CHAPTER 1
INTRODUCTION

Society is a large group of people who live together in an organized way, making decisions about how to do things and sharing the work that needs to be done. Society is formed by the different kinds of neighbourhood where different casts, different ethnicity, different gender, different cultural, different religion and different age groups people live. Society is a base of development where they planned for the community together. They have developed road, hospital, schools, water supply system, electricity, community hall, temple and so on by the lead of society through the government support. Since the basic requirement of the community is living together. They help each other in common works. "Sociology is about social relationship, the network of relationship, we call society" – MacIver and Page. Society is a system of usages and procedures, of authority and mutual aid, of many groupings and divisions, of controls of human behaviour and of liberties. This ever-changing, complex system we call society. It is the web of social relationships. And it is always changing.

Nepal is a unity in diversity. It is multi cast, multi culture multi religion country. The cast system in this is as rigid as the Hindu religion. It was the man who divided the various group of people in different cast and sub cast. The Hindu in Nepal have divided the society into four main castes. They are Brahmins, chhatri vaishya and sudras. The Brahmins regardless a highest cast. It were supposed to be the learned of all caste. Chhatri were the warrior castes. They involve in army. They vaishyas were the working class or and also the business class and look after economic sudras were the lowest castes and worked as cleaners and scavengers. The people belonging to distinct languages, races, cultures and religious inhabit in the same societies united and corporately. The people who belong to various languages and races respect and love each other.

Different people have different knowledge, behaviour and practices in different activities. In our society culturally divided works depends on gender basis. Most of the Male groups are working hard type of activities and they led the whole responsibility of the household. Female groups are working soft type of activities and they led the responsibility in house. Most of the community and their people do the female baseness

activities. Women have not got the whole responsibility of the social activities. Nepal is a patriarchal country. Women dominant system is building since its origin. So, women are giving in second step responsibilities in their household. Most of the women are not involved in decision making process in their household. They are especially busy in their kitchen works. They are busy in housewife activities since early in the morning in each day. Making food, cleaning house yard including personal, household and environmental sanitation, fetch of water from the tap or spring sources, feeding to animal and so on activities are doing by women. A lot of work have done by the women in our society.

Half of the population are women in Nepal. The half population are busy in general works in their household. It does not support directly to the productivity for the country. We cannot measure their input for the national productivity. So, government also left them to do integrate in common responsibility. They are going backward day by day due to their low responsibility. Now a days government has made some laws and policies for the women empowerment. Women Empowerment refers to increasing and improving the social, economic, political and legal strength of the women, to ensure equal-right to women, and to make them confident enough to claim their rights, such as: freely live their life with a sense of self-worth, respect and dignity, have complete control of their life, both within and outside of their home and workplace, to make their own choices and decisions etc.

In this study we are going to discuss about the knowledge, attitude and practice on water and sanitation activities in our society especially in women groups. Most of the women are busy in their work as housewife. Prepare food, fetching water, cleaning yard and house, feeding to children and managing food for animal also are the regular activities and as well as responsibility of the women. We are going to find out their behaviour and practice on water and sanitation activities which they have been doing since long time. We study that how it will be showed different practices on water and sanitation different an age factor, marital status and education factors. We will compare this independent variable with dependent variable on water and sanitation activities. This findings will be our research objectives.

1.1 Background of the Study

Nepal is a country of tradition and beliefs. In rural parts of the country many people explain sickness as caused by deities and witches and a lot of rituals are carried out to prevent attacks from these (NRCS /DRC : 1997). In rural Nepal, villagers reserve left hand for unsanitary tasks, the right for eating and other tasks requiring cleanliness. Disease is believed to be caused by evil spirits, or may occur when individuals take certain food or drink in inappropriate seasons of the year. Water which is clear and flowing is believed to be clean. In tradition, there is no concept of disease being caused by living infectious agents. In addition, the concept of clean and dirty and purity and pollution are well developed in Hinduism, and thus have a strong effect upon personal and household hygiene in Nepal (Simpson-Herbert; 1984, p. 174). (NMIS): Third Cycle conducted in 1995 found that larger proportion of households believe deities, witches, cold, over eating, inappropriate season etc, whereas a small proportion of households contaminated drinking water as the causes of diarrhoea.

Knowledge and practice of clean water for sanitation for bathing, washing hands before eating, washing food and clothes, etc. leads to skin and diarrhoeal diseases caused. Skin diseases are the major poor sanitation related diseases. Children and the poor are most affected by poor water supply, poor quality water and poor sanitation linking to lack of access safe and sanitary provision. Less than 3% of the poorest have access to piped source of water at home. Some 25% of the poorest have access to piped source of water outside the house. The rest of the poorest (72%) depend on unsafe sources of drinking water (CBS 2004).

