Summer Training at
Aga Khan Rural Support Program (AKRSP)

Study on Status of Swachha Bharat Mission in 3 Village of The Dangs

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INSTITUTE OF HEALTH
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IIHMR UNIVERSITY

CERTIFICATE

This is to certify that **Anand Gaurav** has undergone summer training in IIHMR University at **AKRSP (Aga Khan Rural Support Program)** from **3rd April, 2018 to 20th may 2018.**

The candidate himself completed the project assigned to him during summer training. His approach to the project was sincere and proactive. This summer training is in partial fulfillment of the course requirement recommended for the award of MBA in **Rural Management**.

I wish him success in all his future endeavors.

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AGA KHAN RURAL SUPPORT PROGRAMME (INDIA)

Date: 04th August, 2018

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Anand Gaurav from IIHMR University, Jaipur has completed Rural/Summer Internship placement with us on the topic "*To Study the Overall Impact of all the Interventions carried out on Grass Root level by Government and Development Partners and Identify factors that Limits the Usage and Gains of all the Interventions in Mahalpada, Borkhet and Chikatiya Villages*" at Ahwa Taluka of The Dangs district in Gujarat from 3rd April to 20th May'18.

He has submitted the final report as per the guidelines provided by the institute. We wish her all the best for her future!

Area Manager
Aga Khan Rural Support Programme (India)
Dangs

Acknowledgement

This report is an off-shoot of a study of status of Swachh Bharat Mission in 3 villages (Chikatiya,Borkhet & Mahalpada) of The Dangs district in Gujarat state ,made possible to us as part of our course curriculums by IIHMR University,Jaipur. We thank the Institute's faculty and Dean of Development studies Professor .Dr.Goutam Sadhu, for this unique opportunity.

The report owes significantly to Mr.Kirti Bhai Patel,cluster Manager of Ahwa Cluster in The Dangs district, for introducing us to his wide network of grassroots workers in the isolated localities of tribal communities across the district,to Mr.Arun Adhikari , who supplemented our efforts through timely logistic arrangements, suggestions and showing the way ahead with his experience both in the organization and on the field ; to Mrs.Neeta Ben, Anchor for helping us to several occasion to reach out cultural and/or political insiders to the life and struggle of tribes who nuanced our understanding of their strategies of coping and resistance,to all the organization employees for their warm hospitality to all the interns from IIHMR University, and to the residents of tribes communities who patiently accommodated our presence and questions.

Special thanks to Snehal and Kamlesh, (field officer,AKRSP) who helped us go through our challenges, and stood by our side always.

Table of contents

Abbreviations

BCC……....Behavior Change Communication

CBO……...Community Based Organization

GOI……Government of India

GP……..Gram Panchayat

GS……...Gram Sabha

IEC……Information Education Communication

IHHL……Individual Household Latrines

MDG……..Millennium Development Goal

NFHS…….National Family Health Survey

NGO……..Non-Governmental Organization

ODF……...Open Defecation Free

PRI…….Panchayati Raj Institutions

SBM…….Swachh Bharat Mission

TSC……..Total Sanitation Campaign

WASH ……..Water and Sanitation Hygiene

WHO.....World Health Organization

Executive Summary

Sanitation is one among the most imperative global development issues in present contemporary world. Posing grave health challenges, Intensifying socio-economic, gender differences and awkward process of inclusive growth and development, lack of proper sanitation facilities has serious outcomes for any developing nation. Given the strong, direct and indirect linkages of sanitation with socio-economic status of citizens and health aspects, it has been appropriately included in the United Nations Sustainable Development Goals (SDGs).Out of seventeen SDGs, many are directly linked to sanitation: Reduce child mortality, combat disease and ensure environmental sustainability. Even the first goal, eradicate poverty, is somehow linked to sanitation as high health and coping costs associated with illnesses caused by improper sanitation facilities and incomes, contributing to poverty.

The main purpose of the study was to assess the impact of SBM on the pace of progress of sanitation availability and usage, This study focus on the sustainability of sanitary facilities over time. The rationale of the study is to provide important evidence on whether the components of SBM gramin is implemented on grass root level and to which extent, with the objective of analyzing the level of commitment being put by all the stakeholders & identifying the loopholes where further effort is needed.

The study is carried out in a single phase with sample size of 90 (30 from each village),based on random sampling. Solid and liquid waste management stands an issue for the community and Panchayat as around 60% of people still disposes wastes in open,Supply water pipes lying on the open ground raising the point of sustainability factor not taken into consideration while implementing the processes,The IHHL construction happened on part of development partner seems nice and tight with all infrastructures having proper pan.wall.roof& door having piped water inside the toilet and a water storage tank with hand washing area outside the toilet. Usage of toilet by women is found relatively higher than that of men in all three villages.

Background

To cover all households with proper water and sanitation facilities and promote hygiene behavior for overall improvement of health of the rural and urban community. The Total Sanitation Campaign (TSC) of the Rajiv Gandhi National Drinking Water Mission (RGNDWM), Government of India (GoI) was launched. The involvement of Panchayati Raj Institutions (PRIs) & other government & welfare agencies in scaling up the TSC was felt obligatory, since sanitation promotion needed a large scale social mobilization to lead to behavioral change, Several CBO's ,NGO's and international organizations participated vigorously to deal with the scenario.

On 2nd October 2014 current Indian Prime Minister ShriNarendraModi launched a campaign s**wachh Bharat Abhiyan** (**SBA**) which aims to clean up small towns,cities,streets and other public places. The objectives of Swachh Bharat include eliminating open defecation through the construction of IHHL and community-owned toilets and establishing an responsible mechanism of monitoring toilet use. The mission aims to achieve an Open-Defecation Free (ODF) India by 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi, by constructing 90 million toilets in rural India at a projected cost of Rs.1.96 lakh crore,It includes Swachh Bharat Abhiyan ("Gramin" or rural), which operates under the Ministry of Drinking Water and Sanitation; and Swachh Bharat Abhiyan (Urban), which operates under the Ministry of Housing and Urban Affairs.

With not only the sole component of constructing toilets several other components which were included in SBM gramin are,IECactivities,Capacitybuilding,Equity and Inclusion,Soild and liquid waste management.Clear roles of PRI ,CBO's ,NGO's are defined (Guidelines of SBM gramin).

Despite the huge investments and human resource involved this program seems to be revolving around construction of IHHL merely.

Many study in recent times underline that not only are substantial investments is needed but these steps will be effective only when they result in reducing morbidity and mortality, mitigating impacts on drinking water, improving welfare, and reducing impacts on tourism, and so on, which are associated with inadequate sanitation.

Status of Rural Sanitation in India

Sanitation in Rural India has always been a State specific issue,however the efforts of state government are supplemented by Indian government through technical and financial assistance. To change all the sanitation programs ,TSC,SBM into demand driven and community centered program several Civil society organizations participated actively.All the campaigns in Rural area has the follow the objective of accelerating sanitation coverage in rural areas by generating a push from the people to get their own facilities rather than expecting the Government to do it (demand-led promotion) with focus on intensive education and awareness campaigns to ensure that people understand the call for safe sanitation arrangements.

According to census 2011 data, only 30.7% of rural households had access to toilets in 2011.In 2011, approximately 615 million people lacked access to ample sanitation arrangements in their communities and were enforced to defecate in open. Not only is this practice an dishonor, it also presents a major hazard to human health. Millions of tons of sludge and fecal matter are dredged from open-air pits, which leads to a substantial health hazard for communities without the means to safely dispose of this waste. In fact, according to UNICEF, poor sanitation in India is partially responsible for the stunting of more than 65 million children.

According to the 2015 report of the Joint Monitoring Programme of the United Nations International Children's Emergency Fund and the World Health Organization, around 44 % of Indians defecate in the open.Poor sanitation has a array of pessimistic impacts on the society and the economy as well. It causes debilitate and deadly diseases through the contamination of drinking water sources and food with pathogen-laden human wastes.

One of the major challenge that India and other developing nations are facing where poor sanitation remains a stern problem is combining the functionality that toilets need to maintain the reach of infectious diseases while remaining cost-effective enough to be provided to these countries' marginalized communities. For example, toilets commonly found in developed

nations are largely impractical in developing countries due to the large volume of water required. Also, the lack of waste disposal management system while designing a next-generation toilet a extensive challenge. Poor water and sanitation facilities and unhygienic practices contribute to millions of child deaths every year. Around the world, an estimated 1.5 million children under five die each year from diarrhea (UNICEF 2009), and many others suffer from malnutrition and disease caused by water-borne diseases. Lack of access to safe sanitation is a key contributor to high rates of diarrhea. many of the countries with the highest annual DALYs (disability adjusted life years) attributable to diarrhea also have large shares of their populations lacking access to improved sanitation facilities.

- Of the 1.1 billion people in the world who defecate in the open, 59% are in India
- 67% of rural Indian households still do not have access to adequate sanitation facilities
- Inadequate sanitation facilities causes India economic losses of US$53.8 billion a year

India is perhaps the worst affected country. Annually, over half a million children die of diarrhea, 46% of children under five are malnourished. Across rural and urban India, one of the main causes of prevalent diarrheal diseases is open defecation, practiced by around 638 million people who lack improved sanitation facilities. Over half of the world's open defecation occurs in India. Several studies on water, sanitation and hygiene have reported positive behavioral and health effects immediately after the campaigns have ended. Research into the middle and long-term duration of these effects, have pointed out that many households discontinue their new behavior with time.

Drinking Water& Sanitation:

Safe drinking water is an indispensable element for life and of course for better health of an individual. Water born disease like acute diarrhoea, dysentery, acute viral hepatitis, cholera, enteric fever etc. are directly related to the source and storage habits of drinking water of the households.As far as The Dangs district is concerned, about 76 per cent of total households have access to safe drinking water. This figure is not satisfactory as compare to the state level

average where around 93 per cent of total households have access to safe drinking water. If we look at the urban & rural scenario, there is a gap around 16 points for safe drinking water availability which needs special attention. In The Dangs, handpumps are major source of drinking water rather than tap water as in many other places in Gajarat . This hand pumps turns nonfunctional before the onset of summer,Thus, creating water crises in the district.

Apart from the availability of safe drinking water, lack of sanitation, particularly sewage and disposal of solid and liquid waste has been observed as among the main reasons for existing ill health and morbidity, especially in rural scenario. As per Census 2011, around 29 per cent of total number of Households of the district are having toilet facility within household premise which is nearly half of the State average (57.34%). Here also rural urban gap is visible; around 58 per cent for urban households having toilet facility within the premises but only around 26 per cent for rural households in the district have that facility.

Section A: Project Report

The Current Study

The foremost purpose of the study is to assess the impact of SBM and the pace of progress of sanitation availability and usage, This study focus on the sustainability of sanitary facilities over time. The rationale of the study is to provide important evidence on whether the components of SBM gramin is implemented on grass root level and to which extent.

Objectives:

- Study the Overall impact of all the interventions carried out on grass root level by Government and Development Partners
- To measure the effort being put by all the stake holders
- To identify the factor that limits the usage and gains of all the interventions.
- To examine the sustainability and gains of all the interventions.
- To identify the area where further weight is to be put on.

METHODOLOGY ADOPTED

The study is carried out in single phases, A total of 3 village (Mahalpada,Borkhet,Chikatiya) is covered. This is a cohort study which is based fully on observation regarding the knowledge, attitude, & behavior of respondents and their family members towards WASH.

The research instruments administered are,

- In-depth interaction with respondents of selected households using a structured Questionnaire
- In-depth interactions with a range of secondary stakeholders, including PRI representatives, elected PRI members, primary school teachers, Anganwadi workers, Health workers, Community Based Organization (CBO) and Women or Youth
- Self Observation of sanitation arrangements by researcher himself.

Sample coverage:

A total of 90 households is being interviewed (30 from each village, around27% of households) with the help of pre finalized schedule.

For the selection of household to be interviewed here are the selection criteria:

H1 = (R)
H2= (h1+n/30)
H3= (h2+n/30)……

Where,
R=Any random household in the village.
N=Total number of household in the village.
H1=First household to be interviewed.

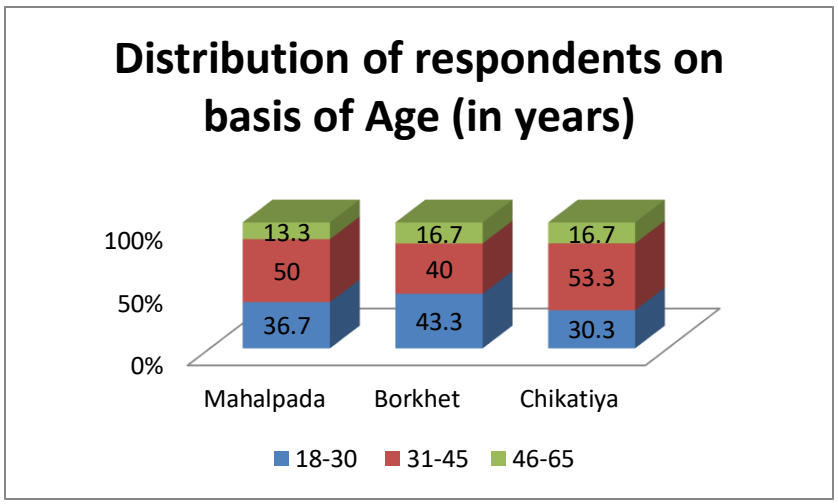
LIMITATIONS

- The non-availability of adult member of household, locked houses and *Anganwadis* during the field visits in villages was the most important operational constraint.
- Due to highly scattered habitations in villages, it posed limitation for conducting household interviews in all the habitation. This is found predominant in tribal villages.
- After gram Panchayat elections, in many cases the Sarpanch who were involved in implementing SBM have changed and the new Sarpanch who have taken over the post couldn't provide in-depth information about SBM implementation procedures.
- "Hindi" seems to be a language barrier while interacting with community and members of household.

