CHAPTER-I

INTRODUCTION

1.1 Background of the Study

There is no any record of sanitation and hygiene promotion efforts in Nepal before 1980. Breakthroughs were made in the area of water supply and sanitation in the UN-declared "International Drinking Water Supply and Sanitation Decade" (the 1980s). In 1987 UNICEF partnered with the Nepal, Department of water supply and Sewerage (DWSS) to design and implement a water supply and sanitation program. Then in 1994 the Nepal Government formulated a sanitation policy that aimed to promote sanitation throughout the country. After a number of efforts made in the sector, a national baseline survey of 1994 reported latrine coverage of 12 percent compared to six percent latrine coverage in 1990. In 1998, a national level sanitation steering committee was established bringing together Government Agencies, donors, Governmental Organization, International/Non Governmental Organization (I/NGOs), and other relevant organizations. In the succeeding year, a basic sanitation package (BSP) was developed and implemented in most water supply projects throughout 75 districts of Nepal. Since 2000, National Sanitation Action Week (NSAW) program has been introduced systematically.

Despite the gradual progress made in the sector, Acute Respiratory Infection (ARI) is the leading cause of death children under five, and diarrhea is the second major cause of death in Nepal (NDHS-2006). Poor, disadvantaged and rural-based people are most vulnerable. Many poor households have little or no access to hygienic sanitation and clean drinking water facilities. An estimate of the annual economic loss due to the lack of improved facilities is 4-10 billion Nepalese Rupees ($57-143 million) (UNICEF/DWSS, 2000). According to WHO; there are ten thousand and five hundred children are dying annually due to poor sanitation and its effects to health.

Nepal also expressed commitment to fulfill the sanitation target, which is a part of the MDG and committed at the south Asian Conference on Sanitation (SACOSAN) held in Bangladesh in 2003 to achieve a national goal of sanitation for all by 2017. The government has been developed a national guidelines on hygiene and sanitation in 2005 in coordination with concerned stakeholders. The Rural Water Supply and

Sanitation National Policy, Strategy (RWSSNPS) and Sectoral Strategic Action Plan (SSAP) revised in 2004 have also promoted strategic actions to contribute to the MDG and national goals of total sanitation. Level wise acting committees have been formulated and activated as N-WASH-CC for national level, D-WASH-CCs for district level, VM-WASH-CCs for Village development Committee and Municipal level and W-WASH-CCs for ward level. Awareness level of people have been raised and enrolled in this sanitation movement. (Sanitation and Hygiene Master Plan, GoN 2011)

Dhamauli VDC of Rupandehi district also started community based sanitation improvement activities leading by Village level Water Sanitation & Hygiene Coordination Committee (V-WASH-CC). Drinking Water and Sanitation Sub Division Office (DWSSO), Yogikuti and a NGO named AMDA Nepal has been extremely supporting to this VDC to improve access of people in sanitation. Toilet construction materials for 600 house hold have been distributed by AMDA Nepal. NPR 3000 has been provided to ultra poor people of Dhamauli VDC as reward for toilet construction. VDC's fund also invested in the sanitation improvement activities. Total 80% households of Dhamauli VDC have been constructed the toilet by Multisectoral effort. (Monthly progress report of Dhamauli V-WASH-CC, Aug-2014) So this research has been carried out aiming to find out actual situation of ODF campaign in the Dhamauli VDC.

1.2 Statement of Problem

Nepal has to achieve 53% toilet coverage by 2015 to achieve the sanitation millennium development goal (GoN, 2011). Hence the target of ODF country declaration is in 2017. A big challenge is realized especially in rural communities of Terai areas to change the peoples' behavior for achieving national target. Only 13 districts out of 75 have been declared as Open Defecation Free (ODF) till the date. Communities based government unit like VDC cum V-WASH-CC are doing their best to support to national sanitation master plan but still the rural communities are not well aware on it. They prefer open filed defecation rather than toilet. Many times it has been explored through the media that; Community people are using toilet cabin to keep only animal dung or bi product of grain instead of defecation. Most of the Terai inhabitant (local ethnic group) says "They feel like a prison inside the toilet and can't expel stool".

Dhamauli VDC is located in Southern part of Rupandehi district. National policy of sanitation has been implementing there under the local governance. The Drinking Water and Sanitation Division Office (DWSDO), District Development Committee, Village Development Committee with some NGOs and local people are main stakeholders of sanitation activities in Dhamauli VDC. However the VDC has not been declaring ODF yet. This research study focuses on the following problems.

1. What is the status of sanitation in study area?
2. What is the pattern of toilet use?
3. How aware are local people on sanitation issue?
4. What is the level and behavior of local people on sanitation?
5. How effective are Open defecation free declaration activities in the study area to achieve the national goal even multiple agencies are working in it?

1.3 Objective of the Study

The general objective of the study is to find out the real situation of Open defecation free declaration campaign in the study area whereas specific objectives are as follows.

- To examine the toilet construction status in Dhamauli VDC.
- To assess the status of toilet utilization status in Dhamauli VDC.
- To analyze the level of people awareness on sanitation in Dhamauli VDC.
- To examine the effectiveness of sanitation activities in Dhamauli VDC.

1.4 Significance of the Study

Nepal has population of 27.5 million, with 25.4 percent of the population living below the national poverty line (NPC, 2010). Poor sanitation and use of contaminated water is the cause of more than 80% diseases in gastrointestinal system. Nepalese people especially who living in remote and rural area are suffering by many communicable diseases like Diarrhea, Dysentery, Cholera, Typhoid, and Infectious Hepatitis so on. According to the mass media also, every time we are noticing an epidemic problems occurring in throughout the country. To achieve the Sanitation and Hygiene Master Plan, 53% toilet coverage by 2015 and total ODF declaration in 2017 is the target for Nepal government. (GoN 2011) Several efforts are being implemented by multi sectors like governmental & nongovernmental organization, media, civil society and social workers etc but still there is lacking between the policy level/resource

mobilization and targeted beneficiaries. Government is investing huge budget to achieve the MDGs by improving sanitary environment. Many donor agencies are also expending huge amount on physical and awareness activities support program in sanitation sectors. VDC level committee as called V-WASH-CCs (VDC level water sanitation and hygiene committee) are initiating the sanitation related community activities. They are providing toilet construction materials, conducting awareness activities/campaign and monitoring, technical input in construction etc. Thus, the communities are still seems almost same situation such as ignoring or do not give priority over hygiene related issues. There might be several reasons behind this so this study/research was designed to know the real situation of toilet construction and utilization in Dhamauli VDC of Rupandehi to support for fulfilling national target.

1.5 Limitation of the Study

Health & sanitation issue is most popular and frequent spoken words in these days. This research has been titled as study on open defecation free declaration campaign at the VDC level. Research itself is very important and needy on such popular and highly concerned issue at local & national level but it has many limitations as following;

- This research covers only the three wards of Dhamauli VDC, Rupandehi.
- Study has been more concerned on existence of toilet, its use and maintenance.
- This study has been taken place by random sampling of three wards, which might not represent any ultra poor or relatively advance community.
- This research does not include multiple impacts like socio economic development of people by improved sanitary environment.
- This research only covers the human excreta disposal at household level.
- Water and sewage system has not been included in this research study.
- 54 households of 3 wards have been selected as respondents due to time and resource constrain.
- This research was conducted as an academic purpose that may not be generalized for other purpose/area.

1.6 Organization of the Study

This thesis is organized into different six chapters. Introduction part is in first chapter which includes background of study, statement of problem, objectives of study, significance of study, limitations of study and organization of study. Similarly second chapter includes review of related literatures. In the third chapter; study area, rational of area selection, research design, population and sample size and sources of data has been mentioned. Analysis and interpretation has been mentioned in the fourth chapter as per the objectives. Chapter five includes summary, conclusion and recommendation.

CHAPTER-II

LITERATURE REVIEW

Efforts have been made to review past publications, documents, reports, related research papers, articles etc pertaining to the area of this research. Only few materials found for review on related subjects since the issue is not very rare. It might be due to Open defecation free declaration campaign is recent issue of Nepal. However researcher has made an attempt to review the following literatures.

2.1 Sanitation Status of Nepal

Sanitation, health, agriculture are the crucial aspects in rural, urban communities in providing the better living condition. Among them, Sanitation is one of the first major issues for healthy community. The life expectancy of human has drastically increased in last half centuries because of the behavioral change in managing and handling human waste. Centralized sanitation system in urban areas as sewerage system is mostly appreciated system developed in last centuries. However, the centralized sanitation system is polluting the environment in bigger scale. In context of rural areas, where sanitation facilities are not accessible, open defecation, direct pit latrines are practiced as an alternative. The importance of sanitation in Nepal was actually recognized with the addition of a sanitation related target to the Millennium Development Goals (MDGs) following the Johannesburg Summit on Sustainable Development in 2002 (Shrestha, Tayler & Scott, 2005). In 1990, the national sanitation coverage was merely 6% of the population. The coverage reached 62% in 2011 (CBS 2011). The sanitation situation of the country is unevenly distributed across the development and ecological regions as well as rural and urban areas. The current nation-wide movement in sanitation is measured in terms of ODF Municipalities and VDCs. As of March 2013, 748 VDCs and 6 Municipalities have been declared as ODF areas. Five districts (Kaski, Chitwan, Tanahun Myagdi and Pyuthan) have achieved 100% sanitation coverage and they have been declared as ODF Districts. (Nepal Country Paper on Sanitation, SACOSAN-V 2013)

In a published work from Department of Water Supply and Sewerage, Nepal, the national sanitation coverage is only 43% by 2010 which is even lower in rural areas where majority of the people (80%) resides. And there is wide gap of sanitation

coverage between rural (37%) and urban (78%). The sanitation coverage in mountain, hill and terrain are 52%, 42.3% and 35.3% respectively. More than half of the population yet lack sanitation access. Therefore, a goal was made to provide sanitation access to all the population by 2017 by Government of Nepal and other foreign organization. (Sanitation and Hygiene Master Plan, 2011)

2.2 Institutional Setup for the Sanitation Sector

The Department of Water Supply and Sewerage (DWSS), under the Ministry of Urban Development (MoUD) is the lead Department of Drinking Water Supply and Sanitation. It is functioning in all 75 districts through its Division/Sub-division Offices (WSSD/SDOs). Regional Offices in five Development Regions are established for monitoring. The Ministry of Federal Affairs and Local Development also works on Water and Sanitation in all the 75 districts through its Technical Department named Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR) whose district unit is called District Technical Offices (DTO). The District Development Committee (DDC) is the local body at the district level. The District Water Supply, Sanitation and Hygiene Coordination Committee (D-WASH-CC) has been formed with DDC Chairperson as the chair and chief of WSSD/SDOs as the Member Secretary and other key sector agencies as members. This committee develops the District Level Strategy for Sanitation promotion. All the concerned agencies work collectively. For open defecation free (ODF) and Total Sanitation promotion movement the Municipality and VDC level WASH Coordination Committees (M/V-WASHCC) have been formed. Similarly, The Regional WASH Coordination Committees (RWASH-CC) have been formed in the five Regions. A National Sanitation and Hygiene Coordination Committee (NSHCC) have been formed at the central level to coordinate partners. Above that the National Sanitation and Hygiene Steering Committee (NSHSC) comprising related Ministries has been formed as the directing body. (Nepal Country Paper on Sanitation, SACOSAN-V 2013)

2.3 The Sanitation and Hygiene Master Plan

The Master Plan largely focuses to Open Defecation Free (ODF) with universal access to toilet in both the urban and rural context through the total sanitation

approach. It has recognized the improved toilet facilities as defined by the Joint Program Monitoring (JMP) Report of UNICEF and WHO. Apart from ODF and toilet coverage, it has encouraged hygiene behaviors at household level and institutional sanitation. The Master Plan states that, all concerned government agencies, local bodies, donors, International/Non Governmental Organizations, and other WASH sector stakeholders should strictly adhere to the guiding principles while planning and implementing hygiene and sanitation programs in all water supply projects, other concerned program packages and projects including approaches and modalities. The guiding principles of the Master Plan are as follows:

- ODF as the bottom line of all sanitation interventions.
- Universal access to sanitation facilities in water supply and sanitation project areas.
- Informed technological choices for household toilets.
- Leadership of the local bodies in sanitation sector activities.
- VDC and Municipality as the minimum basic unit of all sanitation program intervention.
- Locally managed financial support mechanism.
- Mandatory provisions of sanitation facilities in all institutions.
- Mandatory provision of toilets in newly built up buildings.
- Focus on hand washing with soap and other sanitary behavior