Access and usage to sanitary system such as garbage disposal, and toilets is also lowest among the poorest population and is better in the richer quintiles of the population. It is seen the huge gap in access to sanitary facilities between that available to the poorest population and the national average.

1.2. Statement of the Problem

The drinking water and sanitation program aims to enhance positive knowledge, attitude and practice of sanitation and drinking water interventions. Before, middle and end of water and sanitation program launching in the community need to know

level of knowledge, attitude and practice of its interventions. Haphazardly launching the program lowers the effect and impact of program. This deteriorates large amount of resource in water and sanitation sector. Other side, the sustainability of accessed interventions have low possibility. So, the rationale of study is to analyse knowledge, attitude and practice of water and sanitation and to identifying the impact of possible actions aimed at dealt with reducing morbidity of water and sanitation related disease in Sukajor VDC, Ramechhap which further useful to enhance the quality of life in the country.

1.3. Objectives of the Study

The study has the following specific objectives:

1. To examine the knowledge, attitude and practice related to water and sanitation program;
2. To identifying the impact of possible actions aimed at dealt with reducing morbidity of water and sanitation related disease
3. To examine the sustainability of water and sanitation program;

1.4. Rationale/Significance of the Study

The water and sanitation program will be the focus subject of the study, which has dealt about knowledge, attitude and practice of community people of the program and its identification the impact of possible actions. Thus, the outcome of the entire study has concluded to the positive impact to reduce the water and sanitation related diseases resulted by the water and sanitation program in the program area.

1.5. Limitation of the Study

This study is based on knowledge, attitude and practice on water, sanitation and hygiene of Sukajor VDC of Ramechhap district. This district has in the mid-hill of the central-development region of Nepal with VDCs. Among them Sukajor VDC lies west-north part of the district with 5162 population (BS-2013) the study has been very specific like that of case studies. So, the finding from this study has been mere suggestive rather than conclusive. The concluding analysis of this study may not be generalized in the context of national aggregate level because of limitations. But, the interferences may be valid in some extent to these areas, which have similar

geographic, socio-economic and environment setting. For the limitation of study area, following factors are regarded.

a. The samples use in this study has been taken from Sukajjor VDC, Ramechhap district which has not been taken as a representative of the whole country.
b. The study is fully depended on the field visit, questionnaire and as well as interview method for the data collection from the study area.
c. The study is an academic work, so it is observed as a case study of a non-experience researcher.
d. The study conducted within the given time frame and financial limitation.

CHAPTER 2
REVIEW OF THE LITERATURE

2.1 Introduction

Water, Sanitation and Hygiene are the most important elements for the human being to be in good health. In the context of Nepal, community people do not follow the good water, sanitation and hygiene practice since beginning. Due to the lack of water, sanitation and hygiene practices in society, people face different kind of diseases especially diarrhoea, dysentery, Jaundice and Typhoid etc. The cause of different hazard morbidity and mortality rate is going high. It is very big issues in Nepal for the health perspectives.

The Government of Nepal is going to focus on sanitation and hygiene and want to fulfil the gap of water access and sanitation and hygiene practices also. In the current situation of Nepal the water access reached around 84% to the people but pure water access is different than that percentage and Sanitation and hygiene coverage 46% only. After 2008 the Nepalese government has planned to achieve the full coverage of water, sanitation and hygiene situation of the country at the end of 2017 by the support of different partners. So, the water, sanitation and hygiene practice related activities are implementing in whole country through the lead of government and assists by the different partners. Until this periods the water and sanitation situation has covered 84% and near 75% respectively. This campaign is implementing by the lead of government followed the "National Sanitation Master Plan- 2011" as legal document. Now it is applying in whole country and fixed the objectives up to the end of 2017.

The study was observed basically three areas in water and sanitation (Watsan) :

1. Health and Personal Hygiene
2. Sanitation arrangement and management
3. Drinking Water access and Water Quality

1. Health and personal hygiene was one of the major areas of the study where about knowledge; attitude and practice (KAP) level was examined and recommendation was presented.

2. Sanitation arrangement and management was another major area. The study was conducted to find out existing KAP level such as latrine use, households sanitation, solid and liquid waste management..
3. Water access and water quality was also next important area for the study. The study was tried to seek KAP level of people on this area. Study had included mainly water source, availability of water, distance of water point from households, perceive of people about quality of water, point of use treatment of water.