Section B: Findings

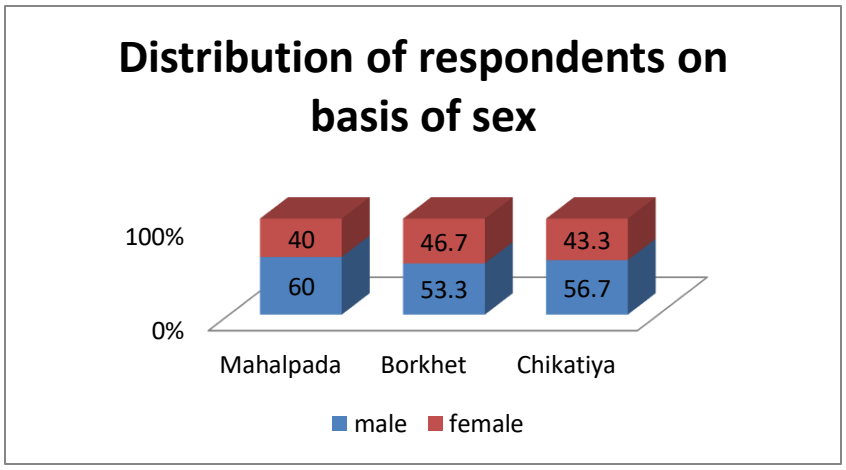
Social & Demographic profile of respondents

Figure B.1



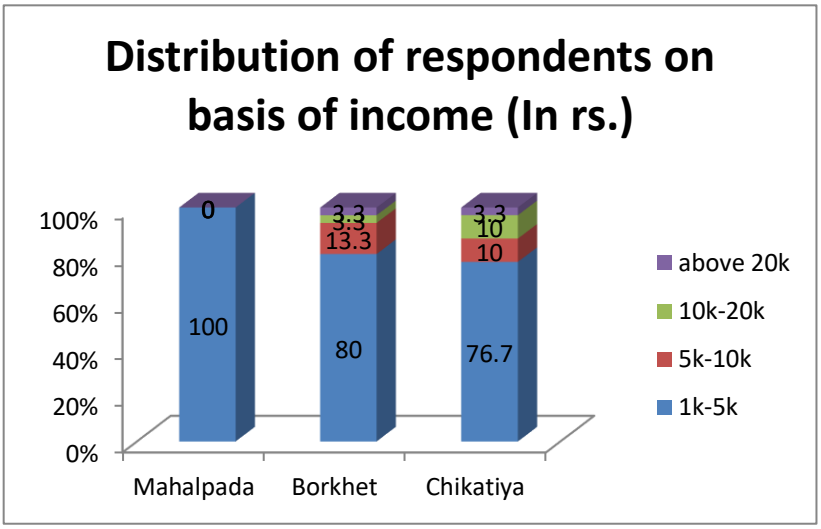
This Figure classifies total number of respondents(90) on basis of three categories,18-30 years,31-45 years,& 46-65 years.It is visible that the most of the respondents fall in category 31-45 years in all the village, though the number of respondents in age group 18-30 years is 37% in Mahalpada,43% in Borkhet and just above 30 % in Chikatiya,while age group 46-65 years contributes little to the study which is around 13%,17% & 17% in Mahalpada,Borkhet and Chikatiya respectively.

Figure B.2



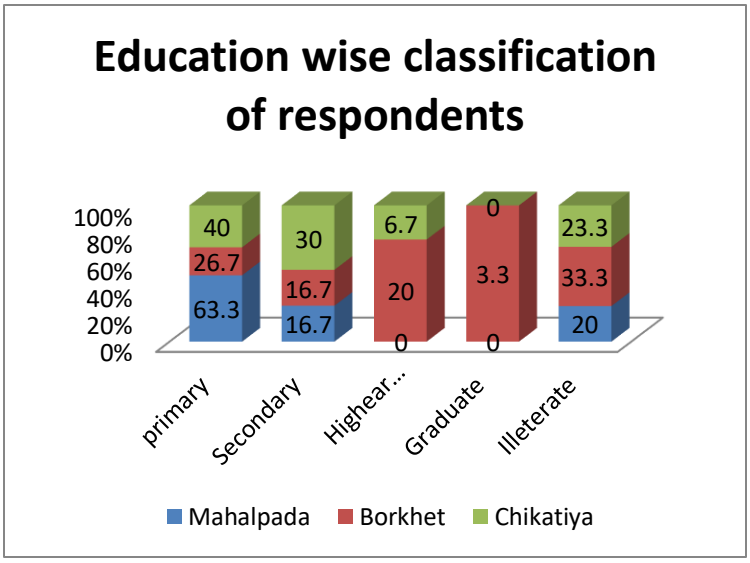
This Figure distributes total number of respondents (90) on basis of sex,Male and Female,The ratio of male and female is quite balanced in all three villages,60%of male and 40% female in village Mahalpada while just above 53%male and 46.7% female in village Borkhet and around 57% male and 43% female in village chikatiya.As the number is very much balanced there is fair chances of capturing the opinion of both the halves of the society.

Figure B.3



This Figure reveals the classification of respondents on basis of income. Four categories of income ,1000-5000,5000-10000,10000-20000 and above twenty thousand has been created to understand the economic stability of villagers. It is clear from the statistical representation that 100% of respondents in village Mahalpada falls within 1st category of income,1000-5000,80% of respondents lie in 1st category of income in Borkhet while 13% in 2nd category .Village chikatiya represents a mixed economic situation of respondents where around 77% falls in 1st category.10% each in 2nd& 3rd category while rest 3.3% in 4th category.

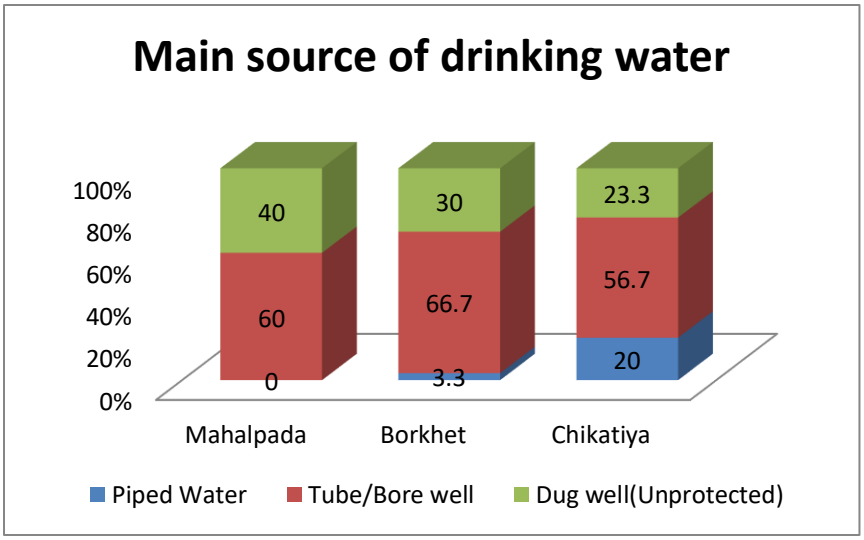
FigureB.4



This Figure demonstrate the literacy status of all the respondents among all three villages.Five categories, Primary education(Up to std.8th), secondary education(up to std.10th),Highear secondary, Graduate and illiterate will help to summarize the literacy status of person interviewed.

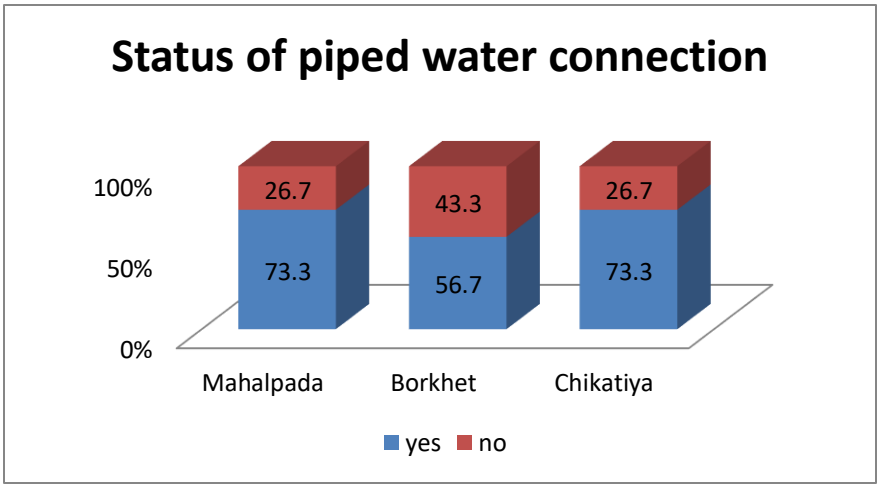
DRINKING WATER SUPPLY & HANDLING PRACTICES

Figure B.5



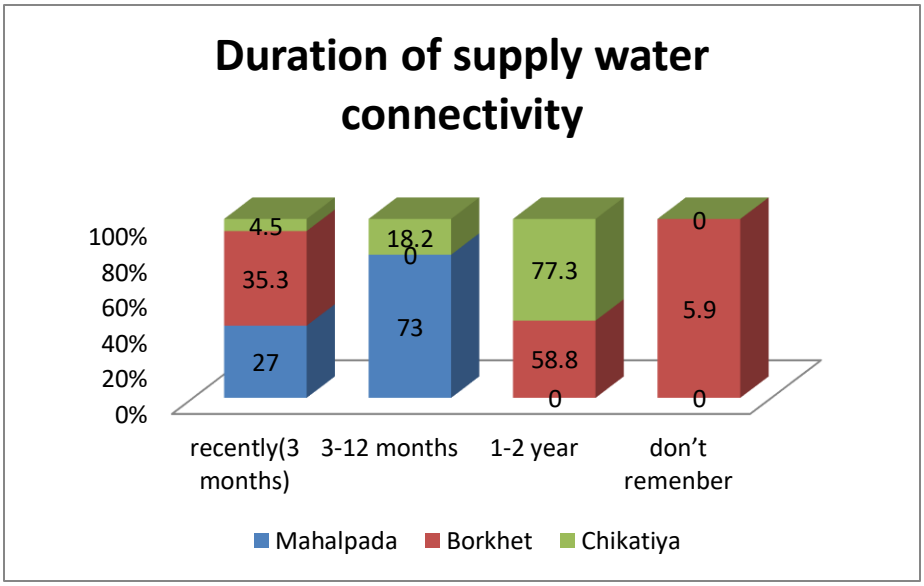
This Figure reveals the main source of drinking water for all the respondents being interviewed. Though many more options were created at the time of designing the schedule but all the responses falls within only 3 categories,Piped water, Tube well/bore well and unprotected well.Tube/dug well and unprotected well are main source of water for 60 % & 40% people in village Mahalpada.Piped water is main source of drinking water for only 3.3% & 20% in village BOrkhet and Chikatiya respectively while Dug well in 40%,30% & 23.3 % cases in three villages.

FigureB.6



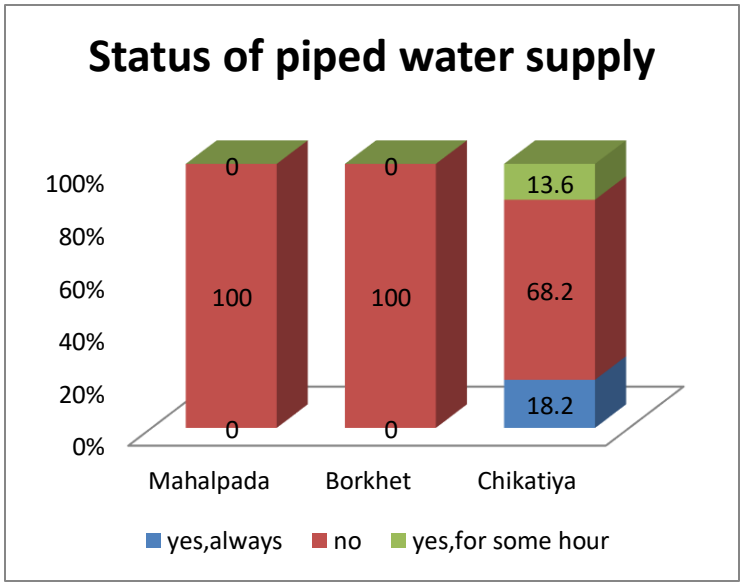
This Figure shows the status of piped water connection in households.Around 73%in Mahalpada ,57% in Borkhet& 73% in village Chikatiya are having piped water connection to their home while around 27% ,43% & 27% in three villages lacks water supply.

FigureB.7



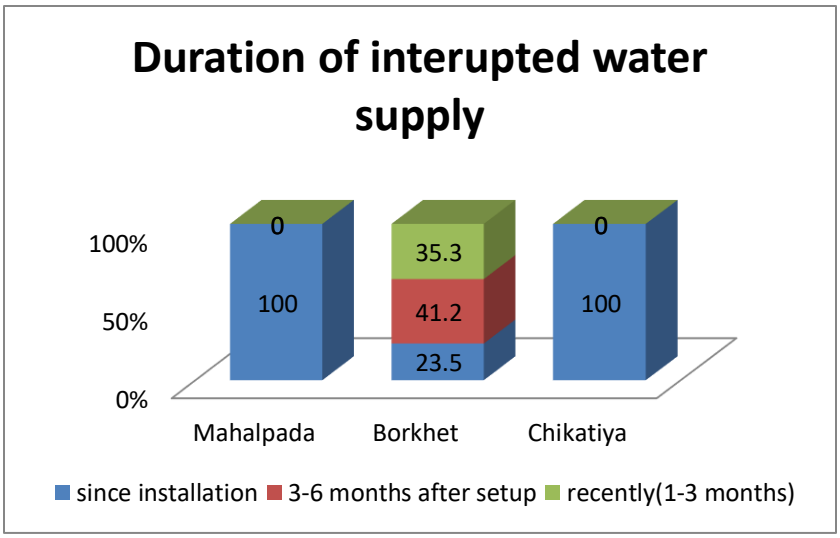
This Figure shows the duration of water connectivity to households in all three villages.Almost 27% In Mahalpada ,35% in Borkhet and 4.5% in Chikatiya has recently been connected to running water.73% & 18% of people have been supplied running water for last 1 year and so in Village Mahalpada&Chikitiya while 59% in Borkhet& 77% in Chikatiya has running water connection for last 1-2 year.Some old aged respondents cant remember the duration of water connectivity.