Action Steps and Program Implementation Process: The Master Plan has recommended four action steps for hygiene and sanitation promotion: a) institutional building (formation and reformation of steering committee and coordination committees at the centre, region, district, municipality and VDC levels), b) planning and programming (formulation of unified plan/plan of action and capacity development activities), c) ODF campaigning (triggering and mass sensitization activities), and d) post-ODF campaigning (total sanitation and behavioral build up process). The Master Plan has set VDC and municipality as the minimum basic unit of sanitation program intervention. However, it emphasizes that the ODF process gradually takes place from a settlement, ward or school catchment area to VDC, municipality and district with catalytic role of schools, NGOs, civil society and local level organizations. The Master Plan recognizes school and community-based program approaches and other innovative campaigns to promote hygiene and sanitation within the planning and implementation framework of unified plan/plan of action led by VDC, municipality and District Development Committee (DDC). The

district, municipality and VDC level WASH Coordination Committee are authorized to validate ODF, monitor activities, evaluate performances, document the learning and share the information. The Master Plan lies amid both opportunities and challenges. The maximization of such opportunities and minimization of potential challenges is must for its effective implementation. The above potential challenges seem to be manageable. Hence, given the growing political interests and commitments, intra and inter-sectaral alliances and collaboration, proactive role of local bodies, increasing engagements of media and civil society organizations, strengthened schools and community partnership, the Master Plan can be implemented effectively. It is inevitable to promote grassroots level 'institutional arrangements' to trickle down the development to the roots of the grass root and to foster good governance and local democracy. Community participation and leadership then reduce cost to government, avoid bureaucratic hurdles, ensure equity, maintain uniformity, improve efficiency, avoid duplication, scale up services at scale and maintain sustainability. The local bodies should not sideline schools, child clubs, NGOs, cooperative groups and women groups-- the real actors in the grass-root levels. The Master Plan should therefore create an amiable environment so that 'little hopes bloom', 'little ideas grow' and 'little minds unite' to make a big leap for the advancement of the sanitation sector. (An Opportunities and Challenges" by Kamal Adhikari (Sociologist) Global Sanitation Fund Program, UN-Habitat Nepal)

2.4 A Message of Gela VDC

There are 693 households. Prior to intervention of sanitation around 5% were used to toilets. Excreta could be seen on the foot trails, public places, villages, stream banks, around the jungle and school surroundings causing bad odor and smell and health hazards. Various diseases like cholera, worms, and diarrhea were frequent due to which the rate of child deaths under five years was high. But later, the local people overcame these terrible incidences their incessant efforts, commitment, strategic action and their collective will power. The local community people carried out various tasks for achieving the ODF status. First, they organized themselves into a village level task force committee i.e. V-WASH-CC along with representation of women, students, local CBOs, teachers, child club, youth network, representatives of VDC, health post, mass media, cadres of political parties. They also formulated the sub-committee and volunteer groups in each ward/cluster. Along with some bold

decisions taken through the various level committees they initiated to overcome the longstanding problems surrounded them. Identifying existing problems and assessing the local needs they organized various campaign activities - orientation programs; trainings; demonstrations on hand washing with soap, use of safe water and food, demonstrations of sample toilets - for sanitation promotion. They decided to promote toilets of any type as per their capacity for managing excreta properly through the use of toilets. They also decided to support ultra poor family who were not able to adopt on their own. They identified the potentiality hidden in their own local materials such as stones, bush, and tree branches for constructing toilets. Interestingly they used stone slates as pans. They also generated funds on their own initiation to enhance the capacity of the local people for building awareness. Consequently, the local people achieved 100% coverage. This way they were successful in declaring their VDC as an ODF village. For the continuity of ODF moving towards total sanitation they formulated some local level strategies i.e. prohibition of open defecation, fines, regular monitoring, and distribution of identity cards for attaining the state of total sanitation. Due to these measures, now open defecation has been exclusively stopped and prohibited in their village. Diarrhoea cases decreased. They altered their "Guye Village" (place with shit and filths) into a suitable place to live. Now their village surrounding has become neat and tidy. (Nepal Country Paper on Sanitation, SACOSAN-V 2013)

2.5 Findings of Watson's Survey 2010

- National water supply coverage is 80.4 per cent and national sanitation coverage is 43.0 per cent.
- There is disparity in sanitation coverage: Western Development Region (WDR) has the highest at 53.5 per cent and Far Western Development Region (FWDR) has the lowest at 29.1 per cent.
- Geographically, the Hills have the highest sanitation coverage at 52.9 per cent and the Mountains have the lowest at 33.6 per cent.
- Households with a toilet, 42.2 per cent have pit latrines, 53.9 per cent have water seal toilets and 3.9 per cent have other types of toilet (biomass, eco-san, etc.).
- About 1.8 per cent of the households having toilet did not use them; these have been excluded from sanitation coverage figures.

- The households covered by a toilet in use, 8.8 per cent have poorly managed toilets that were hygienically satisfactory but with unmanaged superstructures and 11.8 percent have dirty, unhygienic toilets.
- There are currently a total of 76 ODF VDCs in the country.

2.6 Women and Improved Sanitation

Sanitation and good hygiene from the first moments of birth is essential to protect newly borne babies by sepsis. In 2012, 6.6 million children worldwide, tragically, didn't reach their fifth birthday. The highest rates of child mortality are still in Sub Saharan Africa – where 1 in 10 children die before age five, and among the most common causes of this are pneumonia (17% of all under five deaths) and diarrhea (9%) both substantially linked to hygiene and poor sanitation. Toilet and basic hygiene can help both boys and girls to survive these first five years and be healthy enough to attend school. Access to a toilet can help children succeed in education. Basic sanitation and hygiene will reduce the number of episodes of diarrhea and worm infections and making sure children don't miss class due to illness. It also contributes to better nutrition, which has a positive impact on attendance, cognitive ability and lifetime earnings. When a girl reaches puberty access to a safe, private toilet can make a crucial difference. When women don't have access to a toilet they are forced to go outside. This can mean travelling long distances and often at night in order to retain some privacy and dignity under the cover of darkness. This can increase the risk of harassment, sexual violence and even rape. Poor sanitation has a domino effect. With the considerable impact of unhygienic sanitation facilities on health, a lack of facilities in the workplace can have an impact on absenteeism, affecting livelihoods, productivity levels and ultimately the economy. And as women go through different stages of life including pregnancy and old age not to mention if someone has a temporary or permanent disability the design and the proximity of the toilet becomes all the more important. One of our challenges is that we don't always know whether women and girls have access to a toilet, or the soap and water needed to wash their hands, or the means to look after them during menstruation in privacy. Even if a toilet exists in a household, there may be a cultural taboo that blocks one family member, such as a daughter-in-law, from using it. Access to sanitation is currently measured globally by the WHO/UNICEF Joint Monitoring Program against

the targets set when the Millennium Development Goals were set and using internationally agreed definitions for “improved sanitation”. Currently this monitoring doesn’t provide a breakdown of access for men and women, girls and boys or measure aspects of hygiene, including menstrual hygiene. However, as the international community looks beyond 2015 to consider development priorities after the end date of the Millennium Development Goals, steps are being taken to improve these indicators. Measuring whether girls and women have access to the sanitation and hygiene they need is crucial. If we can’t properly measure the size of the problem or measure our progress, there is a huge risk that the needs of women and girls will be neglected and this has been recognized by the WHO, UNICEF and many other agencies. Extensive technical consultations have been undertaken led by the WHO/ UNICEF Joint Monitoring Program in order to create detailed recommendations about what the priorities should be for WASH – water, sanitation and hygiene and how progress should be measured. Lack of sanitation is an issue that disproportionately affects women. The global sanitation crisis means that 2.5 billion people lack access to a toilet and this disproportionately affects women. they need the privacy of a toilet during menstruation; they are at increased risk of violence if they don’t have one and have to go outside, often late at night.
(We Can’t Wait: A report on sanitation and hygiene for women and girls by Domestic Water Aid WSSCC)

2.7 KAFUE District Strategic Findings of JAMBIA

Effectiveness of CLTS (Community Led Total sanitation) in context

Families in MASAITI reported that incidences of diarrheal diseases have reduced from the time that they became ODF. They admit to ignoring the use of toilets as they were lazy then; but now they all have toilets with some people in neighboring villages, construction toilets after seeing the difference in KAMPUNDU village. The team however, felt that that the program was only 50% effective because of inadequate follow ups on the ground, failure to implement planned program due to lack of resources; and that “CLTS is about behavior change and not latrines”.

Efficiency of CLTS Approach

Arriving at KAMPUNDU village, one is greeted by a placard that reads "ODF in Ten Days! 30th Aug to 10th Sep 2010". The placard is posted at the front of the Headman's house and tells a story of how efficient CLTS can be where a need is really felt to bring about change in a community. The people in the village constructed toilets within ten days, working in teams and assisting each other with the materials. Ten days later the district team visited and found the village ODF (in a population of 141 people, there are 27 households all with toilets from a previous 6 only). Other factors that have affected the program efficiency include the trigger process, the local leadership and the people's perceptions to the concept and change.

Relevance of Approach

CLTS draws relevance in achieving ODF as there are reduced incidences of diseases in communities and more people appreciating improved sanitation and hygiene practices. Mothers reported that even the youngest children did not shit anyhow and reported to their mothers that they had left shit and wanted their mothers to clean it up.

Sustainability of Interventions

In order to foster sustainability, the district team has embarked on training the local members of the community to carry on monitoring and follow up activities in their absence. However, one major challenge was the collapsing of toilets that causes fatigue in the people to construct toilets each time they collapsed. Hand washing is the greatest challenge as most communities visited did not have any clean water nearby; this resulted in people not washing hands as it is not considered a priority; under the circumstances.

Impact of Community Led Total Sanitation (CLTS)

In order to stress the impact of CLTS, on family narrated how their daughter returned from holiday in the city within three days after finding poor sanitary conditions at her relative's home. The daughter had gotten used to using a clean toilet. The lesson was on how well people's attitudes have changed since CLTS was introduced in their communities. Some mothers talked to also indicated that their children are cleaner looking each day and not on church days only. The men admitted that now they can pick and cook mushrooms from nearby their homesteads without worrying about shit in the vicinity. The surroundings are cleaner and without the smell of shit. Medical expenses are now spent on other items like schools, grinding maize at the

mill, buying cooking oil and other food stuffs (2011, Zambia ZAM WASH CLTS Evaluation Report 2011)

2.8 Women Participation in Sanitation Program

Women have somehow physically participating in water supply and sanitation programs but their participation in decision making seems dismal. Knowledge and practices of women in sanitation activities are not sufficiently enough to maintain their personnel hygiene and household sanitation. Knowledge of women about the quality of drinking water is very low. Participation of women in requesting process of water supply and sanitation program was found insignificant.

Finally, all references mentioned above have not focused or emphasized about the Open Defecation Free Declaration or Campaign in Nepal though there multiple efforts being carried out to achieve MDG's target. National Sanitation Master Plan itself has very nice and progressive thought but it has many challenges as well. Timely assessment on its implementation especially in rural areas is required so this research study has been conducted in Dhamauli VDC of Rupandehi district.

CHAPTER-III
RESEARCH METHODOLOGIES

3.1 Rationale for Selecting Study Area

All VDCs in the south area of Rupandehi including Dhamauli have least developed in sense of physical, social and economical status. Awareness level on health and sanitation is also very poor. Hence some positive indicators also seen currently in southern VDCs for example; Roinihawa VDC has been declared as Open Defecation Free VDC by the villagers' effort. This study has been carried out in Dhamauli VDC which has 20,059 and 3010 household (VDC profile, 2012). Holy Place of Lord Buddha is located in Lumbini which is near by the Dhamauli VDC where V-WASH-CC has been taken initiative for better sanitation. The following situations were considered to select this VDC for research.

- It has low access to sanitation.
- Construction materials for 600 toilets targeting to very ultra poor household have been distributed by AMDA Nepal to Dhamauli VDC.
- V-WASH-CC of Dhamauli was committed to declare Open Defecation Free VDC at first quarter of 2014.
- Multiple agencies are functioning there such as; V-WASH-CC, W-WASH-CC, Child Clubs, Mother Groups, FCHVs, CBOs & NGOs to improve sanitary situation.
- No study has been conducted on sanitation progress in Dhamauli VDC so far.