The whole activities of study areas of Watsan program was organized to satisfy the relation between the dependent and independent variables for examine knowledge, attitude and practice level of Sukajor people in the program.

2.2 Water and Sanitation Situation in Nepal:

The Government of Nepal's long term vision in the water supply and sanitation sector provided in the 20-year drinking water supply perspective plan is to provide 25%, 60% and 15% of the population with high, medium and basic levels of services respectively. The Tenth development Plan focuses on demand driven approach to water supply and sanitation initiatives. The plan targets coverage of 85% population with basic level of water supply and gradual improvement in service level. It emphasizes involvement of community and local NGOs in the construction as well as operation and maintenance of the rural water supply and sanitation schemes. Integration of sanitary component to all drinking water Projects are mandated by the tenth plan. It also emphasizes on use of surface water in hills and groundwater in Terai as sources for supply of drinking water. Nepal government has made a plan for access on water and sanitation for the population by 84% and 80% in the end of 2015 respectively. Source- National water, sanitation and hygiene master plan-2011. In the current situation of the country, around the 80% population have accessed the water service nearby their household but the sanitation and hygiene practice near to only 70%. It has difficult to meet the gap between water and sanitation access to the population with in time.

2.3 Background of the Ramechhap District and Sukajor VDC

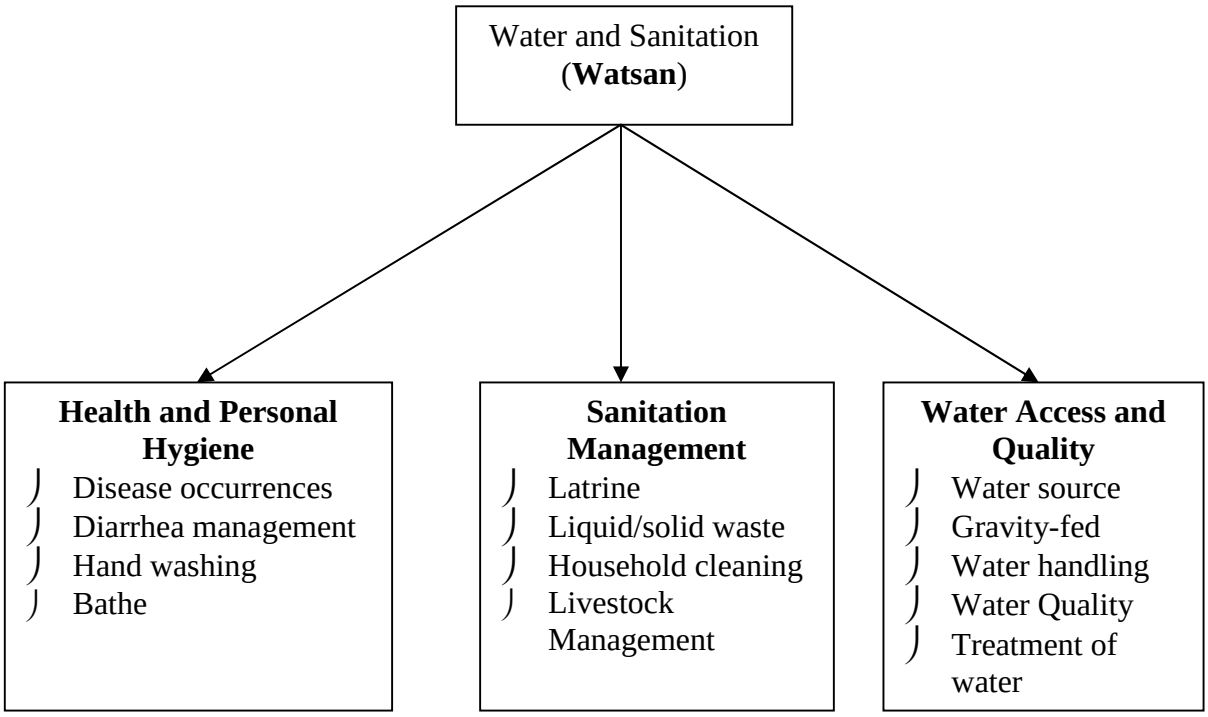
Ramechhap district is one among the 75 district lies in hill area of central development region. In this district there are 55 VDCs and 2 municipalities. In the district 212408 number of population are living there. This district has covered the 1546 sq. kms. As per the National sanitation master plan 2068, D-WASH-CC Ramechhap has made a district water, sanitation and hygiene plan cover up to the end of 2016 to whole district. This district has covered 80% and 65% on water and sanitation situation until this time. Many local and non-local NGOs are working in this district on sanitation and hygiene activities. This district has declared open defecation free to the 4 VDCs before 2015.