FigureB.8



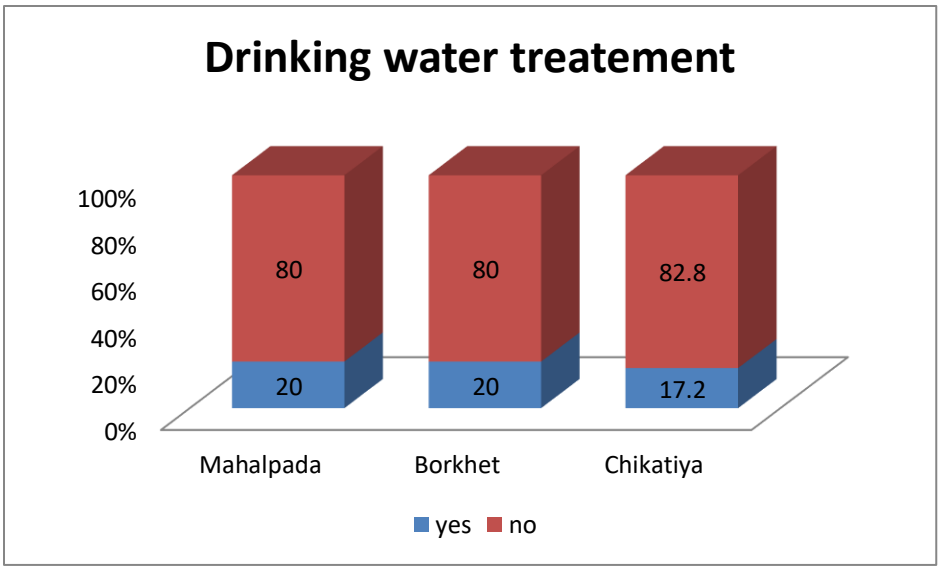
The above graphical representation help us to understand the status of water supply to households in all three villages.18%of respondents in Chikatiya are getting uninterrupted water supply while numbers are nil in rest two village.Though connections are quite satisfactory in all the villages but all the respondents in Mahalpada& Borkhet,68% in Chikatiya are not getting any kind of tap water while people getting water for some specific timing contributes only 13.6% in Chikatiya and nil in other two villages.

FigureB.9



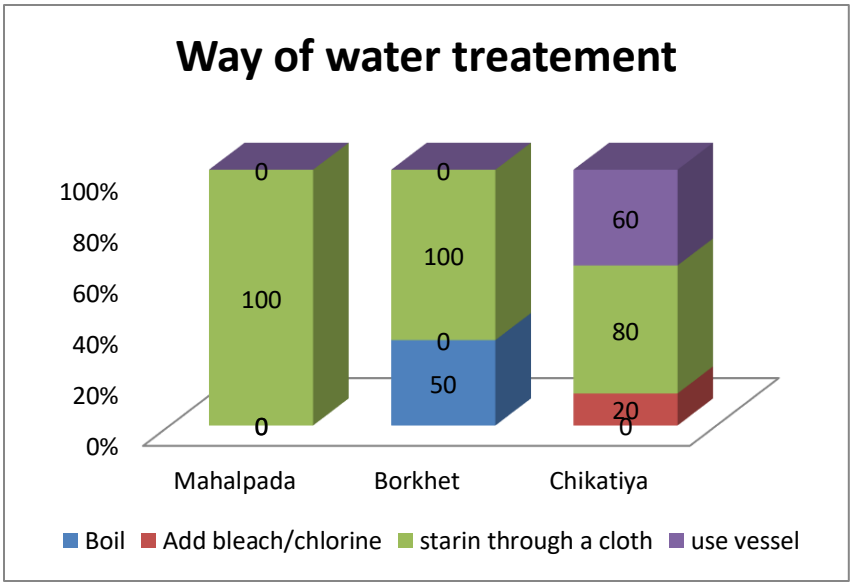
This Figure shows the duration of people not getting supply water. It relates to the above Figure where respondents said no to water being supplied to their household. Connections have been installed but all the respondents are not getting supplied water since installation (15 days compensation) in village Mahalpada and Chikatiya.Borkhet has a mix response where 23.5% of respondents are not getting water since installation,41% after 3-6 months of installation and 35% have some kind of interruption since last 1-3 months.The reason seems lack of willingness among PRI members .

FigureB.10



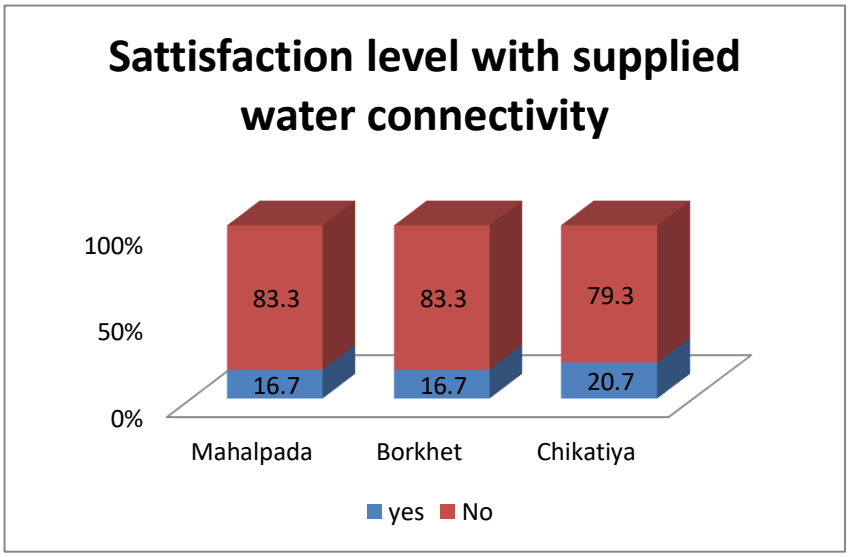
This Figure shows the behavior of respondents towards drinking water treatment before drinking.Only 20% each in Mahalpada&Borkhet and 17% in Chikatiya agreed to the provision for any kind of treatment of drinking water while around 83% in Chikatiya& 80% each in Mahalpada and Borkhet replied not doing any kind of treatment of drinking water

FigureB.11



This Figure represents the way of treatment of drinking water before drinking as some % of respondents agreed of some kind of treatment. All the respondents in mahalpda strain through a cloth before drinking,while in Borkhet&Chikatiya number is 100% & 80% respectively. other two village has mixed response where 50% in Borkhet boil water before drinking .20% of respondent add bleach/chlorine tablet for decontamination while 60% use vessel on tap before drinking in Chikatiya.

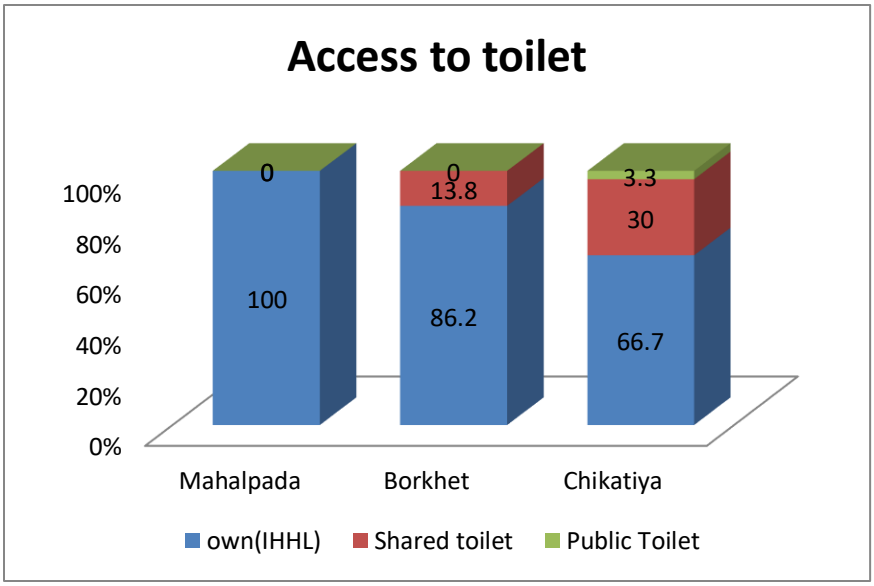
FigureB.12



The graph represent the satisfaction level of respondents with supplied water connection by panchayat.Only some of the respondents can be seen satisfied with the quality,16.7% in Mahalpada,16.7% in Borkhet& 20.7% in Chikatiya.The percentage of respondents not satisfied with the quality are quite high,83.3% in Mahalpada&Borkhet while 79.3% in Chikatiya.

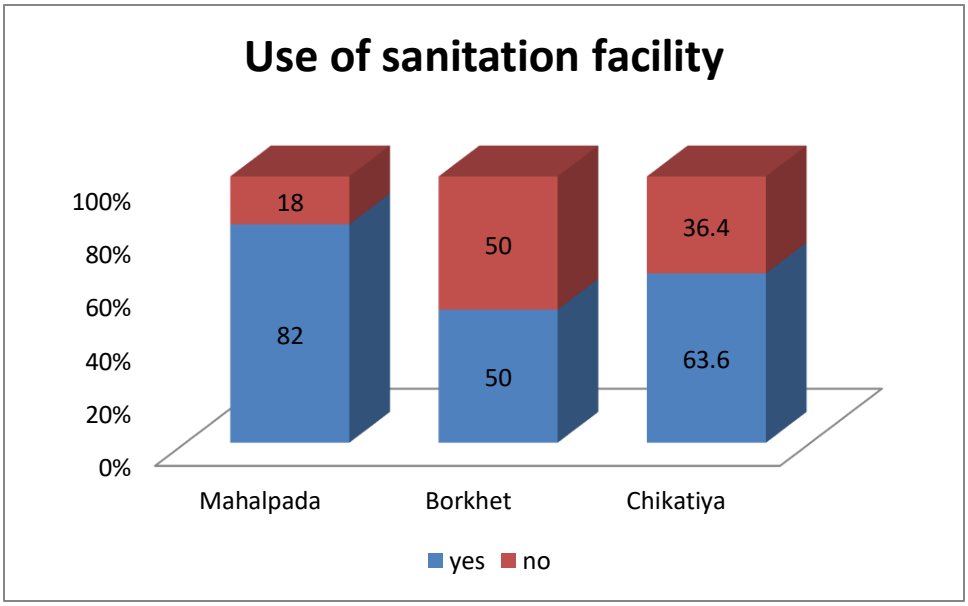
Access & use of household sanitation arrangements

FigureB.13



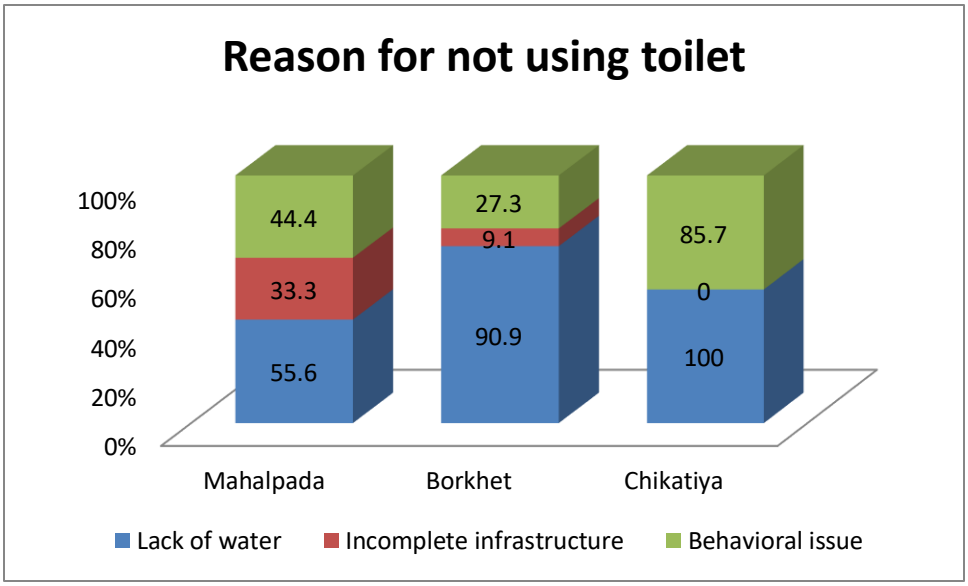
The graph demonstrates the access of respondents to any kind of sanitation facility, Individual household latrines, shared toilet or public toilet. All the respondents of village Mahalpadahs access of IHHL,while the number is 86.2% in Borkhet& 66.7% in Chikatiya.13.8 % & 30 % of people has access to shared toilet in Borkhet and Chikatiya.Percentage of respondents having access to public toilet is quite less ,3.3% in Chikatiya only.

Figure B.14



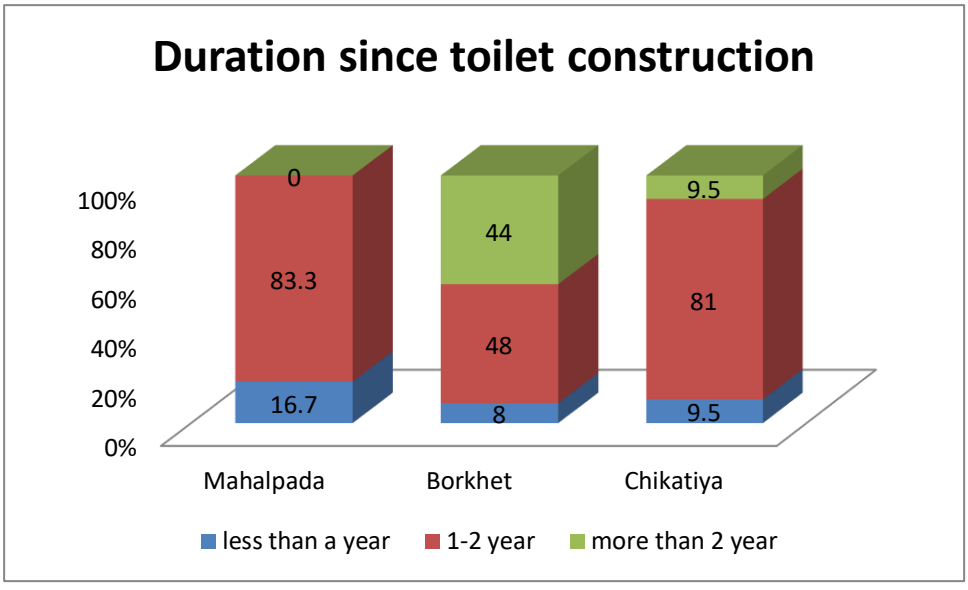
The Figure shows the behavior of respondents towards use of sanitation facilities.82%,50% & 63.6% use toilet regularly in v illageMahalpada,Borkhet&Chikatiya while 18%,50%,36.4% don't use toilet on regular basis in respective three villages.