3.2 Research Design

The research design adopted for the present study can be said as descriptive in nature which attempts to identify the status of Open Defecation Free movement in Dhamauli VDC as a rural community. This research has tried to identify and describe the sanitation related issues of the study area. Primary and secondary data were collected using questionnaire & interview. Collected information were tabulated and presented in tabular form. Simple statistical tools like ratio and proportion are used to analyze the data.

3.3 Nature and Sources of Data

The data were collected in qualitative and quantitative forms through direct interview with household head, women, and office staffs. Primary data were collected through interview with structured questionnaire and secondary data were collected through key informants and direct observation.

3.4 Population and Sample Size

Dhamauli VDC has total 20059 populations and 3010 household. 50 household out of 249 from 4 wards were selected using systematic random sampling for interview. 1790 population were found in selected 4 wards according to VDC profile.

3.5 Techniques and Tools of Data Collection

Firstly the VDC office was visited and permission received to conduct research in Dhamauli VDC. Pre test of structured questionnaire was conducted in Purva Ahirauli of Dhamauli VDC among 15 household. Some minor technical errors were corrected and finalized the questionnaire. Various materials such as books, related research papers, past publications, documents, reports, magazine and government's strategy paper were studied while conducting survey.

3.5.1 Household Survey

Structured questionnaire were used to collect primary data from 50 household of 4 wards; Surawal-2, Khadkhadiya-5 & Dubihawa-9 & Purva Ahirauli-8. Head of the selected households have been chosen as the main respondents of this study.

3.5.2 Observation

Some issues could observe directly such as construction & utilization of toilet in household, schools and other public areas.

3.5.3 Key Informant's Information

Key informants were also utilized to collect several data like Offices of VDC, NGO, and Sub- Health Post. Likewise the staffs of NGO, VDC and Female Community Health Volunteers were visited to collect related information as secondary data.

3.6 Methods of Data Analysis and Interpretation

Quantity and qualitative data were collected in this study. The data was coded, categorized and fed in the computer and was processed by using excel program. Simple statistical tools like ratio, percentage was used to analyze the collected data and presented in table, graphs, figures & charts.

CHAPTER-IV

ANALYSIS AND INTERPRETATION

The findings of this study have been presented here according to the sequences of research objective. Though, related information also presented to make it reader friendly. People's knowledge on sanitation related issues, their personal sanitary habits, common practices in sanitation facility use, hand washing practices etc are mentioned as knowledge & practices of local people. Availability of toilet and & its proper use also described to know the existing facilities. Tabulation and graph chart are used to present the finding with short analysis.

4.1 National Scenario of Sanitation Coverage

A national scenario of sanitation coverage in Nepal has been described through the tabulation which was extracted from internet.

Table no: 4.1

National Scenario of Sanitation Coverage

Survey and year	**Sanitation Coverage in Nepal**	
	Urban	Rural
NFHS 1991	65.8	12.0
NDHS 1996	71.3	13.4
BCHIMES 2000	66.5	22.6
Census 2001	72.3	33.6
NDHS 2001	76.6	19.4
NLSS 2004	79.5	25.3
NDHS 2006	77.0	29.4

NFHS: Nepal Family Health Survey; NDHS: Nepal Demographic and Health Survey; BCHIMES: Between Census Household Information, Monitoring and Evaluation System; NLSS: Nepal Living Standards Survey. Source: NMIP/DWSS 2010.

Sanitation coverage of rural area in 1991 was only 12% according to NFHS survey where urban coverage was 65.8%. Somehow there is a data conflict between two survey reports because Census-2011 says 33.6% coverage was in rural area where

NDHS-2001 says only 19.4% coverage. However the latest data is 29.4% sanitation coverage in rural area in 2006 according to NDHS.

4.2 Demographic Information of Study Area

The basic demographic information of Dhamauli VDC is here presented in tabular form that was carried out from VDC profile.

Table no: 4.2

Demographic Information of Dhamauli VDC

Description	Unit	Numbers
Total household	Number	3010
Total population	Number	20059
Male population	Number	10362
Female population	Number	9697
Male house head	Number	734
Female house head	Number	58
Population U5 years of age	Number	802
Household which has toilet	Percent	1
Soap user's for hand washing before meal	Percent	7
Soap user's for hand washing after defecation	Percent	34.6
Person who have passed SLC	Percent	2.9

Source: VDC Profile 2012, Dhamauli

Project survey report of AMDA Nepal, 2014

4.3 Socioeconomic Status of the Respondents

4.3.1 Area wise Distribution

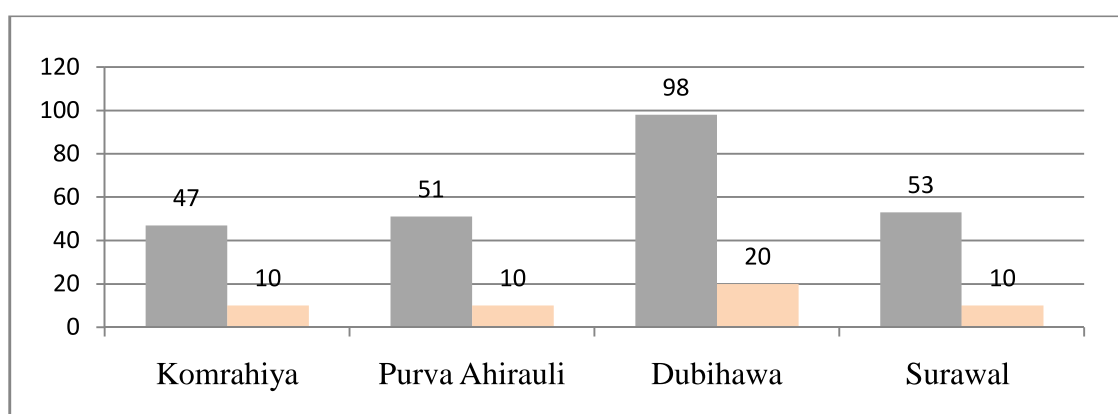
The respondents were selected from different four wards/clusters among nine. The table below shows actual number & percentage of households.

Table No: 4.3

Area wise Distribution

Name of ward/cluster	Total Household	Selected household	Sample percentage
Komrahiya-5, Dhamauli	47	10	20
Purva Ahirauli-8, Dhamauli	51	10	20
Dubihawa-9, Dhamauli	98	20	20
Surawal-2, Dhamauli	53	10	20
Total	**249**	**50**	**20**

Fig no: 4.1



Sample Size

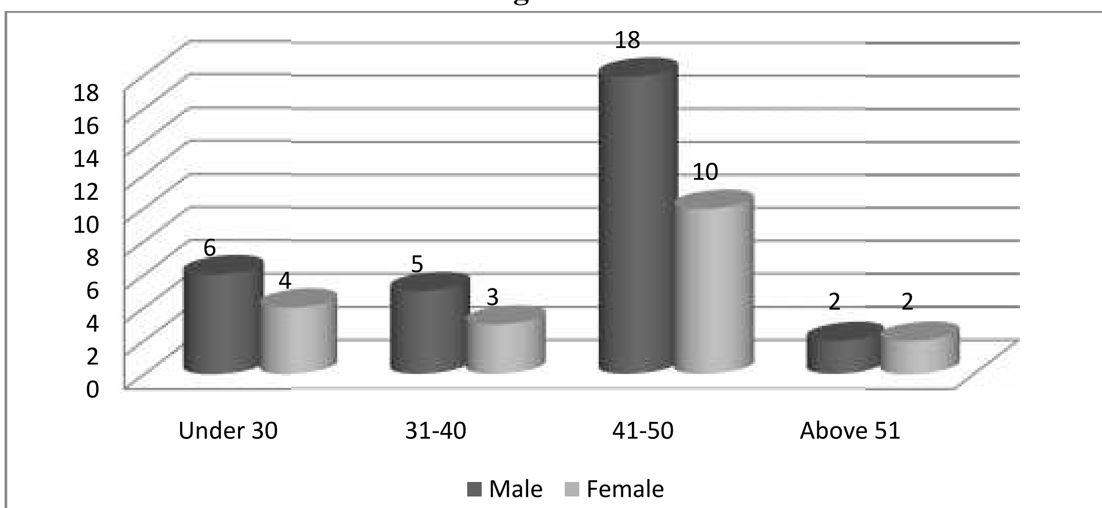
Table no. 2 shows the sampling morphology of research area where sample size is twenty percent. Komrahiya, Purva Ahirauli, Dubihawa & Surawal represents here as the cluster or ward of the Dhamauli VDC. Taking four wards out of nine is twenty percent of research area. Twenty percent sampling has been done in each wards. Sampling procedure was systematic random sampling.

4.3.2 Age and Sex wise Distribution

Different age group people were interviewed during field work. It represents total scenario of the communities. Especially the elder people have less knowledge & information regarding sanitation issues. They used to go outside for defecation just before two years. Initially they used to say why toilet is necessary? If somebody construct toilet by any external pressure but that used to be utilized as a store for animal dung. They had ever thought construction of toilet and its utilization will be compulsory or as an authentic order by the government. Comparatively the newer

generation quietly prefers sanitation facilities even in the rural communities. The following graph shows the different age of respondents.

Fig No: 4.2



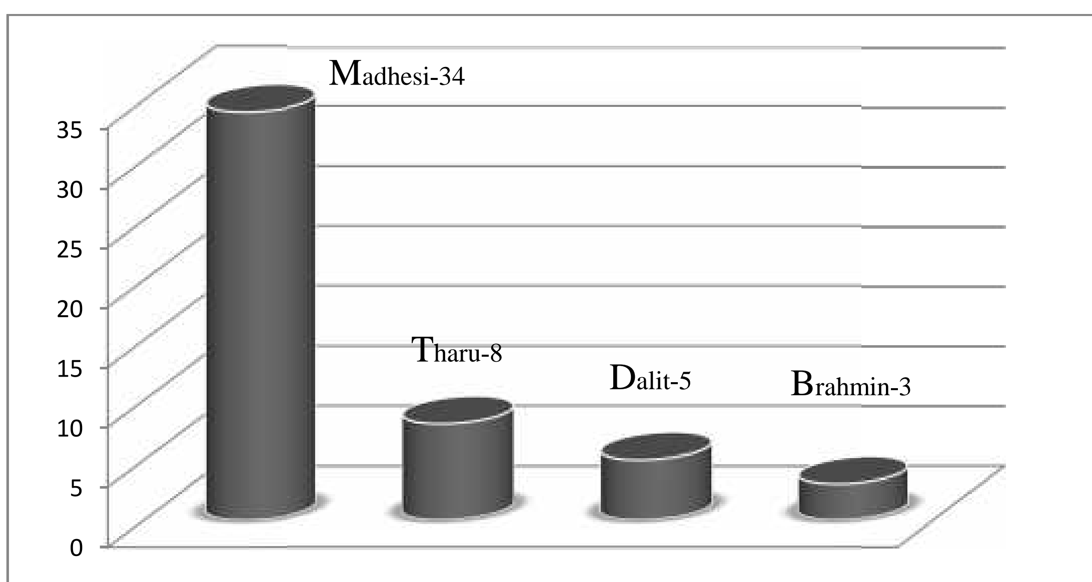
Age and Sex wise Distribution

The figure shows different age group and sex of respondents. The maximum respondents found in 41-50 years age and male people have majority in every age group.

4.3.3 Caste wise Distribution

Mainly the inhabitants of Dhamauli VDC are Madhesi but some other caste also in existence. As per shown data below the Madhesi people are in majority then Tharu, Dalit & least people are Brahmin. The caste/ethnic distribution is shown in study area.

