source: Field Survey, 2075

The above table shows that among the total respondents, 85.3 percent used soap and water while washing their hands after going to the toilet, followed by 14.7 percent washed their

hands with soil and water. Most of people wash their hands with soap and water after going to toilet but some use soil and water.



**Figure 2.** Distribution of Hand Wash Practice after Defecation

### Practice on cleaning environment

Clean environment is free from dirt, waste products or unwanted substances, the conditions and influences under which an organism lives.

**Table 3.** Distribution of Respondents by Cleaning Environment Around the Home

Description	No.	Percent
Keep the courtyard of the house plain	11	7.3
Manage drinking water	4	2.7
Maintain the garden and the toilet	133	88.7
Look after flowers	2	1.3
Total	150	100.0

Source: Field Survey, 2075

As shown in the above table, 7.3 percent said that they kept the courtyard of the house plain, 2.7 percent indicate that managed drinking water, the higher proportion of respondent 88.7 percent were in favour of maintaining the garden and the toilet. Likewise, lower proportion of the population, 1.3 percent, said that they looked

after flowers. Most of the users-maintained cleanliness.

### Practice on Frequency of Cleaning Toilet

Cleaning the toilet keeps it free from dirt, waste products or unwanted substances and reduces bad smell.

**Table 4.** Distribution of Frequency to Cleaning Toilet

Description	No.	Percent
Every day	124	82.7
Once a week	12	8.0
Seldom	12	8.0
Once a fortnight	2	1.4
Total	150	100

Source: Field Survey, 2075

The above table indicates that a large number of respondents, 82.7 percent, clean the toilet

every day, 8 percent respondents clean the toilet once a week. Similarly, 8.0 seldom and 1.4

percent clean the toilet once a fortnight. It can be that majority of said respondents clean their toilet every day. People are found conscious regarding the everyday clean of toilet.

## Conclusion

Health is essential for the signification of human need to improve quality of life. In fact, it is very difficult to carry out a study to analyze the practice of open defecation free zone. This Gaunpalika is one of the fastest growing Gaunpalika and the issue of the ODF management is a very serious problem in the Gaunpalika. However, this study is confined in certain limited area. In this Gaunpalika, the technical and untrained human resources are for lacking achieving the effective management of ODF. The role of the people's participation is seen unsatisfactory. The overall study concluded that significance of ODF programme is not seriously taken in the study area.

## Reference

- [1] Steering Committee for National Sanitation (2011). *Sanitation and Hygiene Master Plan-Nepal*, Government Nepal.
- [2] Shrestha, N. L. (2013). *A Collaborative Effort through Children as Change Agents*. Kathmandu: UNICEF.
- [3] As Ecosan Resource Centre. (2009). *A Concept Paper on Darechowk VDC*: Kathmandu.
- [4] Gautam, A. Paudyal. (2014). *Learning Program on Advances in Social Norms and Social Change*. Kathmandu: UNICEF.
- [5] UNICEF (2009). *Community Approaches to Total Sanitation*, New York.
- [6] UNICEF (2013). *Community-led Total Sanitation*. East Asia and Pacific Regional Office.
- [7] Illian, M., & Cikhartova, M. (2012). *Returning to Open Defecation: Nature Healing Nature*
- [8] Kar, K. & Chambers, R. (2008). *Handbook on Community-led Total Sanitation*. UK: Plan International.
- [9] Mukherjee, N., Robiarto, A., Eentrif, S. & Wartono, Djoko. (2012). *Achieving and Sustaining Open Defecation Free Communities: Learning from East Java, Africa*
- [10] Singh, Ms. Roy. (2014). *Annual Report*, ENPHO. Nepal.
- [11] Wiener, Macro. (2014). *Water, Sanitation and Hygiene in Jitpur Phedi*, Final report-orientation internship, Netherlands: Nepal.
- [12] CBS (2013). *Environment Statistics of Nepal*. Kathmandu.
- [13] WSP (2004). *The Case for marketing Sanitation*, Field note, Africa.
- [14] WSP (2007). *Community-led Total sanitation in Rural Areas*. An Approach that Works, Nepal.
- [15] SACOSAN-V (2013). *Nepal Country Paper on Sanitation*. Nepal
- [16] Social Sector Service Delivery (2015), *Good Practices Resource Book*. India: Jharkhand.