FigureB.15



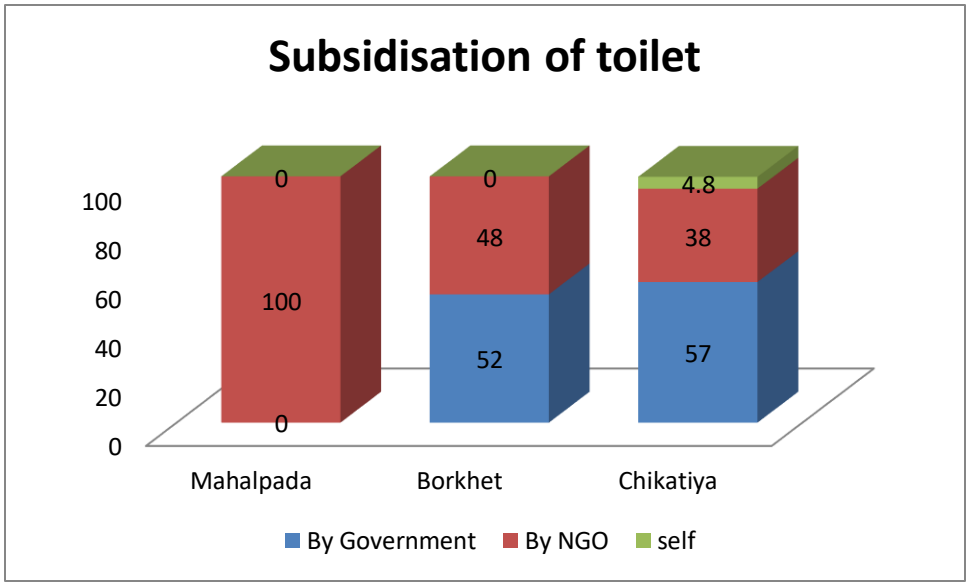
The graphical representation states the reason behind not using toilet facilities. The main reason seems to be lack of water along with behavioral issue. Incomplete infrastructure contributes little In village mahalpada and Borkhet.

Figure B.16



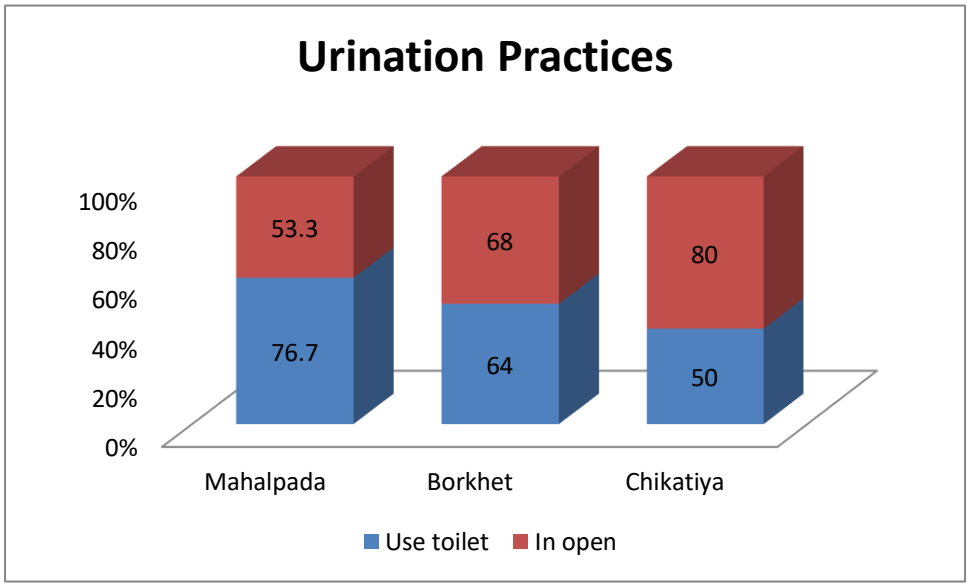
The above Figure reflects the duration since toilet construction .Most of the toilets were constructed around 1-2 years and more while very little percentage were constructed recently.83.8% in Mahalpada ,48% in Borkhet& 81% in Chikatiya were constructed 1-2 years before.

Figure B.17



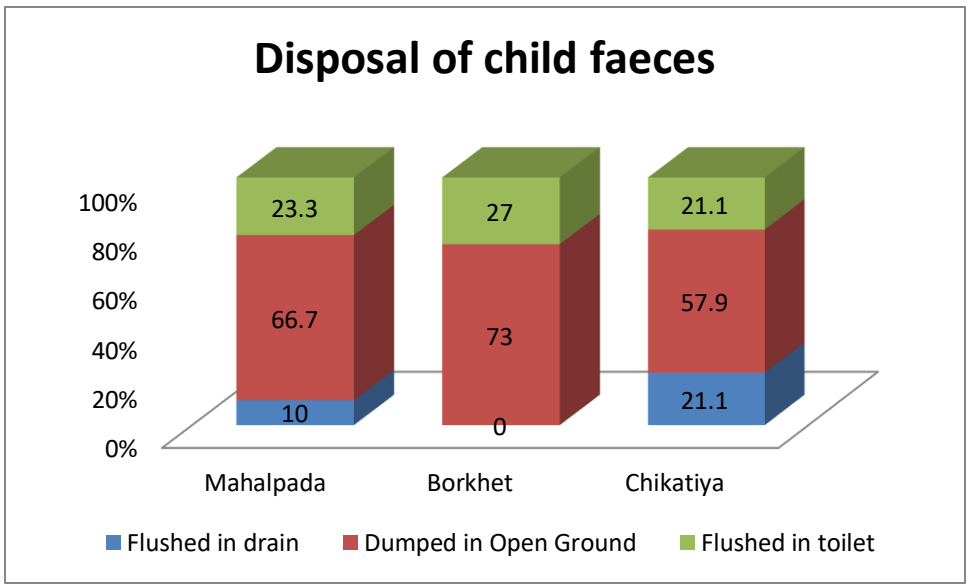
The graph shows the subsidization of constructed toilets either by government or NGO's.100% toilets are constructed by development partners in village Mahalpada while the numbers are 48% & 38% in Borkhet and Chikatiya.52% in Borkhet& 57% in Chikatiya contributes to government subsidy.

Figure B.18



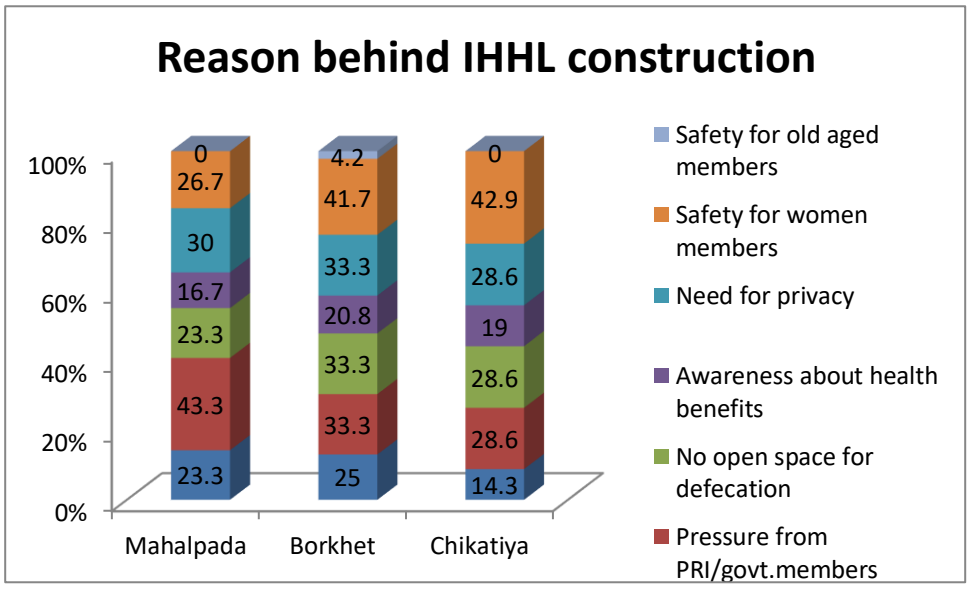
The Figure shows the urination practices by respondents weather using toilets or open ground to urinate. Around 77%,64% & 50% use toilet for urination in Mahalpada ,Borkhet&Chikatiya respectively while 53.3%,68% & 80% as a habit of urination in open.

Figure B.19



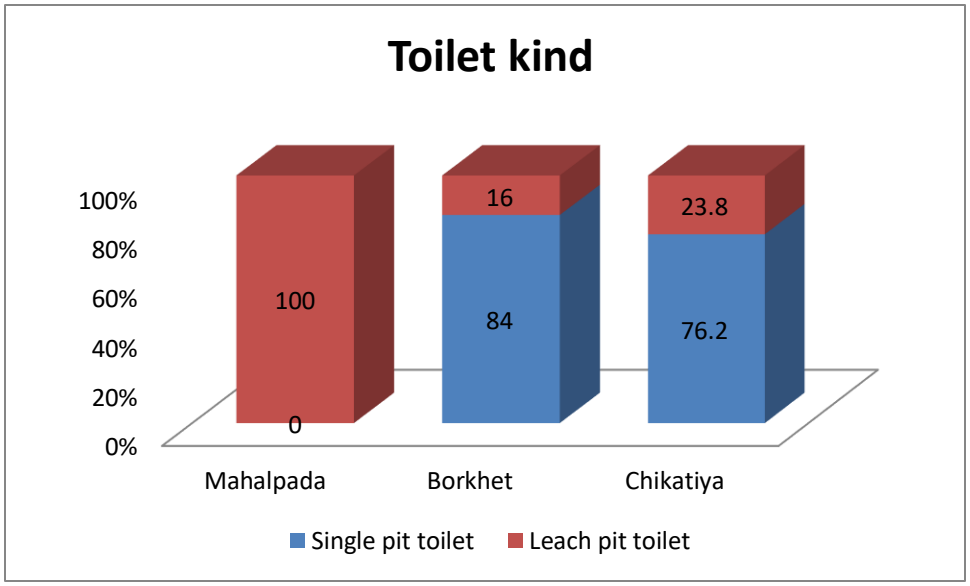
This Figure states the method of usage by respondents regarding disposal of child faeces.It can be clearly seen that most are disposing on open ground as the numbers are 66.7%,73% & 57.9% in village Mahalpada,Borkhet&Chikatiya.Disposal flushed in drain are 10% in Mahalpada& 21% in Chikatiya while 23.3% ,27% & 21% are using toilets for the disposal of child's faeces.

Figure B.20



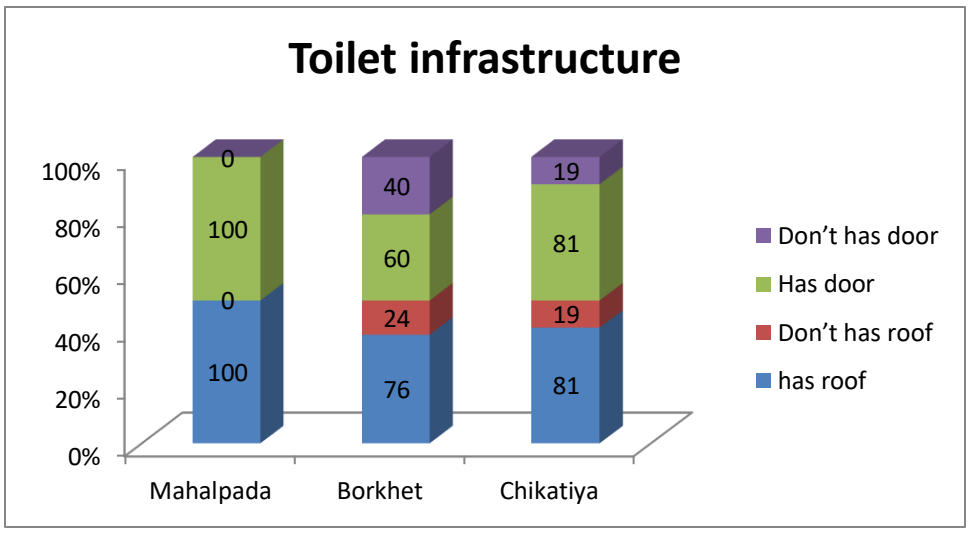
This Figure shows the reason behind toilet construction by respondent. It focus on the need & perception as well.In all three villages there can be found a mixed response among several options given to them ,though schedule contains some more options but it responses falls beyond that.