Fig No: 4.3



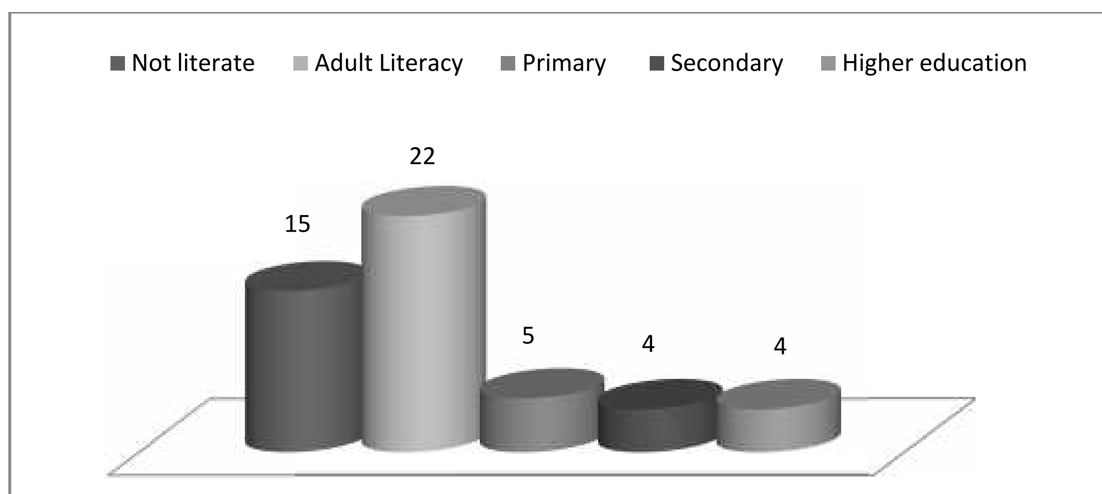
Caste wise Distribution

The figure reveals that about 88 percent respondents are from Madhesi followed by 16 percent Tharu, 10 percent Dalit, 6 percent are Brahmin and others. Madhesi people have majority in Dhamauli VDC.

4.3.4 Literacy Level of Respondents

The people who are living in Dhamauli VDC have different education levels. As per the result of this research, maximum people have been participated in "Adult Literacy Class" conducted by a NGO and government agencies. At least they can read & write their name as the achievement of literacy classes. Only few people have secondary or higher secondary level of education. Still there are many people who are illiterate in the research areas. Lower education level of the people certainly affects in personal hygiene & sanitation behavior. Either they do not give care or just neglect regarding the hygienic daily behaviors. Since there are three government and three private boarding schools are existing in Dhamauli VDC.

Fig No: 4.4



Literacy Level of Respondents

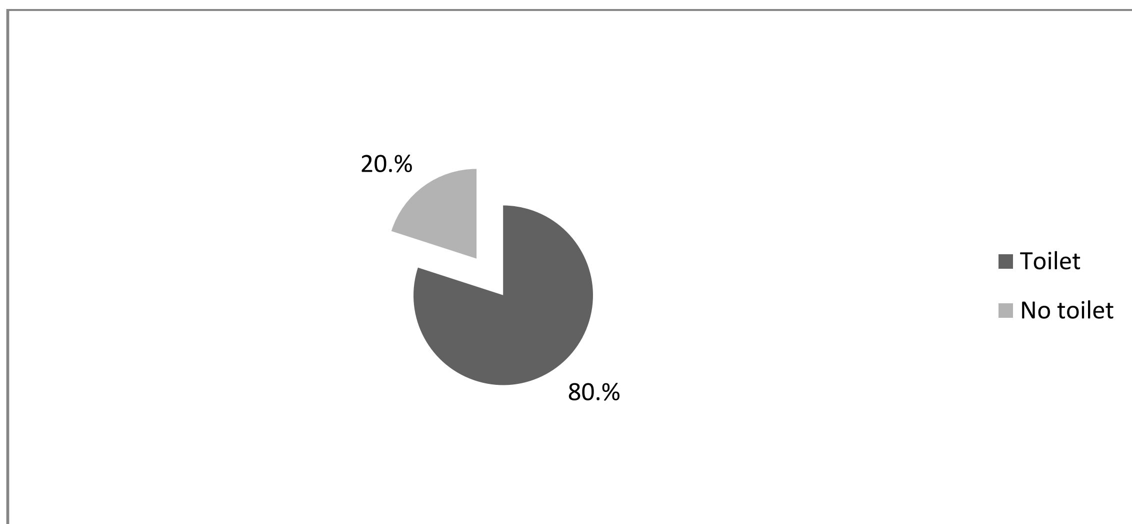
Among the respondents; 30% people illiterate, 44% literate through adult literacy program, 10% primary school, 8% secondary school & 8% were found as higher education status.

4.4 Status of Toilet Construction

There are 18.5% people who have not constructed toilet in their house. This is against to national & district sanitation campaign. According to a local NGO AMDA Nepal; they have distributed toilet construction materials to 600 ultra poor household in

Dhamauli VDC but still the people who had received materials have not been utilized appropriately. By such cases it is very difficult to get achievement on ODF declaration by 2017 AD.

Fig No: 4.5



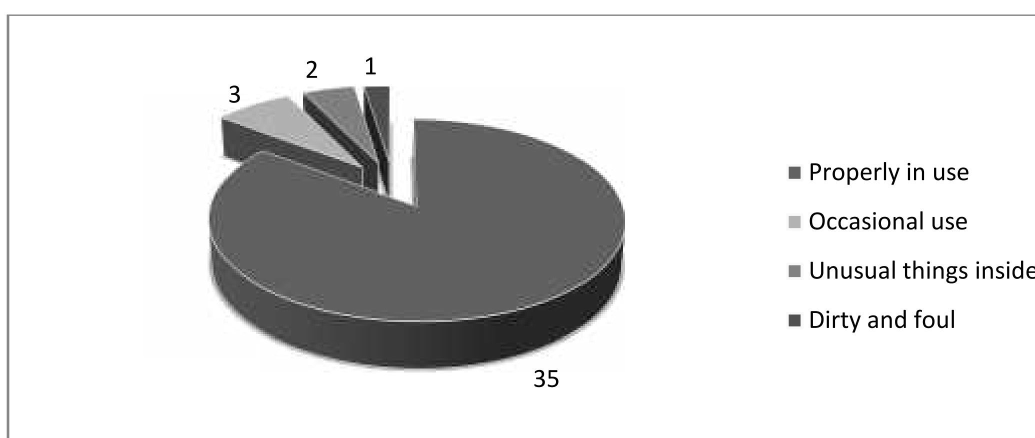
Status of Toilet Construction

The figure reveals that 80 percent households have been constructed toilet in their home that means 40 out of 50 but still 10 have to construct. It means still more efforts need to apply to accelerate the ODF process.

4.4.1 Using Condition of Toilet

Researcher has been observed each and every constructed toilet in the study area to confirm the utilization status. Availability of water inside the toilet, cleanliness, privacy maintenance system and toilet cleaning instruments or any unusual things inside was checked during that.

Fig No: 4.6



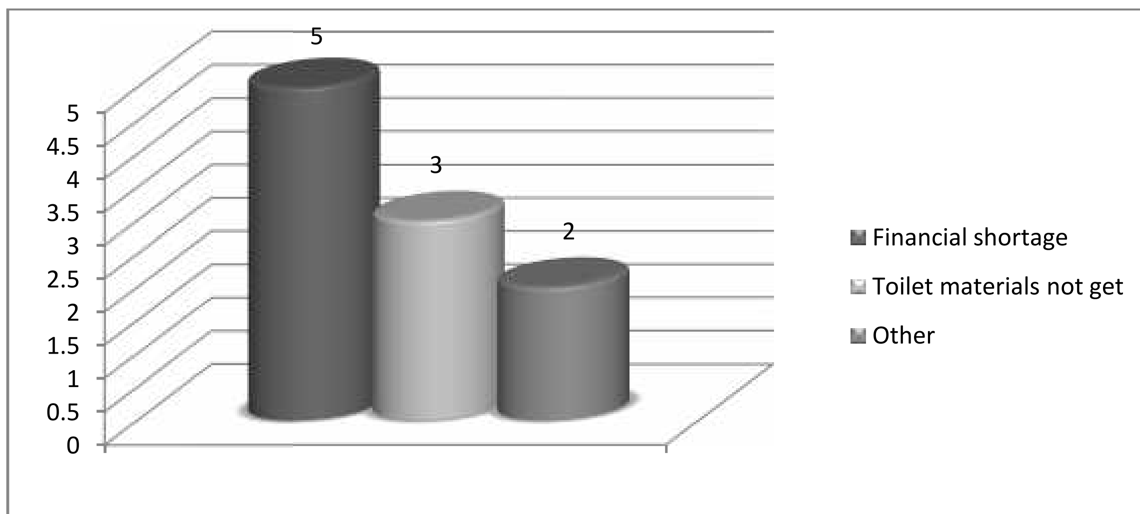
Using Condition of Toilet

In total 35 toilets out of 40 found in proper use. They had well maintained with cleaning instruments and liquid with water inside. There were 3 toilets looked like occasionally used because they have dust and cockroaches inside instead of water. 2 toilets had some unusual things inside like animal dung, and pieces of straw inside and 1 was very foul and not maintained.

4.4.2 People's Respond for not Constructing Toilet

The government body DDC, DWSSHO and VDC also granting 1000NPR from each agency to support the ultra poor people and for the toilet construction. They can get this opportunity but only some people have been benefitted by this governmental support & scheme. There were 10 household which have not constructed toilet is their house. Researcher has asked them as why they did not and they have given different answers.

Fig No: 4.7



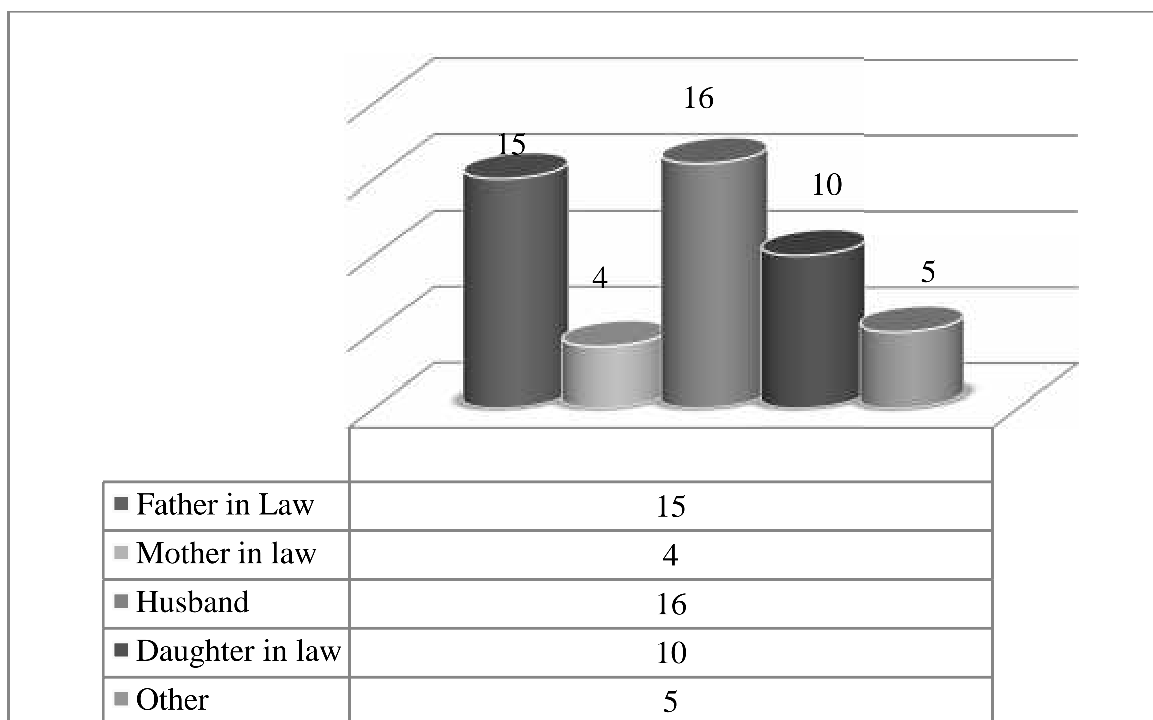
People's Respond for not Constructing Toilet

As the figure reveals above, 5 household said, they have no money currently to construct the toilet. Three respondents said, they did not received toilet materials from the government or NGO so disappointed and not willing to construct. Two of others replied differently like they have planned but not sure how to construct, no urgent task because currently open field and bush are being used as the toilet.

4.4.3 Household Decision Maker of Toilet Construction

Nepal has several communities with male dominated societies. Major decision is taken by male head. Dhamauli VDC is also a sample of similar society. Question was asked who took decision for toilet construction.