Figure B.21



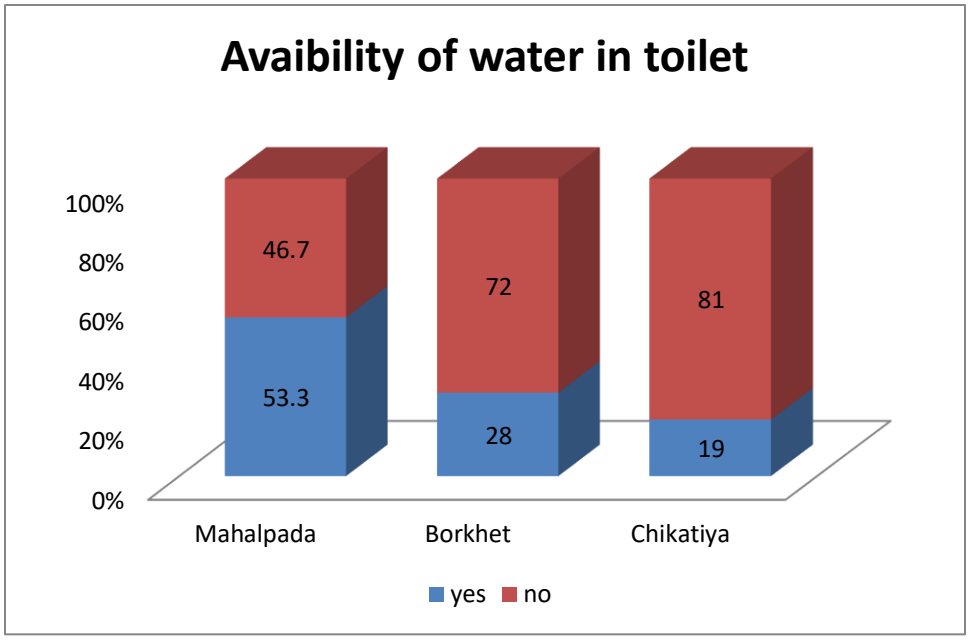
This Figure shows the kind of toilet being constructed by government or By NGO's.Responses were covered on basis of two options single pit & Leach pit.100% toilets in Mahalpada are found leach pit toilets while in Borkhet 84% are single pit & rest 16% are leach pit.Single pit contributes to 76.2% in Chikatiya while the village having round 24% as leach pit.

FigureB.22



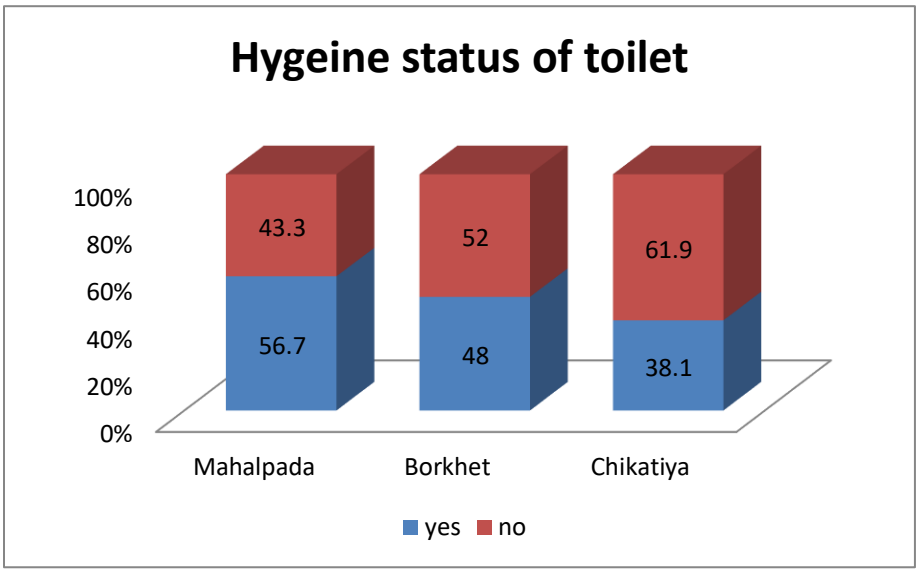
This Figure shows the nature of infrastructure being constructed in all three villages.The focus is to capture incomplete infrastructures along with completed ones.Around 40% in Borkhet and 19% in Chikatiya don't have door while 24% in Borkhet and 19% in Chikatiya don't poses a roof.while the percentage of comlpeted facilities are 100% ,76%,& 81% in respective villages.

FigureB.23

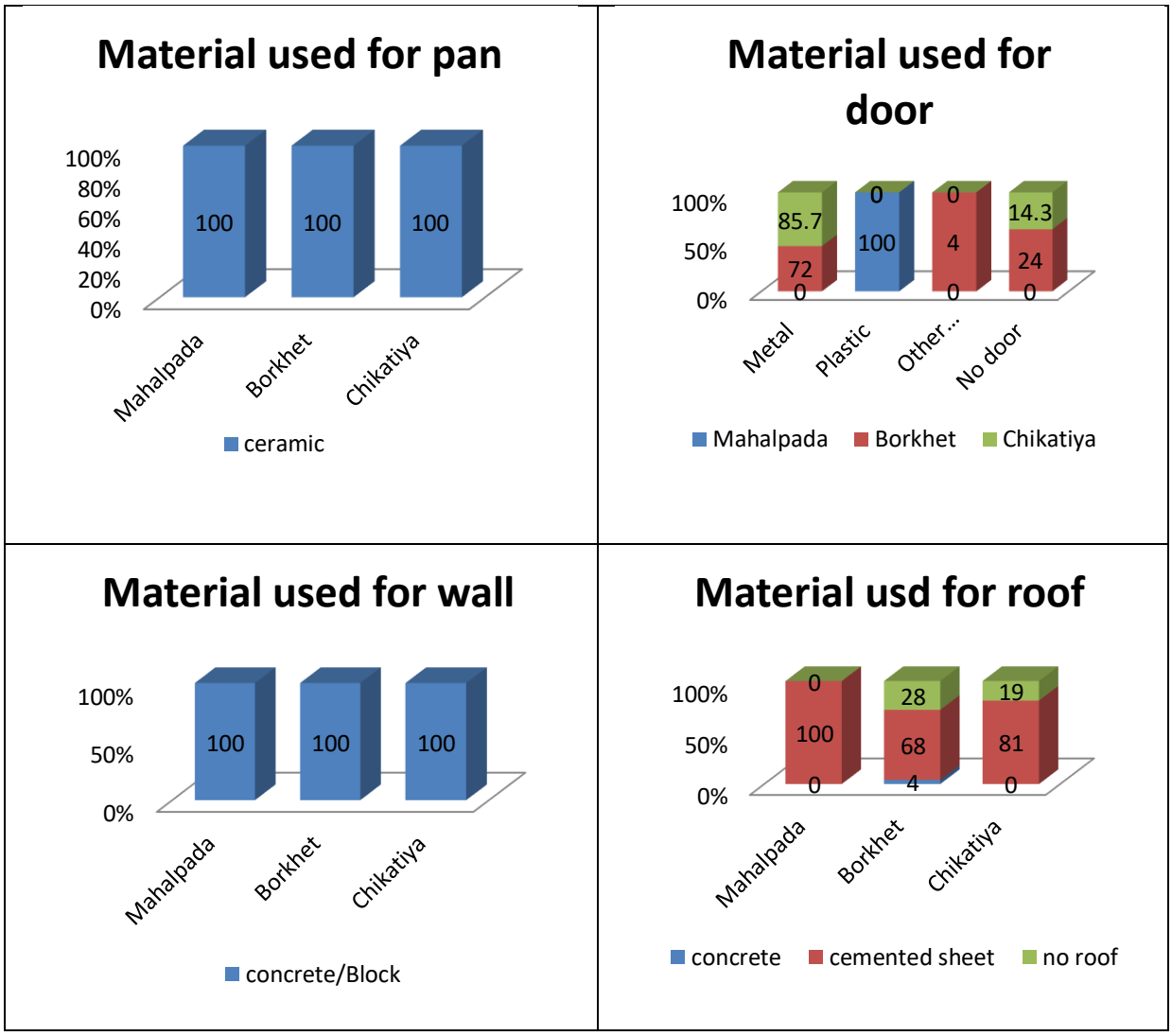


The Figure shows the status of avaibility of water in toilet as it can be considered as the main reason for not using the toilet.Around 53% of toilet has water avaibility in Mahalpada& 28% 19% in Borkhet&vHiktiya respectively while 46.7% in Mahalpada ,72% in Borkhet& 81% in Chikatiya don't has avaibility of water inside toilet.

FigureB.24

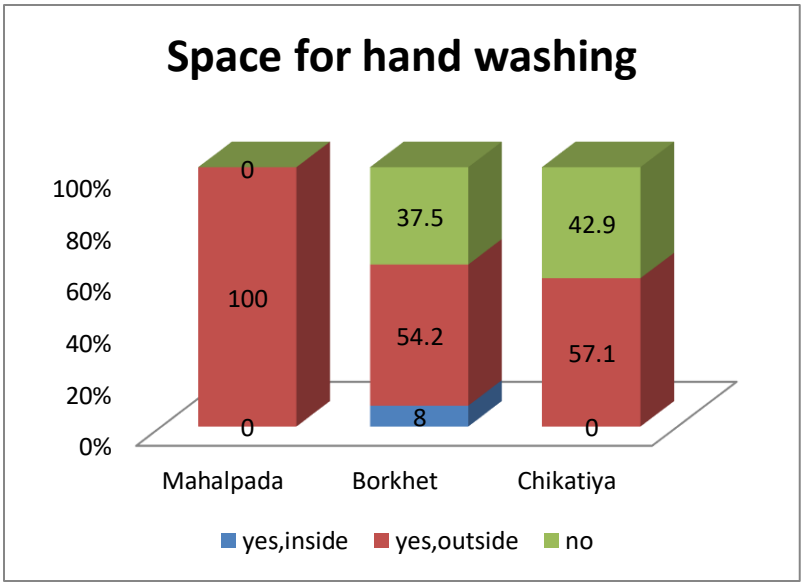


The represented graph shows the hygiene status of toilet used by households in all three villages.56.7%,48% & 38% are found hygienic in village MahalpadaBorkhet and Chikatiya respectively while 43.3 % ,52% & 61.9% were found non fly proof and unhygienic for use in respective villages.



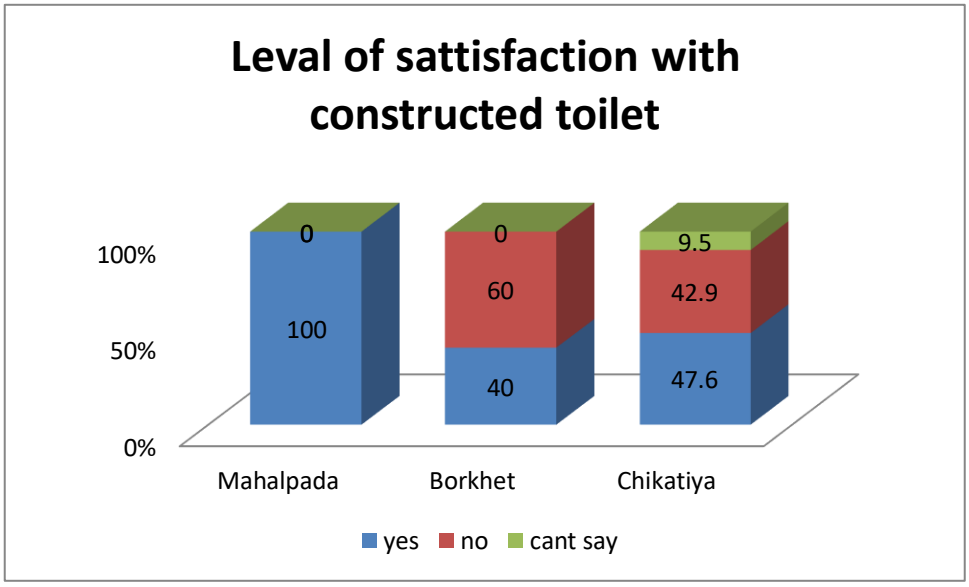
The above Figure shows the material used for the construction of toilet in respect of Pan,Door,Wall and Roof.It is clearly visible that ceramic pans are used in each cases in each of the villages,while wall are made of concrete /Concrete block in 100% cases in each village.72% in Borkhet& 85% in Chikatiya metal door are being used while 100% plastic doors are being used in village Mahalpada.Some infrastructures were found without doors ,24% in Borkhet and 14% in chikatiya. Cemented sheet is used for roof everywhere ,100% in Mahalpada,68% & 81% in Borkhet and Chikatiya.28% & 19% in Borkhet and Chikatiya were found without roof.

Figure B.26



This Figure shows the avaibility of hand washing area near toilet weather inside or outside or has no hand washing area.100% Respondents of Village Mahalpada are having hans washing area outside their toilet and the case is 54.2% in Borkhet& 57% in Chikatiya while 37.5% & 42.9 % don't have any space for hand washing after defecation near constructed toilet.Very little percentage ,8% or respondent in Borkhet has this facility inside their toilet.

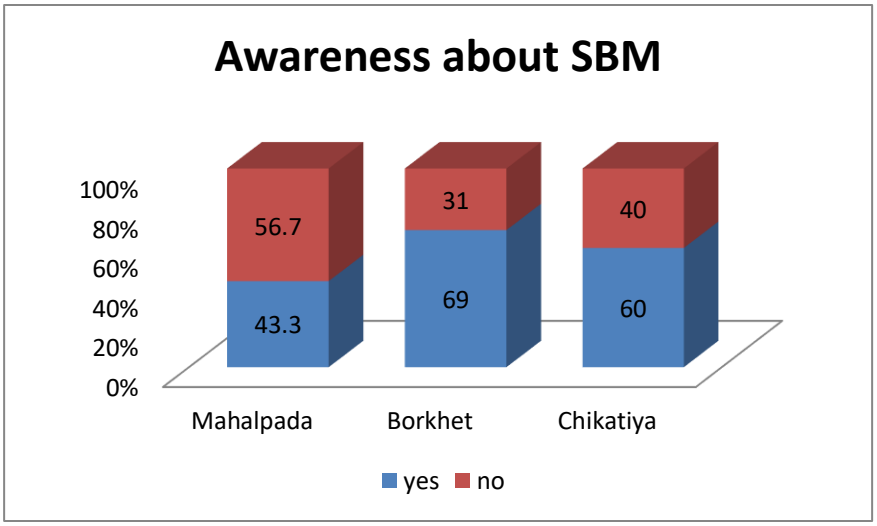
Figure B.27



The Figure shoes the level of satisfaction of respondents with the constructed toilets on overall experience. All respondents in Mahalpada are satisfied with the facility while numbers are 40% & 47.6% in Borkhet and Chikatiya.Around 60% in Borkhet and 43% in Chikatiya are not satisfied with the kind of toilet being constructed while merely 9.5% are not sure about it in village Chikatiya.