Fig No: 4.8



Father in Law	15
Mother in law	4
Husband	16
Daughter in law	10
Other	5

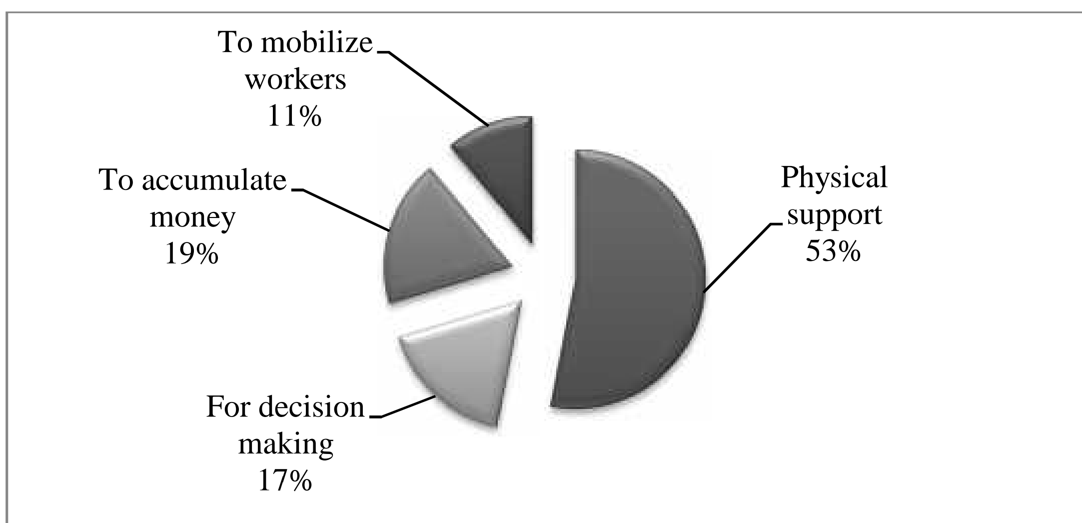
Household Decision Maker of Toilet Construction

In total 15 household found as decision taken by father in law, 4 by mother in law, 16 by husband, 10 by daughter in law and 5 by others. This finding clearly shows the authority is holding by male than female. Daughter in law also seems here remarkable but they all have getting chance because either they have been already separated from family or presence of very old father in law who is not active in family management.

4.4.4 Women Support for Toilet Construction

Women are the internal manager or key person of the family health. They cook food and served to all family members. They look after the family, house premises, children and other domestic tasks. General people underestimate the capacity of women during conversation. Women also have great potential to do important tasks. Here women's role for toilet construction was asked and answer found as the figure shows below.

Fig No: 4.9



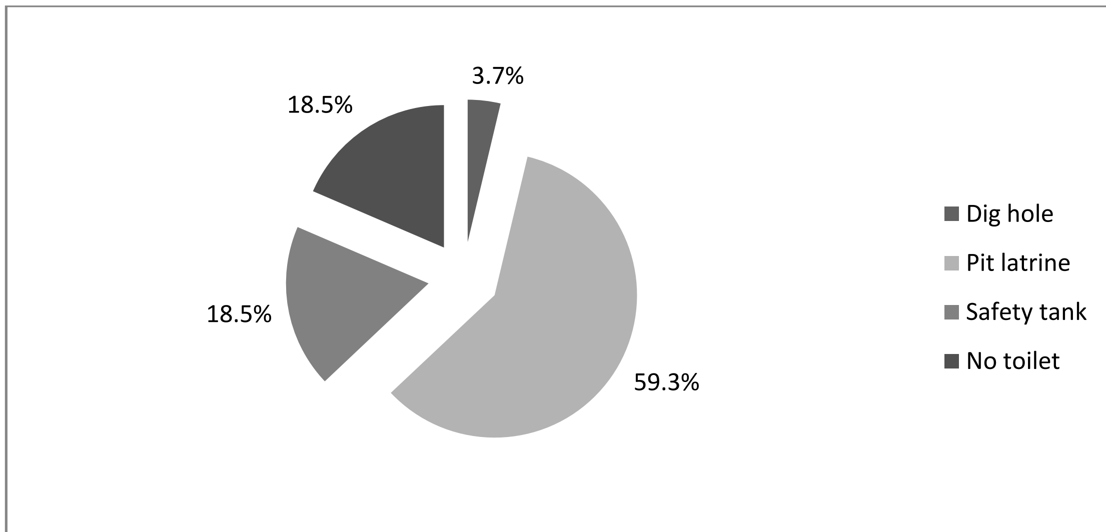
Women Support for Toilet Construction

In total 53 percent women had supported by physical labor, 19 percent supported by accumulating money from different sources, 17 percent supported to make final household decision and 11 percent helped by mobilizing labors. Thus, women are called as representative of Goddess Durga and so on. They have multiple roles in family as well as toilet construction and its utilization. A child first learns from mother regarding life skills. At the same time mother teach them sanitation related behaviors also. So it can be said women are as main stakeholders of national sanitation campaign.

4.4.5 Types of Available Toilet

Different types of latrine are available in the market but the government's sanitation master plan especially gives focus on sanitary pit latrine with concrete structure up to plinth level. Construction of safety tank type latrine is better than other but at least pit latrine is ok in current context. Toilet construction by using cemented rings for tank and a water seal pan with concreted plinth level is must recommended design in Terai areas. Generally the Dig Hole latrine is not in popular practice but had found in research area. Dig Hole Latrine cannot be sustainable in Terai area due to the underground water level and as well in sanitation point of view. That can easily contaminate the hand pump and artisan boring.

Fig No: 4.10



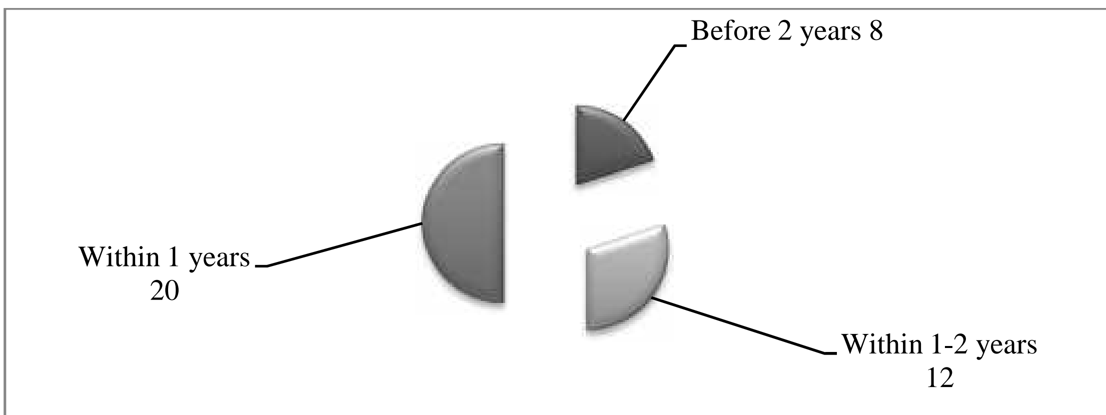
Types of Available Toilet

Toilet construction in Dhamauli VDC found different varieties like; Dig Hole by 3.7% (less), Pit latrine by 59.3% (maximum), Safety tank by 18.5% and still no toilet is in 18.5% household. The data shows clearly; still people of Dhamauli VDC are going for open defecation which is the major reason of communicable disease such as Diarrhea, Dysentery, Typhoid, Worms, and Hepatitis etc. This can be explained as a weak point of sanitation campaign by multi stakeholder efforts in Nepal.

4.4.6 Timeline of Constructed Toilet

It was reported that Dhamauli VDC had only 1 or 2 toilet before 5 years so the question was asked when they have been constructed toilet. Maximum toilets have been found recently constructed.

Fig No: 4.11



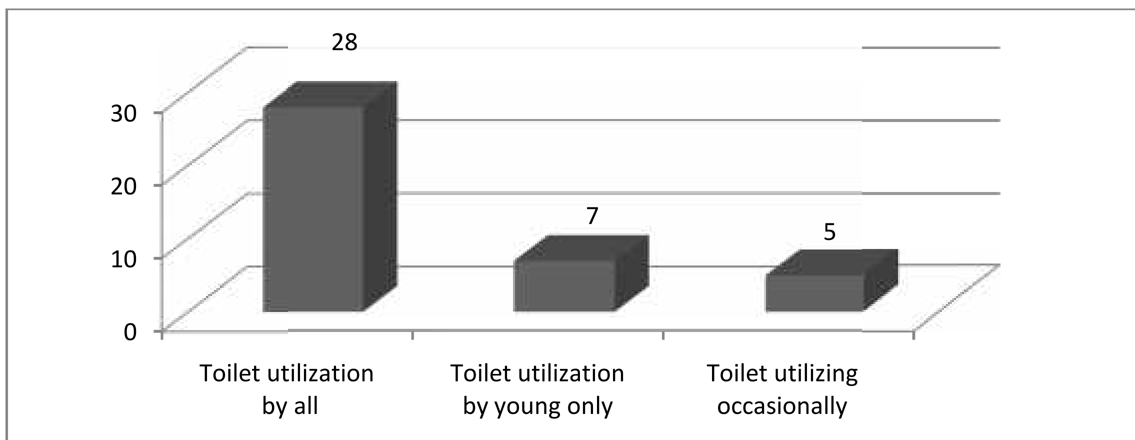
Timeline of Constructed Toilet

There were 8 toilets constructed before 2 years, 12 constructed within 1-2 years and 20 constructed within 1 year in the research area. That means people have been recently sensitized in sanitation issues and toilet construction. This might be a positive changes or kind of social pressure of sanitation campaign in Nepal.

4.4.7 Utilization of Toilet

Only construction of toilet is not a mandate given by sanitation campaign but its regular utilization also has equal impotency. Previously people used to keep animal dung, firewood and bi product of grain into the toilet instead of defecation inside.

Fig No: 4.12



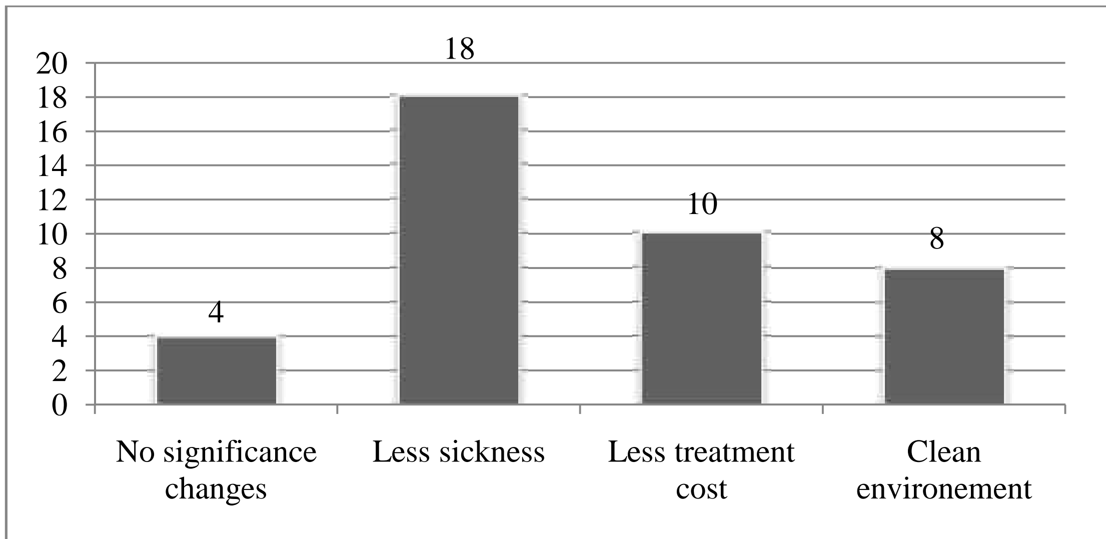
Utilization of Toilet

Elderly people do not prefer to use toilet for defecation. 28 toilets out of 50 has been using by every family members properly but only young members are using in another 7 toilet. The other 5 toilets are not being utilized regularly by all family members. The trend of toilet use in research area also indicates some of previous people's habit. However, it is clearly shown that, people are gradually habituating in it. At least the new generations are regularly using toilet facilities.

4.4.8 Major Changes after Toilet Construction and Utilization

Environmental changes or sanitary improvement was expected after the toilet construction. Any outer party could observe few positive changes in environmental sanitation but what the local people says is very important. A major change after toilet construction and utilization was asked to the respondents.