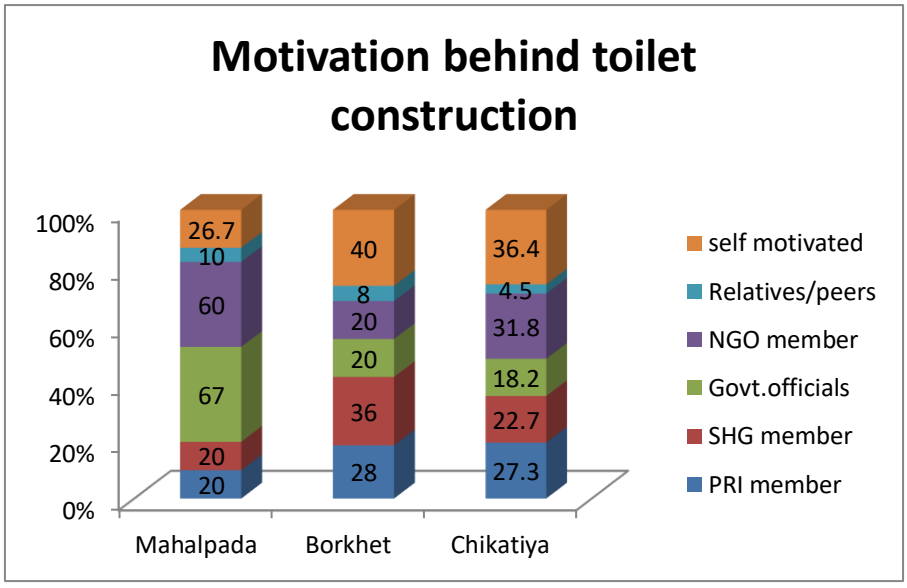
IEC & COMMUNICATION

Figure B.28



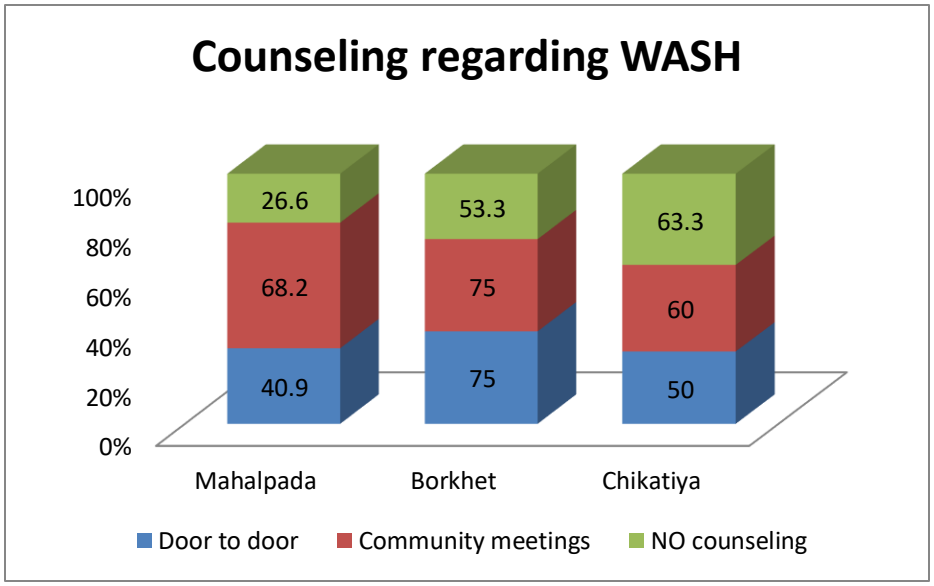
This Figure shows the level and extent to which SBM has been taken to rural areas,respondents were asked whether they have heard about SBM or not.43.3 % ,69% & 60% in Mahalpada ,Borkhet and Chikatiya is aware about SBM while 56.7%,32% nd 40% are not in same respective villages.

Figure B.29



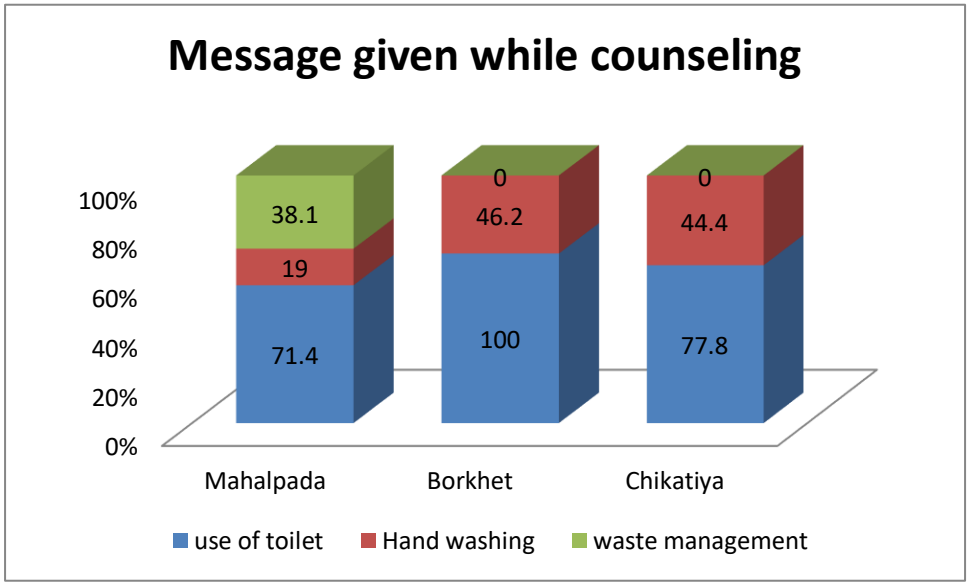
This Figure shows about the stakeholders behind motivating the common rural public for construction of IHHL.Responses were found mixed in all three villages, It shows the involvement of all stakeholders at different level in different villages.67% in Mahalpada were motivated by government officials while 60% by NGO members.The role of SHG members were critical in all three villages who motivated 20%,36% & 22.7 % respectively. Though a high percentage of people were found self motivated ,26.7%,40% & 36.4 % in three villages.

Figure B.30



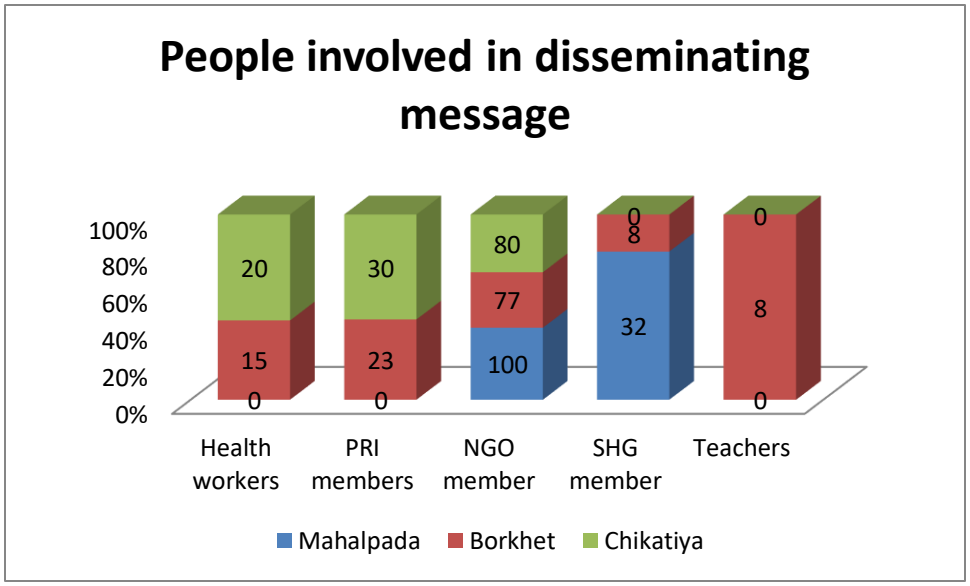
This Figure states about the counseling weather it is door to door counseling or by inviting in community meetings provided to the respondents at different levels by different stakeholders.26.6%,53.3% & 63.3% of respondents were not counseled at all by any one while the respondents who were counseled ,40.9%,75% & 50% through door to door counseling and 68.2%,75% & 60 % through community meetings.

Figure B.31



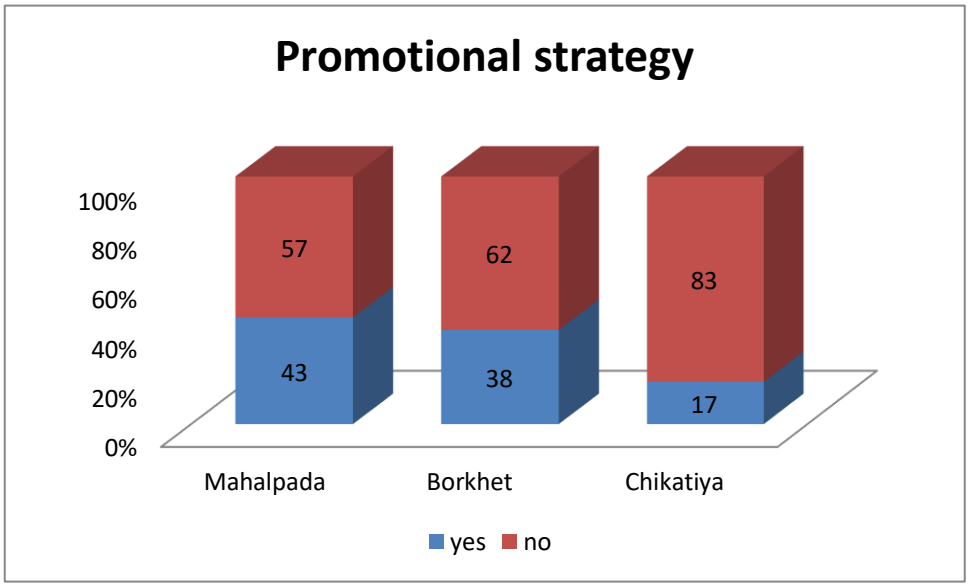
This Figure relates to the respondents who were counseled at any level by any of the stakeholders. It shows about the message given to them about benefits of WASH.Use of toilet is most commonly found in all three villages ,71.4% ,100% & 77.8% respectively. Benefits of Hand washing is second most ,19% in Mahalpada ,46.2% in Borkhet and 44.4 % in Chikatiya while waste management benefits contributes 38% in village Mahalpada only.

Figure B.32



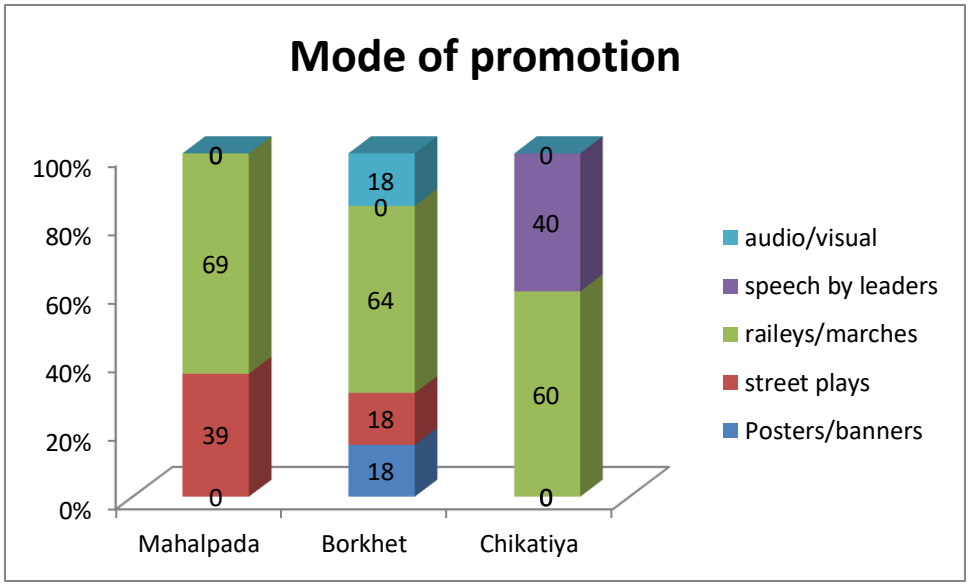
This Figure shoes the commitment of stakeholders involved in disseminating the benefits of WASH.The involvement of Health workers & PRI members can be seen in village Borkhet and Chikatiya , NGO members contributes to a larger extent in all three villages covering around 100% respondents in village Mahalpada.SHG members in Mahalpada&Borkhet played a vital role.

Figure B.33



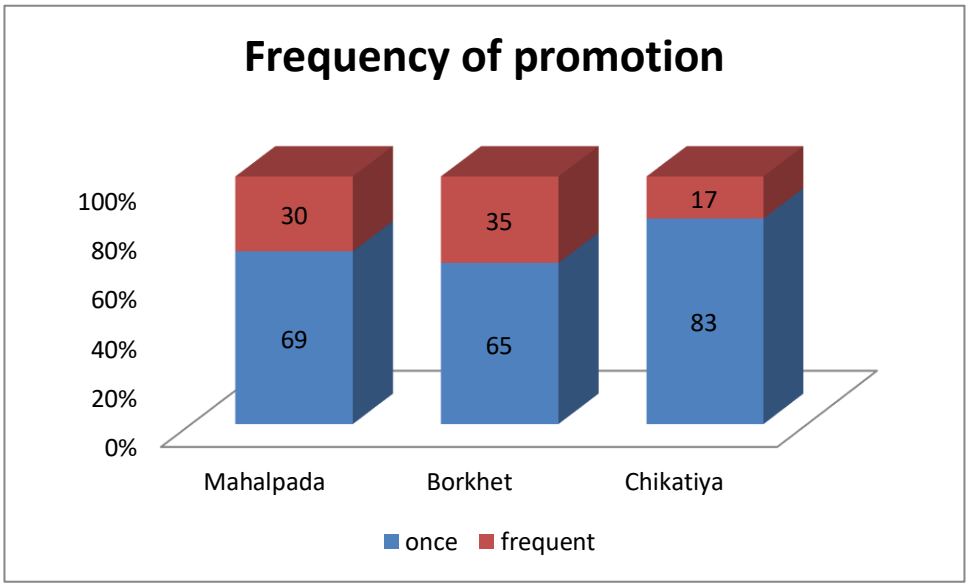
This Figure shows the promotional strategy carried out in villages to create a demand for sanitation facilities.43% in Mahalpada ,38% in Borkhet and only 17% in Chikatiya witnessed any type of promotional strategy carried out in their village while 57%,62% & 83% of respondents denies of witnessing any type of promotional strategy in respective villages.

Figure B.34



This Figure shows the mode used as a promotional strategy in all villages.Village Mahalpada reflects Street plays & Marches ,39% & 69% respectively ,posters/banners promotional technique were found in rest of two villages,where 40% of respondents witnessed speeches by PRI members/Local leaders .Riley's/marches were found common in all three villages,69%,64%& 60% respectively.

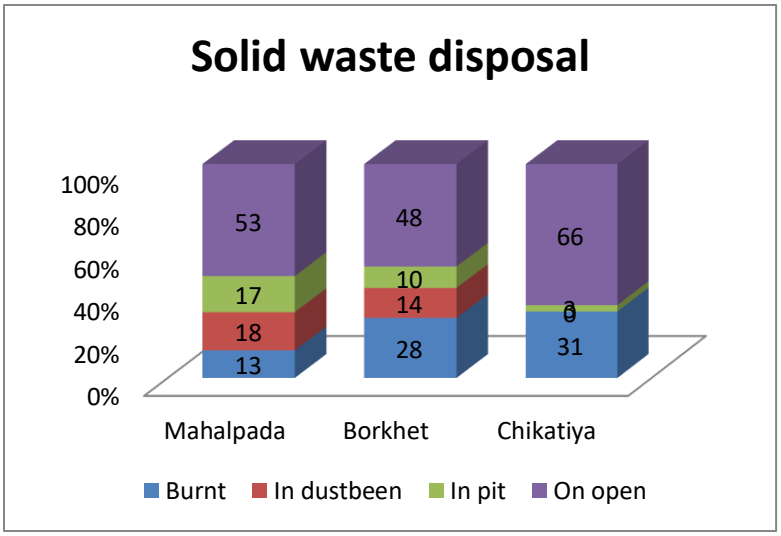
Figure B.35



This Figure states the frequency of promotional strategy being carried out I the village. It can be clearly seen that wherever the promotional strategy were carried out ,that was limited to once,69% in Mahalpada,65% in Borkhet and 83% in Chikatiya agrees to his. while 30% ,35 % & 17& in respective villages say that was frequent.

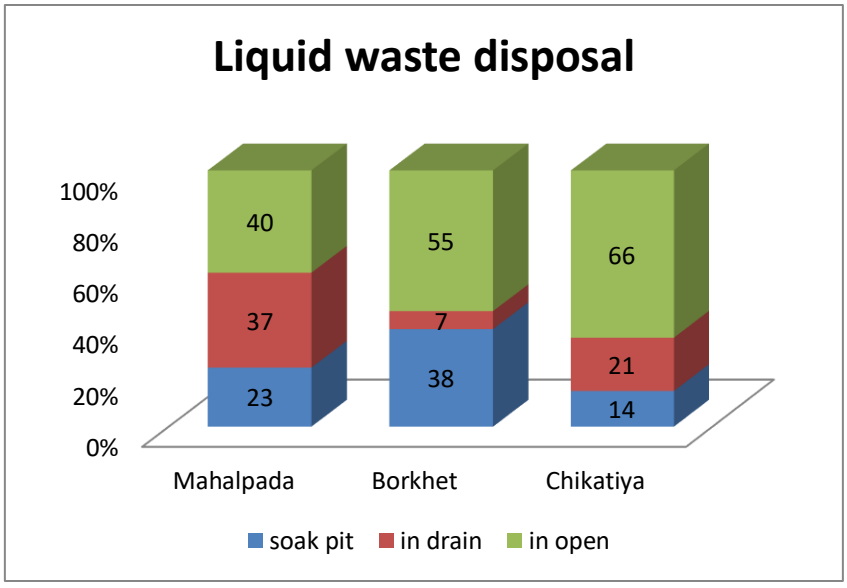
HYGEINE & WASTE MANAGEMENT

Figure B.36



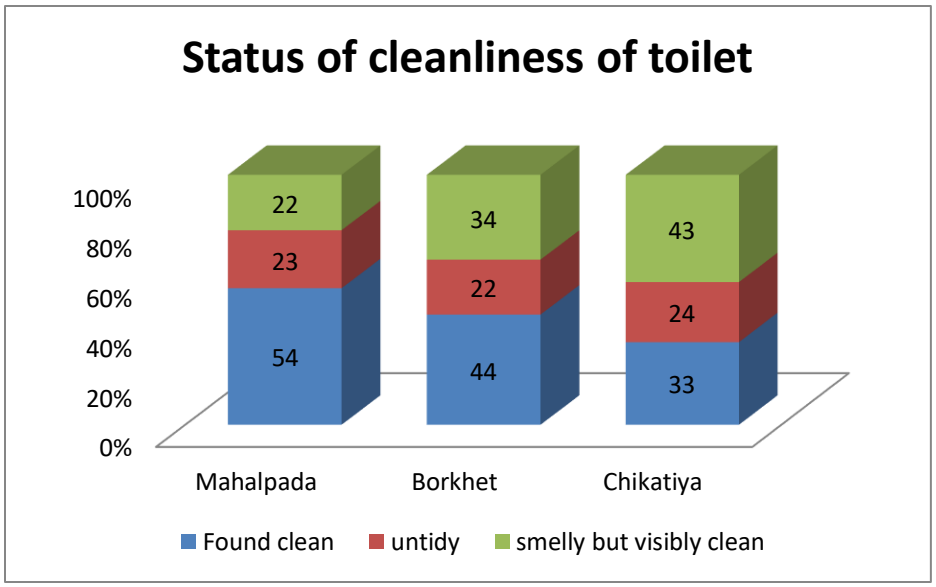
This Figure shows the method of disposal of solid waste in all three villages. Wastes being thrown in open is mostly found behavior of respondents,53% ,48% & 66 % in Mahalpada,Borkhet and Chikatiya respectively.13% ,28% & 31% respondents believe on Burning out the dry wastes.while the practice of throwing in pits and waste bin is found less in is limited to two villages Mahalpada&Borkhet where17% & 10 % people use pits and 18% & 14% use waste bin respectively.

Figure B.37



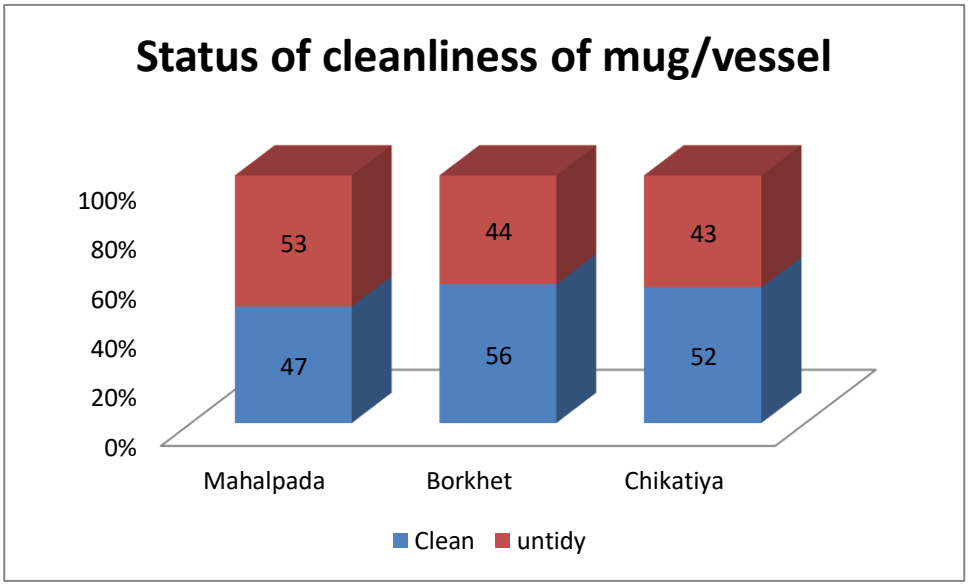
This Figure shows about the practice of villagers in disposing liquid wastes.Draining liquid wastes in open is most common ,40%,55% & 66% in respective three villages.Disposal in drains is limited to 37%,7% & 21% in three of the villages while 23% in Mahalpada ,38% in Borkhet and 14% in Chikatiya use soak pits.

Figure B.38



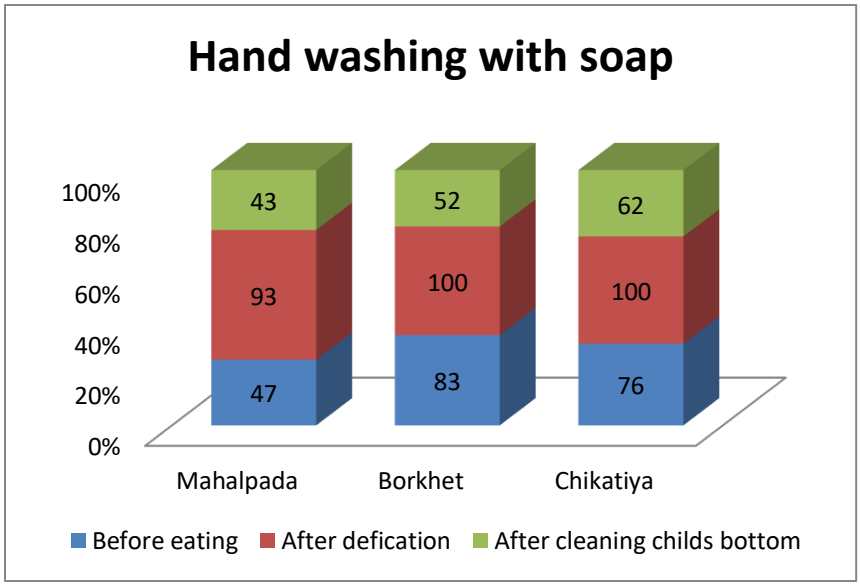
This Figure reflects the status of cleanliness of toilet,54% in Mahalpada ,44% in Borkhet and 33 % in Chikitiya were found clean while 23%,22% & 24% in respective villages were found untidy for use.Though 22%,34% & 43% of toilets were smelly but visibly clean in respective villages.

Figure B.39



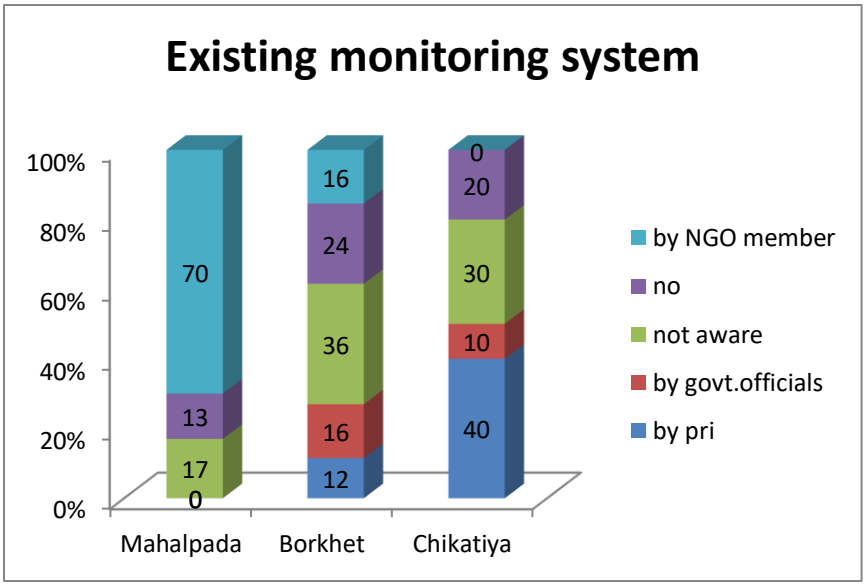
This Figure reflects the Status of cleanliness of mug/vessel used in the toilet.47%,56% & 52% in village Mahalpada,Borkhet and Chikitiya respectively were found clean while 53%,44% & 43% in respective villages were found untidy .

Figure B.40



This Figure shows the behavior of respondents towards hand washing practices with soap before eating ,after defecation and after cleaning child's bottom.Almost all respondents agrees upon hand washing after defecation but only 43% ,52% & 62% washes their hand after cleaning child's bottom,handwashing with soap before eating ,47% in Mahalpada 83% in Borkhet& 76% in Chikatiya.

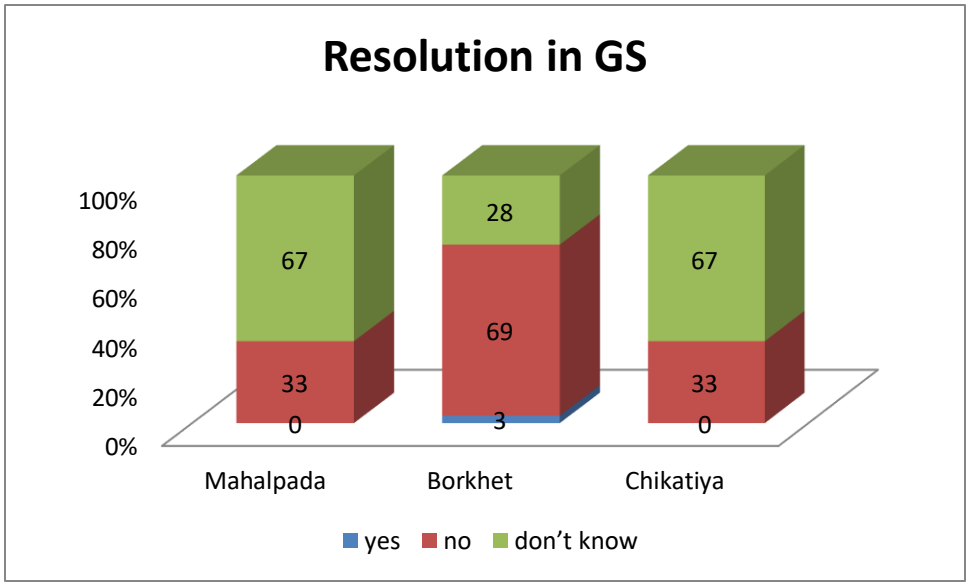
Figure B.41



This Figure shows the monitoring system of constructed toilet.Monitoring by NGO members is quite dominant in village Mahalpada ,70% while 17% are not aware of it and 13% said no.Borkhet and Chikatiy has a mix response of monitoring ,12% & 40 % by PRI member,16% & 10% by Government officials.while 24% & 20 % said no and 36% &30% are not aware of it in respective villages.