Fig No: 4.13



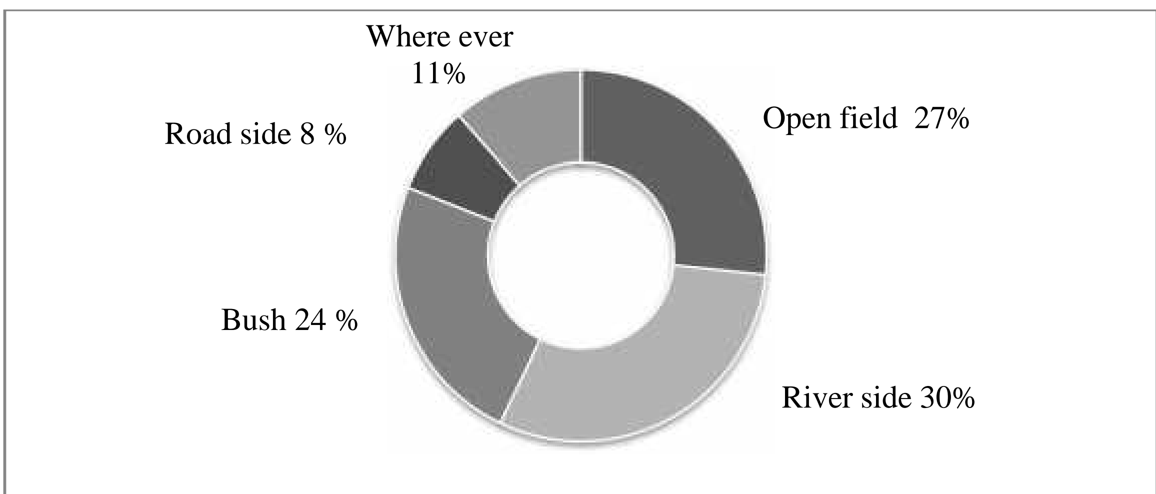
Major Changes after Toilet Construction and Utilization

The maximum 18 respondents said they have realized less sickness after starting toilet utilization. Likewise treatment budget of family has been reduced said by 10; environment has been cleaned said by 8 and no significance change said by 4. It means maximum people has been realized few positive changes after the toilet construction and utilization in the communities.

4.4.9 Alternate Areas of Toilet

Many people did not have toilet before 2 years as per the findings shown above. There are still 20 percent who have no toilet. The issue comes where they are going for toilet?

Fig No: 4.14



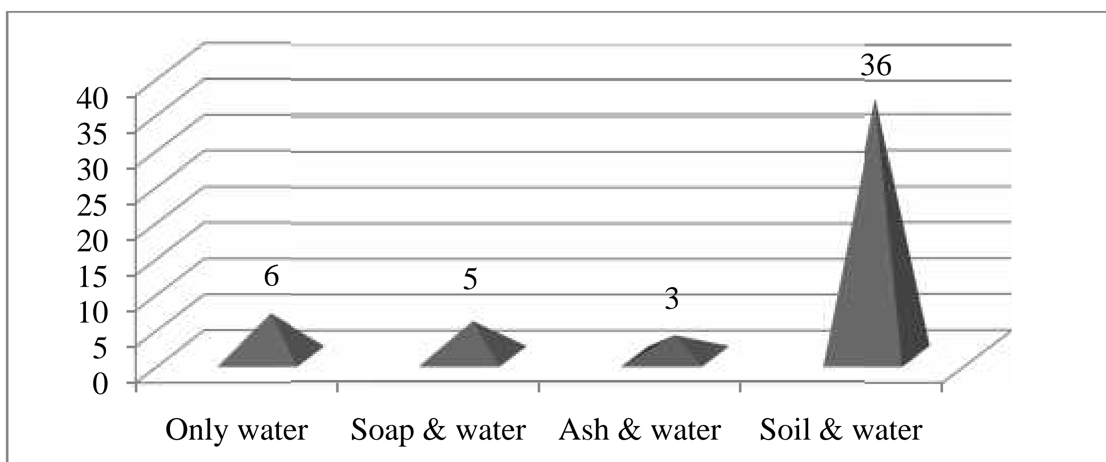
Alternate Areas of Toilet

In respond of this question 30 percent said they are going to river side for defecation, 27 percent to open field, 24 percent to bush, 8 percent to road side and 11 percent are defecating wherever they feel comfortable. This means water sources, road, open field, bush everywhere people go for defecation. By this practices; one the environment is being contaminated and another side an unexpected accidents are happening. Insect bite, snake bite, animal attack and rape/robbery are the common accidents while a person goes to bush and riverside. This is a very big problem especially for ladies. According to local ladies, they do not take sufficient foods because it may create problem to go toilet in day time. Usually women go to outside for defecation in evening time and man are going at morning time.

4.4.10 Materials Using for Hand Wash

Hand washing is important task in human's daily life. Proper hands wash makes people's life healthy and long. Different materials are being used for wash & cleaning purpose like Ash, Soil, Sand, herbs but basically soap is accepted as reliable materials for hand wash even in modern technology. These days soap jells and liquid are also being used for hand wash. There are 6 standard steps of hand washing, if people follow it well many diseases automatically goes far & make less trouble in people's life. People of Dhamauli VDC were asked what they are using for hand wash especially after defecation.

Fig No: 4.15



Materials Using for Hand Wash

Then maximum people (36) are using soil & water for hand wash after defecation. This is very dangerous and ironical for sanitation movement to get MDG goals

because soil itself is a reservoir of germs so how people's hand will be clean and safety after even washing. In the name of cleaning they can get other infection through that soil. Only 5 people found who are using soap, 3 people are using Ash and 6 people wash their hand by only water.

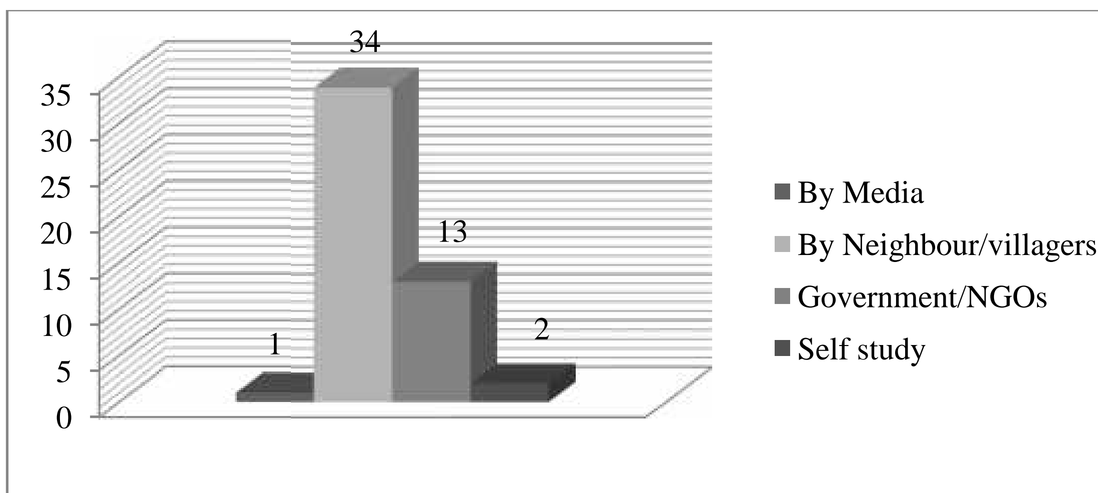
4.5 Knowledge and Awareness on Sanitation

People's knowledge and awareness level has been analyzed through different questionnaire as following.

4.5.1 Information Sharing Practices on Sanitation

Medias like newspaper, television, radio & magazine are the major sources for the urban people but there are limited sources of information in the rural communities. There is some major information sharing systems in traditional societies like Haak, Chaukidaar, Kachahari etc. But recently social network is being established for information sharing like Face book, Twitter as electronics & mother groups, cooperatives, user's group etc as direct contact either networking also. Suggestion for the toilet construction in the Dhamauli VDC was shared by different ways as following figure shows here.

Fig No: 4.16



Information Sharing Practices on Sanitation

Only 1 person out of 50 had received notice by media, 34 by neighbor and villagers, 13 by government agencies/NGO and 2 by self study. It means the social networking in the community and relationship among villagers is appreciable. Social pressure is also established in the community to construct the toilet.

Table no: 4.4

Information Shared to Others

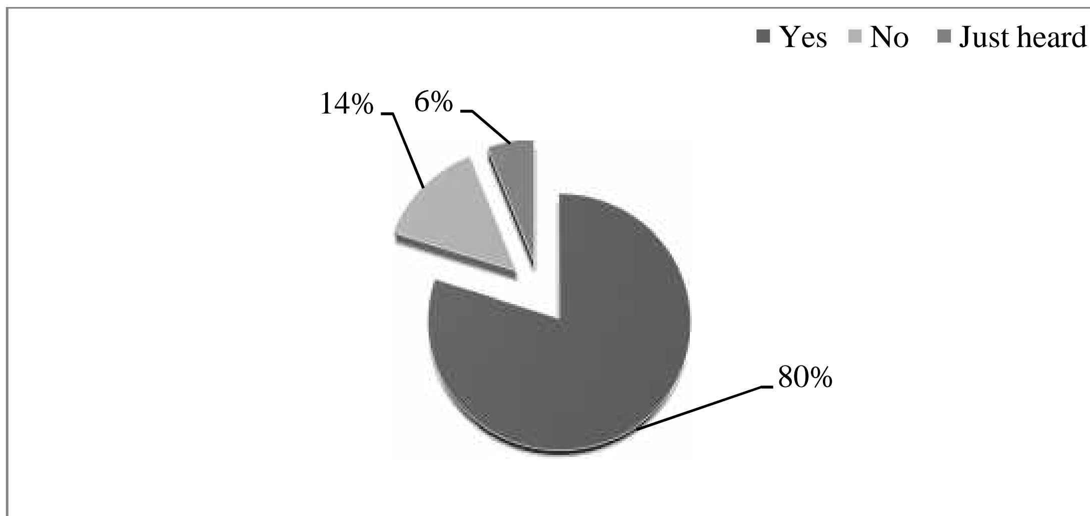
Did not shared	Shared to Neighbors	Shared to relatives	Shared to closers	Shared in groups
3	25	4	8	10

In total 3 persons out of 50 did not shared the information to others but 25 had shared to neighbors, 8 to close persons, 4 to relatives and 10 shared within groups.

4.5.2 Acquaintance on Slogan of "One House, One Toilet"

Knowledge on sanitation issues is very important factor which supports the national sanitation campaign. Literacy level of community people is less than urban people. They have been hardly got chances to attend school and media due to many circumstances before. But at least a basic knowledge in sanitation is preferable concerning their health condition.

Fig No: 4.17



Acquaintance on Slogan of "One House, One Toilet"

One toilet for each household is mandatory to declare ODF by sanitation master plan. Hence, People must have known this thing as a main chant in every settlement but here 40 person out of 50 are known as "One house, One toilet", 7 persons does not know and 3 person has been just heard but not so clear. It means still this slogan has to be advertized among the rural people to get its actual meaning in practice.

4.5.3 Sources of Information Regarding Sanitation

There are various sources to get information in the communities regarding sanitation issues. V-WASH-CC (Village Water Sanitation & Hygiene Coordination Committee), FCHV (Female Community Health Volunteers), radio, groups, relatives from different or same communities etc are the main resources to get information. People of Dhamauli have been informed about a national slogan in sanitation "One toilet for one household" from local resources.

Table no:4.5

Sources of Information Regarding Sanitation

By V-WASH-CC	By Media	By FCHVs	By Groups	By relatives/friends	By self study
10	10	16	35	20	2

This question was designed as multiple answers so 10 persons was informed by V-WASH-CC, 10 by media, 16 by FCHVs, 35 by mother groups, 20 by relatives/close friends & only 2 by self study of references. This kind of multi sources information sharing is quite good practice in such rural communities where modern communication system has not been established.

4.5.4 Awareness on Need of Toilet

Awareness is necessary in toilet construction for that people have to know an importance of the toilet. People have given different answer in a question as why a toilet is needed in a household. A multi answer question was asked to the respondents and answer received as following.

Table no: 4.6

Awareness on Need of Toilet

Don't know	To keep hygienic environment	To be safe from diseases	To maintain social prestige	Easy than go to open field	Due to social obligation
3	20	21	31	9	6

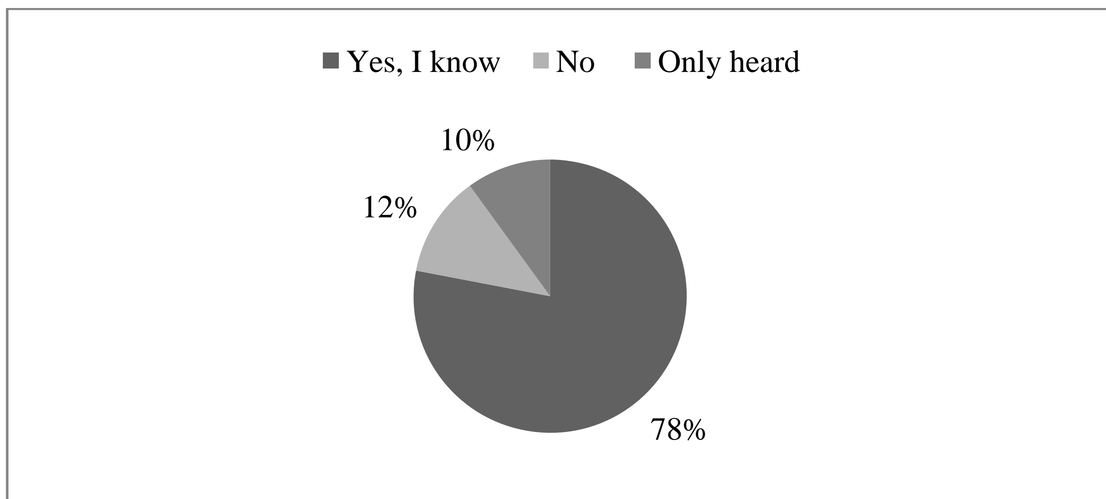
3 people out of 50 don't know reason of toilet construction in household, 20 other said; to keep hygienic environment, 21 said; to protect family from different

communicable disease, 31 said; to maintain social prestige, 9 said; easier to use rather than go to open field and 6 said; due to social obligation. It means maximum people know the importance of having toilet in household level. Some people are still thinking toilet construction is not for health benefit but only for social obligation and prestige.

4.5.5 Awareness on Human Excreta Transferring into Mouth

The human excreta contain millions of germs which causes several types of communicable disease. Knowing the process of excreta transformation might support people to escape from those communicable diseases such as Hepatitis, Diarrhoea, Dysentery, Worms & Cholera etc.

Fig No: 4.18



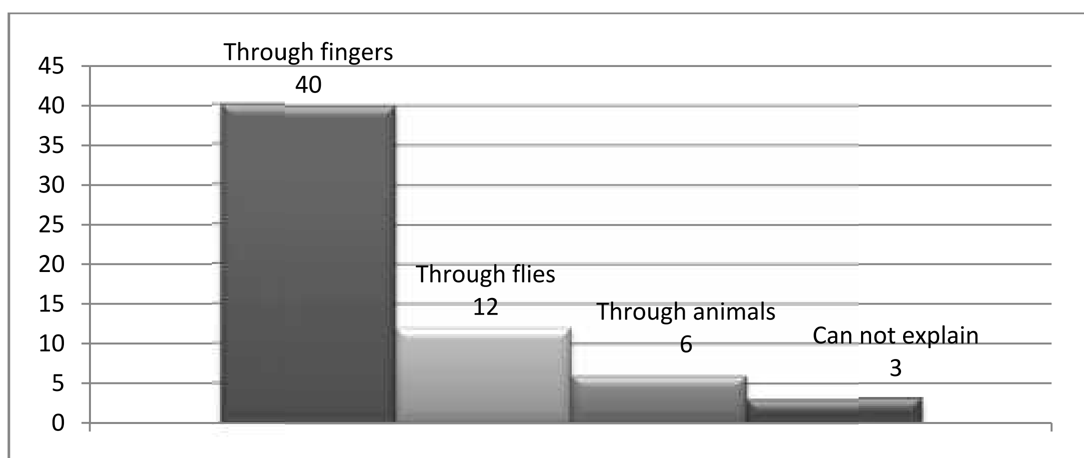
Awareness on Human Excreta Transferring into Mouth

The figure reveals that the 78 percent people know human excreta can transfer into mouth, but 12 percent other people just heard about it. An ironical thing is still 10 percent people are not aware on it.

4.5.6 Awareness on Route of Excreta Transfer

Route of transferring causative organism into human body is very essential to know but community people does not seem much knowledge and awareness in it. A multi answer question was asked to know their knowledge level and found the following answers.

Fig No: 4.19



Awareness on Route of Excreta Transfer

Most of the people (40 out of 50) answered that fingers are the major vector of excreta transformation into human mouth. 12 said through the flies, 6 said through the animals and 3 other people could not give answer properly. These kinds of findings are very important to organize awareness rising activities in the communities.

4.5.7 Knowledge on Fecal Oral Contaminating Diseases

What kind of typical diseases can be transmitted due to fecal oral contamination was asked with respondents through multi answer question.

Table no: 4.7

Knowledge on Fecal Oral Contaminating Diseases

Not able to answer	Diarrhoea	Dysentery	Worms	Typhoid	Cholera	Jaundice
6	22	12	15	18	17	10

According to respondent's; Diarrhoea by 22, Dysentery by 12, Worms by 15, Typhoid by 18, Cholera by 17, Jaundice by 10 & 6 persons were unable to give answer. All those answer were correct but the issue is still some people (6 here) have no idea about fecal oral contaminating diseases. This might be due to either their low education level or due to less access to media. Sanitation movement of Nepal may not be completed without raising the people's awareness on diseases contamination process including fecal oral or other route.

4.5.8 Knowledge on Benefits of Toilet Use

There are significant advantages of having toilet in the household, local people have different knowledge in it. The following answers were found from the respondents through multi answer question who have already constructed toilet in their home;

Table no: 4.8

Knowledge on Benefits of Toilet Use

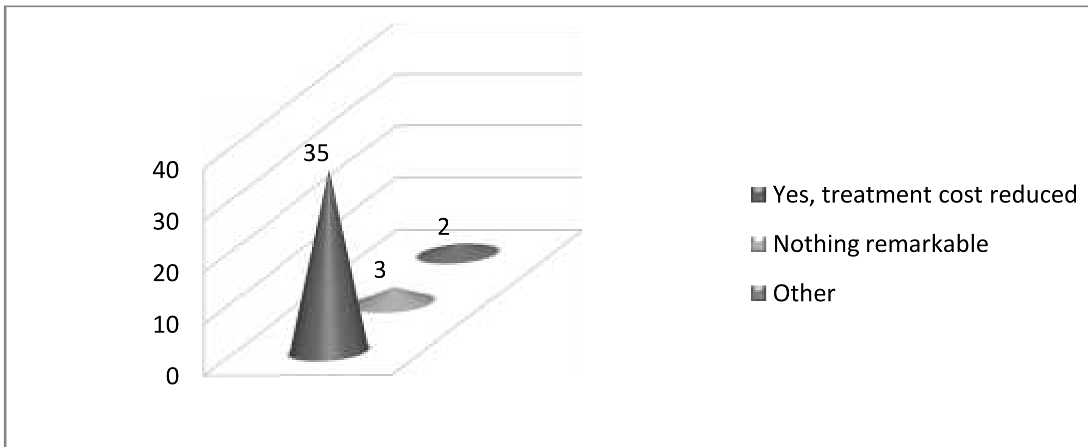
No shame while defecation	Clean environment	Safe from diseases	Maintain social prestige	No chances of accident
27	30	22	25	13

In total 27; no need to feel shame while defecation after having toilet, 30; environment being clean, 22; they are safe from different kinds of communicable diseases, 25; toilet can maintain their social prestige and 13; people can escape from different kinds of accidents such as snake bite, rape etc. It means many of them have been realizing the importance of toilet which can make habitual to them. Being habituate for toilet use is a plus point for sanitation campaigning in Nepal.

4.5.9 Realized Advantages After Toilet Use

Any kind of construction does not seem direct economic benefits but it always has some indirect benefits. So the toilet construction also has no any direct economic benefits to people but it can support people's saving. Saving is also a kind of benefit for common people. Morbidity can be decreased by hygienic behavior. Not only by construction but its hygienic use is necessary to get some benefits. People can be survived from several kinds of communicable diseases such as diarrhea, Typhoid, Hepatitis etc. Money for treatment can be saved when infection frequency decrease. Question asked to respondents as mainly what kind of benefits they have been realized after the toilet construction and utilization, and answer found as following.

Fig No: 4.20



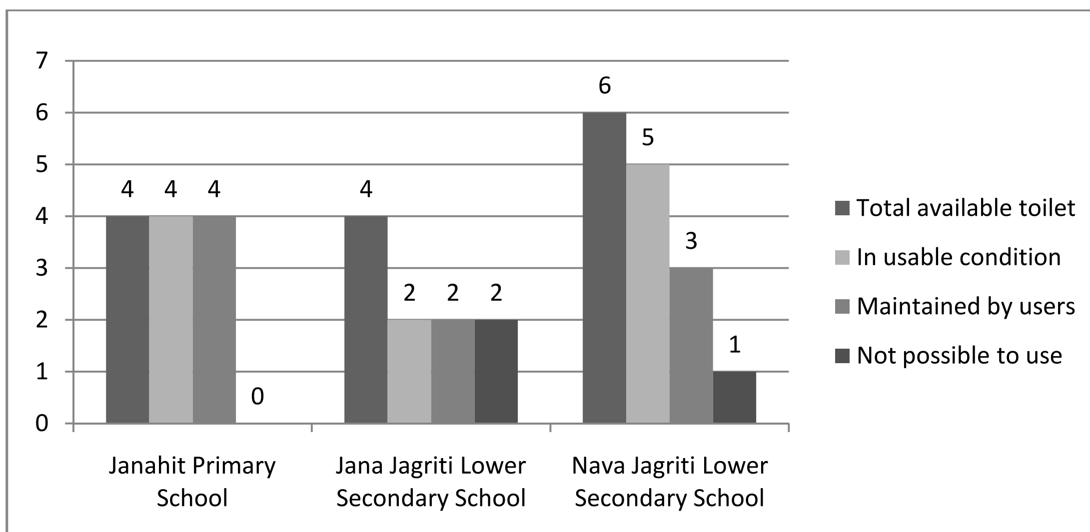
Realized Advantages after Toilet Use

The respondents have given their answer as revealed in above figure. 35 answered; yes, their treatment cost has been reduced, 3 answered; no any remarkable change realized and other 2 given other types of answer. It means people from Dhamauli VDC known as toilet construction and utilization can give economic benefits easily either by indirect mode.

4.6 Status of Toilet in the School

To maintain sanitation environment in the school is very essential for declaration of complete sanitation status in the respected VDC. Criteria of 1 toilet for 100 students are mandatory in every school by department of education. Status of public toilet in Dhamauli VDC has been observed and find out as per following,

Fig No: 4.21



Status of Toilet in the School

The figure reveals that, there are three public schools in Dhamauli VDC. All of them have toilet facilities but status of toilet is different in each school. Janahit Primary School has 4 toilets and all are usable condition. And according to the head master those toilets are sufficient as per the criteri of government. Actually Janahit School has newly constructed the toilet. The Janajagriti lower secondary school has only 2 toilets in usable condition. According to headmaster of Janajagriti School; those toilets are not sufficient to serve the total around 500 students. 2 toilets have been abandon and not in re usable condition by breakage and ignorance to clean up. Next the Nava Jagriti school has 6 toilets in total which is sufficient as per number of students there. But 1 toilet out of 6 cannot be re used due to breakage and damage of its pan. Cleanliness of toilet was not satisfactory in every school, and there were many children using open field for defecation and urination during the field observation by researcher. By that it is easier to say, the public schools of research area are not punctual to national sanitation campaign in Nepal.

4.7 Status of Public Toilet

Public toilet is very necessary to keep maintain ODF status in declared areas. Any external visitors may need toilet during there but there was no any public toilet found so far constructed in research area. It is difficult to maintain ODF status without construction of public toilet in the Dhamauli VDC for near future.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This research entitled as "Open Defecation Free Declaration Campaign in Nepal: A case study of Dhamauli VDC of Rupandehi" was carried out with objectives to find out the status of toilet construction, use of sanitary facilities and awareness level of community people. Research area and respondents were randomly selected. Primary and secondary data were collected and analyzed using simple statistical tools. It is found through research; still awareness level of common people is very poor, they are not well noticed about national targets, infrastructure of sanitation are also not being utilized as respective manner, personal and environment related knowledge behavior is not appropriate comparatively to other developed countries. The community people are still asking for donation to construct toilet. Since 13 districts and so many other VDCs have been declared ODF but still many districts have to be soon. Huge resources from government and non governmental agencies are being invested in sanitation sector to achieve millennium development goals.