POST ODF STATUS

Figure B.42



This Figure shows the intent of Gram Sabha to pass a resolution for maintaining ODF village.Merely 3.3 % of respondent agrees to this while 33%,69% & 33% in Village Mahalpada,Borkhet and Chikatiya denies of any resolution being passed in GS to maintain ODF village while 67% ,28% & 67% ofrespondents in respective villages are not aware about it.

Section C : KEY FINDINGS/OBSERVATIONS

+ Piped water supply management system :

Gram panchayat along with local community members seems to have put up a great commitment in distributing a chain oe piped water to households.Almost more than 70% of households are covered and they have been connected to free piped water,but the issue lies in the management system as community is not getting water through the chain system ,the

reason behind somewhere is leakage in pipe or burnt motor.The Gram panchayat seems not listening to the problem though they are well aware of the situation.The unwillingness of PRI members can easily be noticed as they have many more reason to seoerate themselves form the existing situation.

Many households in village Chikatiya is found with two or even three piped water connection but they are not getting water for their regular use .As per local community since installation they are facing the same issue of interrupted water supply.Though some households in a particular “Fali” has the luxury of water being supplied to them but only for a few hours not necessarily a particular time in day.Exclusion of a particular area due to many reasons can easily be noticed

+Sanitation Facilities

The IHHL coverage is quite remarkable in all three villages of The Dangs,almost 85% of households had been covered with IHHL infrastructure wise.Though in some cases incomplete infrastructure is an issue. many toilets were found without roof and door.The usage part of this indicator needs to be improved as many local residents denied using IHHL though they have access to it,the reason comes out to be lack of water in latrines & behavioral issues in many cases.

The village Chikatiya having 63.6% of households using proper sanitation facility and contributing to ODF village do have many incomplete IHHL ,one of the reason of not using toilets for defecation .The reason stated behind is the shortage of concrete blocks through which roof was supposed to be furnished. As per local villagers the monitoring part of constructed toilets is so week these things are bound to happen.The unwillingness or PRI members and village committee can be noticed easily.Many more toilets in other villages was found without roof & door.

±Waste Management:

Solid and liquid waste management stands an issue for the community and Panchayat as around 60% of people still disposes wastes in open.

±Supply water pipes lying on the open ground raising the point of sustainability factor not taken into consideration while implementing the processes.

± The IHHL construction happened on part of development partner seems nice and tight with all infrastructures having proper pan.wall.roof& door having piped water inside the toilet and a water storage tank with hand washing area outside the toilet.

±Usage of toilet by women is relatively higher than that of men in all three villages,Mahalpada,Borkhet&Chikatiya.

Section D : Key Conclusion:

- Around 85 percent households have access to individual, community,shared toilet,but only around 70% percent are using it as toilet. The reasons for non use of toilets are poor/ unfinished installations, lack of water in toilet and no behavioral change, attracts further focus on different aspects of the programme i.e. training of masons for proper installations for behavior change, the emphasis of the focus also needs to be different in different villages based on the reason for non use of toilets.

- With the launch of SBM, there has been a good achievement in most villages with respect to Total Sanitation Campaign which leads to almost 70 percent people using toilets, the battle against open defecation is not yet over in majority are defecating in open which requires additional effort in making the rest 30 percent people use toilets instead of going for open defecation. This situation is relatively worse in case of village Chikatiya where 36.4% of people are going for open defecation.

- Disposing of child faeces is another indicator of improved sanitation. Around 63 percent of households seems to be disposing the child faeces in open ground. This also requires special focus within the IEC and other social mobilization inputs for behavior change

- The emphasis on solid and liquid waste disposal were lacking in all the villages and households visited. This requires further improvements through creating adequate infrastructure such as drains and waste bins, and creating awareness through social mobilization.

- It is also evident from the analysis that PRIs and SHGs proved to be the better agency for social mobilization as it is recalled by most households. Further strengthening and building capacities of these institutions may prove better results in future.

- There has been no gender or social exclusion observed in all three villages with respect to access and use of sanitation facility and/or involvement in social mobilization processes. However, very few numbers of household in all the village do respond exclusion or non involvement.

- On the study of knowledge about SBM & SBM anthem it was found most of the people are aware of Swachh Bharat Abhiyan however very few of then have ever heard SBM anthem.

Section E: Suggestions:

- Reconstruction of existing water supply system may help in connecting more & more residents to main stream line.

- Construction of new water supply lines for new residential areas and village outskirt, as the study shows the relationship between water avaibility in toilets and its frequent use by households.

- Decontaminating facilities are required for safe water supply.Timely cleaning processes of water tank installed in village.

- public awareness raising campaign particularly in rural areas may help to improve population's knowledge about links between health and hygiene. PCHS (participatory change of hygiene and sanitation) methodology has been adopted many where.

- It seems that the whole SBM campaign go by target driven method of toilet construction,IEC and BCC can come out as an option for behavior change in rural villages along with regular community meetings.

- Gram sabha needs to be specific about the issues, separate sessions to convey the benefits of WASH should help to come up with a positive result.

- All the components of water & sanitation hygiene,Handwashing,Waste management,Menstrual hygiene etc, must be taken into consideration while disseminating message to the community in public meetings.

- The frequency of promotional strategy is limited to once as revealed in the study needs to be frequent and specific

- Strengthen the existing monitoring system of all implementation process.

- The involvement of all government stakeholders (Health workers,PRImembers,SHGmembers,political local leaders/motivators) along with all development partners on a single platform with a common goal is needed.

- The follow up phase of all campaigns and meetings needs to be addressed on regular basis to inculcate the desired behavior change.

Section F : References

- Feeling the pulse – A study of the total sanitation campaign in five states – 2016
- Progress on sanitation and drinking- water - UNICEF 2017
- India's sanitation for all: How to make it happen – Asian Development Bank 2016
- Glass 2010 – UN-water global annual assessment of sanitation and drinking water
- Annual Report - Ministry of water & Sanitation 2017-2018
- Annual Report - Ministry of water & Sanitation 2016-2017

Annexure:

Research Questionnaire

General Information		
Respondent's Name:-		
Age in years:-		
Sex:-	Male……1	Female……2
Education:-	High school……2 Graduate……3 Illiterate……5	Higher secondary……2 Post graduate……4
Religion:-	Hindu……1 Christian……3	Muslim……2 others……4
Caste:-	SC/ST……1 General……3	OBC……2 Others ……9
Village Name :-	Mahalpada……1	Borkhet……2
Average monthly Income of household		

Section A: DRINKING WATER SUPPLY & HANDLING PRACTICES		
A1	What is the main source of drinking water in your household?	Piped water……1 Tube well……2 Dug well Protected……3 Unprotected……4 Surface water/ river dam/lake/pond/canal/ irrigation channel……5
A2	Does your household has a piped water supply connection?	Yes……1 No……2
A3	When did you get piped water supply connection?	Recently(3 months)……1 3months -12 months……2 1year -2year……3 Can't remember……4
A4	Have you get the drinking water connection under the SBM scheme implemented by Panchayat/NGO's?	Yes……1 No……2 Don't know……3

A5	Does your household get uninterrupted drinking water supply always?	Yes……1 No……2 Yes,but for some hour……3 Can't say……4
A6	If no, how many days/months you are not getting sufficient drinking water supply?	Since Installation……1 (3-6 months) after installation……2 Recently(within 1 months)……3 Very recently (10 days)……4 Don'remember……5
A7	Do you store water for drinking?	Yes……1 No……2 Don't know……3
A8	Do you treat your water in any way to make it safer to drink?	Yes……1 No……2 Don't know……3
A9	What do you usually do to the water to make it safer to drink?	BOIL . . . . . A USE ALUM . . . . . B Add bleach/chlorine tablets . ……C Strain through a cloth . . . ……D Let it stand & settle . . . . . G Use ladder/vassal with tap……H Don't know . . . . . Z
A10	Are you satisfied with the quality of piped water management system.	Yes……1 No……2 Don't know……3

Section B: Access & use of household sanitation arrangements		
B1	Do your households has access to a functional Toilet?	Own toilet(IHHL).....1 Shared toilet.....3 Public/community toilet.....4 No.....2
B2	Does the HH members use the toilet regularly?	Yes. . . . . .1 No 2
B3	If Answer no in B2, ask for the reason (s), WHY?	Lack of water in toilet.....A Incomplete infrastructure.....B Using it for other purposes.....C (cattle shed/storage space) Behavioral issues.....D Blockage of pane/pipes.....E Destroyed by natural calamities.....F Others.....9
B4	When toilet was constructed?	Newly constructed(up to 3 months).....1 Less than a year.....2 1-2 years.....3 More than 2 years.....4 Can't remember.....5
B5	Is this toilet subsidized through some scheme?	Yes,by government.....1 Yes,by NGO's.....2 No, financed.....3
B6	Where do your family member generally urinate?	Use toilet.....1 Urinate in open.....2 Others.....9
B7	Where do you generally dispose child faeces?	Faeces flushed in drain.....1 Faeces dumped in open ground.....2 Faeces flushed in toilet.....3 Any other.....4.
B8	What was the main reason for toilet construction	Peer pressure/relatives.....A Pressure from PRI/govt.members.....B No open space for defecation.....C Awareness about health benefits.....D Need for privacy.....E Safety for women members.....F Safety for old aged members.....G
B9	What kind of toilet is this? (Observation)	Single pit toilet.....1 Leach pit toilet.....2 Septic tank toilet.....3 Attached to Bio-gas chamber.....4 Faecal matter draining out in open.....5 Service latrines/Drain it in open.....6 Others.....9

B10	Nature of infrastructure(Observation)		No super structure……A Enclosure made of Tarpulin/plastic……B Has roof……C Don't has roof……D Has door……E Don't has door……F Others……9	
B11	Is water available in/for the toilet? (Observation)		Yes . . . . . 1 No 2	
B12	How water is stored ? (Observation)		Piped water inside……1 Piped water outside……2 Storage tank inside ……3 Storage tank outside……4	
B13	Is toilet "fly-proof" or Hygienic? (Observation)		Yes . . . . . 1 No 2	
B14	Material used in sanitary pans(Observation)	Material used for doors(Observation)	Material used for wall (Observation)	Material used for roof (Observation)
	Ceramic……1 Fiber……2 Cemented pans……3 Mosaic……4 Other……5	Metal……1 Wood……2 Plastic……3 Other material……4 Aluminum……5 No door……6	Brick/stone……1 Tin plates…… ……2 Plastic/jute……3 No wall……4 Other ……5	Concrete……1 Tin……2 Plastic……3 Cemented sheet…4 No roof……5 Other……6
B15	Hand washing area near toilet (Observation)		Yes,Inside……1 Yes,outside……2 No……3	
B16	Did any member of the household defecate in the open in the last three months or after gaining access to toilet?		Yes . . . . . 1 No 2	
B17	Are you satisfied with the quality of toilet being constructed		Yes . . . . . 1 No . . . . . 2 Can'say……3	
B18	Whether any member of the household have heard about Swachh Bharat Mission?		Yes . . . . . 1 No 2	
Section C: IEC & Communication				
C1	Who motivated you to construct toilet at your household?		PRI/VHSNC members……A SHG members……B Govt.officials……C NGO members……D Religious head……E	

		Relatives/peers……F Speeches by leader……G Self motivated……H Other……9
C2	Did you receive any training/ counseling regarding benefits of WASH?	Yes. Through door to door campaign……A Yes, attended community meetings……B No……2 Other way……9
C3	If yes, What was the message given to you?	Use of toilets……A Hand washing……B Menstrual Hygiene……C Waste management……D Others……E
C4	Who were involved in disseminating messages on WASH?	Health workers(Asha,AWW,Anm)……A PRI members……B Volunteers/Swachta Doots……C NGO representatives……D SHG members……E School teachers……F Others……G
C5	Did you see any mode for WASH promotional strategy in your village?(Not elsewhere)	Yes……1 No……2
C6	If yes, What are those?	Posters/Banners/pamphlets……A Street plays……B Rallies/Marches……C Speeches by political leaders/Govt.officials……D Audio's/visuals……E Others……9
C7	What was the frequency of WASH promotional strategy in your village?(Not elsewhere)	Once……1 Frequent……2 Very frequent……3 None……4
C8	Have you seen any type of WASH promotional strategy on TV/Radio/Newspaper?	Yes……1 No……2
C9	Weather all these strategies are meaningful & can bring desired awareness in community?	Yes……1 No……2
Section D: Hygiene & Waste management		
D1	Where do you dispose your solid waste?	Door to door collection……1 Burnt……2 Dumping in waste bin……3 Dumping in composite pit……4 Dump on street/outside……5 Any other ……9

D2	Where do you dispose your liquid waste?	Soak pit……1 In community drain……2 Disposed in open……3 Any other……4
D3	Status of cleanliness in toilet? (observation)	Found clean……1 Untidy with faecal material……2 Smelly but visibly clean……3 Not in use……4
D4	Status of cleanliness of mug/vessel in toilet	Found clean……1 Untidy……2 Not in use……3
D5	When do members of your house wash their hand?	Before eating……1 After defecation……2 After cleaning child's bottom……3 Other……9

D6	What do you generally use for hand washing?		
	Before eating	After defecation	After cleaning child's bottom
	Soap……1	Soap……1	Soap……1
	Soil/mud……2	Soil/mud……2	Soil/mud……2
	Ash……3	Ash……3	Ash……3
	Only water……4	Only water……4	Only water……4
	None……5	None……5	None……5

Section E: POST ODF

E1	Did somebody come to monitor the constructed toilet?	Yes,by PRI members……A Yes,by govt.officials……B Not aware……C No one came for monitoring……D By community……E
E2	Did any resolution is passed in gram sabha by PRI to maintain ODF?	Yes……1 No……2 Don't know……3

Thanks..!!