According to the findings of this research also, community people's knowledge, behavior and sanitation related issues are very miserable which are described as following.

- Still there are 18.5 % people have not constructed toilet even they have received construction materials in Dhamauli VDC.
- Household rights to make final decision for toilet construction reserved mainly to male members either father or son, comparatively women have less power in decision making but 53% women have been supported to male in physical works like labor while toilet construction.
- There are some positive changes in research area for example; maximum toilets have been constructed recently where only 12 toilets were constructed before 2 years. But that doesn't mean the people have been totally aware on sanitation issues because this could happened due to high pressure from social agencies.

- There are almost 28% household which all family members are not using toilet regularly; either they go to field or river side for defecation. This trend is totally against the sanitation master plan/campaign.
- People of research area found less aware about sanitation campaign as well as sanitation issues because 9% answered don't know. Some other people still saying they are not able to construct toilet due to the poverty or in sufficient resources.
- The 60% respondents realized the benefits of toilet construction and its regular use. Because according to them; a big money from treatment cost is being saved by improving their health situation but still there are 17% people who are not able to realize the benefits of toilet use. They replied as, no significance changes found after toilet construction.
- People of Dhamauli VDC are still going 30% in river side, 27 % in open field and 24% in bush for toilet purpose. They are using these areas as an alternative of toilet. This is very serious and challenging issue for open defecation campaign.
- The most dangerous issue is 66.66% people are still using soil for hand wash after toilet use. Using soil for hand washing is highly restricted measure. There almost 20% people are using soap or ash for hand washing purpose after the toilet use. More than 11% are also washing their hand with only plain water.
- Neighbors are the major source of information where media have less access to people.
- There are 76% people who know the slogan of national sanitation campaign as "One house, One toilet" but still there are 18% who totally did not heard about it. This is also not a good sign of sanitation campaign in Nepal.
- V-WASH-CC is a main responsible and authorized organization in VDC level sanitation campaign so far but very less people are getting information directly from them. It clearly shows that V-WASH-CC members are not so active in Dhamauli VDC. Instead of that people are getting information either from mother groups or friend relatives.
- Among the respondents of interview; only the 41% people have given a scientific answer in need of toilet construction. The other people said either to

protect their reputation or by obligation/social pressure. It means only few people are well aware on need of toilet.

- There are 24% people in Dhamauli VDC who are not aware on fecal oral route of disease contamination especially excreta can enter into human mouth could answer by few respondents.
- Only few people found well aware on benefits of toilet use but majority are still thinking sanitation campaign is a kind of burden to them. Because maximum did not reply as from scientific point of view.
- The 83% respondents replied as "treatment cost has been reduced by toilet use" but still 17 % are giving not appropriate answer as used to be.

5.2 Conclusion

Based on the finding of this research following conclusions has been drawn. The conclusions have been set here as per the objectives like; status of toilet construction, practices of utilization and knowledge and awareness level of community people.

- There is a good aspect of sanitation campaign, like maximum toilets were constructed in recent 2 years but still 20% households in Dhamauli VDC have not constructed toilet and using open field, river side, bush or other for defecation. Extreme pressures of related agencies are also not being able to convince easily to the people for toilet construction. In such situation getting success by sanitation campaign is seem questionable.
- Previously constructed toilets in Dhamauli VDC are also not fully utilizing by the people. Maximum toilets are being used infrequently/irregularly by family member. An elderly people and small kids are the main who do not use it regularly. In some household toilet seemed as using to keep animal dung or bi-products of grain also.
- Sanitation campaign of Nepal government found not popular to each family or people in Dhamauli VDC. However some people are aware on it but maximum of them thinking this campaign is just as an obligation policy. It means, ownership of this campaign has not been taken by villagers. People are not aware even in very basic things on personal hygiene and sanitation related issues.

5.3 Recommendation

Based on above study, the following key recommendations have been drawn up.

- Conduct awareness campaign in the communities like Home visit counseling, Focal Group Discussion, Competition, Exhibition, Award/Reward system, Rally, Street Drama etc through that people can easily understand the meaning of sanitation campaign and personal/environmental issues.
- Governmental and non governmental agencies have to invest in awareness rising activities through participatory way. Develop action plan & implementation by community people through participatory way is very effective and best model to mobilize and ensure ownership of targeted people. Otherwise they will not give much interest if anyone only oppose for toilet construction and utilization. Feeling of ownership is very important for such social contribution as well as.
- A kind of regular monitoring system is needed by V-WASH-CC members to identify the status of toilet use in each household. Those V-WASH-CC members are also needed to be more active and dedicated to make success the sanitation campaign.
- Governmental and non governmental agencies which are working in sanitation field also have to develop a monitoring criteria to know the degree of achievement in sanitation activities to declare ODF areas either village, ward or whole VDC.
- Additional research on the question is highly recommended as; why it is difficult to easily adopt the national sanitation polices of Nepal government by the rural people?

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ANNEXES

ANNEX-1

FORMAT OF INTERVIEW QUESTIONNAIRE

Demographic Details:

Full name of respondent: ………………………………………….

VDC's name: ………………………………………………………….

Ward No: …………………………………………………………..

Q. No.	Questions	Answers	Code No:	Skip
1.	How old are you?	………………..		
2.	What is your caste?	[a] Bramin/Chhetri [b] Tharu [c] Newar [d] Dalit [e] Madhesi [f] Other (specify)	☐	
3.	Can you read and write?	[a] Can write name only [b] Can read and write without any formal education [c] Can read and write with formal education [d] Unable to read and write [e] Other specify	☐	Skip to (5) if answer is (a) or (d)
4.	Which level up to you has been?	[a] Elderly literacy class [b] Primary class (1-5) [c] Secondary level (6-10) [d] Plus 2 or above	☐	
5.	What type of toilet do you have in the home?	[a] Dig hole [b] Pit latrine (Manual flush) [c] Auto flush (safety tank)		Skip to (7) if answer is (a) (b) (c)

		[d] No toilet		
6.	Reason for not constructing the toilet?	[a] Feel happy by open defecation [b] Lack of awareness [c] Lack of finance [d] Not getting help form NGO/INGOs [e] Lack of family harmony [f] Other specify		
7.	When was toilet constructed? (If have)	[a] Before 2 years [b] Within 2 years [c] Within 6 months to 1 years [d] Recently		
8.	Toilet is using by whom in the family?	[a] By everybody [b] Everybody except elders [c] Everybody except children [d] Some do or other not do [e] Other specify		
9.	Who have suggested to you for toilet construction?	[a] By the media [b] Neighbors or villagers [c] Staffs of government or I/NGOs [d] By self awareness [e] Other specify		
10.	Have you ever suggested to somebody outside for toilet construction?	[a] Not yet [b] To neighbors [c] To relatives [d] To closers [e] To groups [f] Other specify		

11.	How long distance to be maintained between kitchen and cattle yard?	[a] Close to kitchen [b] 5-10 meters [c] 10-20 meters [d] More than 20 meters [e] Other specify		

Knowledge and Awareness Related Questions

Q. No.	Questions	Answers	Code No:	Skip
12.	Do you know about one house one toilet movement?	[a] Yes [b] No [c] I have heard [d] Other specify		Skip to (14) if answer is (b)
13.	If yes, how did you know? (Multiple answer)	[a] By V-WASH-CC members [b] By media [c] By FCHVs [d] By mother groups [e] By relatives/friends [f] By self study [g] Other specify		
14.	In your opinion, why it is needed to construct toilet in the house?	[a] Don't know [b] To keep hygienic environment [c] To protect from diseases [d] To maintain reputation [e] Due to difficulties to go outside for defecation [f] Social obligation [g] Other specify		
15.	Do you know about, how a human excreta can enters into	[a] Yes [b] No		Skip to (17) if answer is (b)

	human mouth?	[c] Only heard [d] Other specify		
16.	If know how is it enters?	[a] Through the fingers [b] Through the flies [c] Through animals [d] I have heard but can't explain [e] Other specify		
17.	Do you know about diseases after fecal oral contamination? If yes what are they? (Multiple answer)	[a] Don’t know [b] Diarrhoea [c] Dysentery [d] Worms [e] Typhoid [f] Cholera [g] Jaundice [h] Other specify		
18.	What to do if the above your mentioned diseases occurred?	[a] Don’t know [b] Go to traditional healer [c] Ask medicine with FCHVs [d] Go to health institutions [e] Other specify		
19.	What do you use for hand wash after using the toilet?	[a] Only water [b] Soap & water [c] Ash & water [d] Soil & water [e] Other specify		
20.	How frequently your family members take bath?	[a] Once in a day [b] Within 2 or 3 days [c] In a week [d] Irregularly [e] Other specify		
21.	How frequent clothes are washing in your families?	[a] Once in a day [b] Within 2 or 3 days		

		[c] In a week [d] Irregularly [e] Other specify		
22.	What are the advantages of using toilet for defecation rather than in open field? (Multiple answer)	[a] Not feeling shame [b] Environment becomes clean [c] Safe from diseases due to poor environment [d] Reputation goes to high [e] Can be safe from accident [f] Other specify		
23.	What kind of changes have you seen in your village after constructed toilets? (Multiple answer)	[a] No changes have seen [b] Less people getting sick [c] Treatment cost being less [d] Environment is clean [e] Other specify		
24.	Where those people are going for urinal and stool that have no toilets? (Multiple answer)	[a] In open land [b] River side [c] In the fence [d] In the road [e] Wherever they want [f] Other specify		

Women Participation in Toilet Construction

Q. No.	Questions	Answers	Code No:	Skip
25.	Who takes decision of making toilet in your home?	[a] Father in law [b] Mother in law [c] Husband [d] Self [f] Other specify		Skip to (27) if answer is (d)

26.	What kind of role you played in other's decision for toilet construction inside your home? (Multiple answer)	[a] I have proposed [b] Frequently asked [c] Explained about benefits of toilet [d] Pressure given [f] Other specify		
27.	What kind of contribution you made for toilet construction in your home? (Multiple answer)	[a] Physical support [b] Support to take decision [c] To accumulate money [d] To mobilize workers [e] Nothing did [f] Other specify		

Socio Economic Status of Women

Q. No.	Questions	Answers	Code No:	Skip
28.	Are you a member of any agency?	[a] Yes [b] No		
29.	Are you engaging in any income generating activities?	[a] Yes [b] No		Skip to (31) if answer is (b)
30.	If yes, in which activities you have been engaging? (Multiple answer)	[a] Trading [b] Agriculture [c] Labor [d] Job [e] Other specify		
31.	Can you take decision over your income?	[a] Yes [b] No		
32.	Do you have any land in your name?	[a] Yes [b] No		Skip to (32) if answer is (b)
33.	If yes, Can you take decision for its sale or anything else?	[a] Yes [b] No		

34.	Is there any financial support realized in your family after starting to use toilet?	[a] Yes, Treatment cost reduced [b] Not remarkable [c] Other specify	☐	
35.	If yes, What are they?	[a] Treatment cost reduced [b] Other specify	☐	
36.	Are you a member of any women organization like mother group etc? If yes what kind of participation?	[a] Yes [b] Not any [c] Other specify	☐	
37.	Any contribution has been given by women group to improve your community environment?	[a] Yes [b] Not any [c] Other specify	☐	Skip to end if answer is (b)
38.=	What kind of support has been contributed by women group to improve community's sanitary environment?	[a] Labor for physical works [b] Implementation of awareness program [c] Coordination between NGO/INGOs [d] Follow up and threatening activities [e] Resource finding and mobilization [f] Other specify	☐	
39.	In your opinion; what types of role a women can play for sanitary activities?	[a] Active and important role [b] Only help [c] Other specify	☐	
40.	Is the role of members played by women in your community is sufficient?	[a] Sufficient [b] Can do more [c] Other something do [d] Don’t know [e] Other specify	☐	

Thank you for your support.

ANNEX-2

DHAMAULI VDC IN THE MAP OF RUPANDEHI