Sukajor VDC is one of those VDC which has been in Ramechhap district. Before the intervention of the project almost half (48%) of the total respondents (760) were found to rely on public pipe water, while one in three (30%) reported to use private pipe water. However one in ten (10%) relied on traditional stone sprout (Dhungedhara), and few were found to rely on well (7%) and stream/Pond/Spring (5%). Majorities (89%) of the household from ward no 1, depend on stream/pond/spring and more than half (56%) of respondents from ward no 4, depend on stone sprout/ traditional tap (Dhungedhara). 86% of household had reported about drinking water problem within the VDC. Almost two fifth reported that the source was not good and one in three said that the drinking water was unclear (Dhamilo). One in five also reported that the water was dirty (20%) and had insects on it (11%) but majority (78%) of respondents did not purify water before drinking.

Hand washing in atlas one condition was universal (100%) and majority (84%) washed their hands in two conditions but less than half (49%) was found to wash their hand in at least three conditions. It was found that two in three (69%) of the respondents washed their hand before eating and only three in five washed their hands after toilet. However, less than half of the total respondents were found to wash their hands only with water and only half (56%) of the respondents used soap and water. Radio (54%) was the most common source knowledge regarding hand washing.

Figure 1.1:

Water and Sanitation intervention included in the study:



2.4. Variables

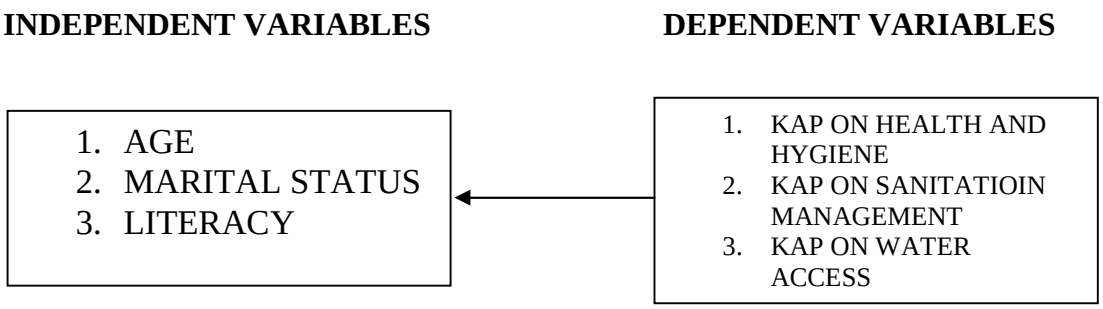
The dependent and independent variables had analysed for the study of KAP of water and sanitation program. The variables that analysed solely relate to the program only. For the convenient of the study, other variables which could influence the program have been assumed constant for the analysis of the study. The details of the variables that have analysed for the study are described in two aspects; i.e. dependent and independent variables, and the theoretical framework.

2.5 Dependent and Independent Variables

The study was basically dealt about KAP of water and sanitation program. Whatever found the change in KAP of community people were the result of the change in belief, assumption, expectation and value of hygiene facilities, sanitation arrangement and quality water access; Table 1.1, 1.2 and 1.3.

Table: 1.2

Social Background and CAP



CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research Design

This research study is focused on KAP in the water and sanitation program in Sukajor, Ramechhap. So, its universe of the sample is all wards and all individuals of Sukajor VDC. The type of sample for this research study is random probability sampling; that is the samples where each items or element in the universe has equal chance of being selected.

There are nine wards in a VDC. Firstly samples were selected of individual households' women member using random number table. Eight wards' (except ward no-1) people or households was included in sample selection process. The sample size of this research is one hundred twenty five (125) individual from universe population of 5162. Because of the heterogeneity of the universe as well as of the sample wards, the sample of individual households includes caste, age, gender, disadvantage group. After the selection, individuals were interview with questionnaires and, focal group discussion and observation were conducted to verify the information.

3.2. Study Area/Site and Rationale for Selection

This research study was conducted in Sukajor VDC of Ramechhap , which is located western part of district and adjoining to Sindhuli district. It is nearly 105 kilometres from centre of Capital. The sample VDC is heterogeneous population having caste of Hayu, , Chetri, Brahamin, Newar, Tamang and Dalit. Thus the result of study can further equally use other part of Nepal. Another side there has been implementing the water and sanitation program since nearly a decade back and now since mid-2013, Nepal Red Cross is also working Watson project. Therefore, me, it was accessible to collect detail households data of the community.

3.3 Data Collection Techniques and Tools

In this research study, data collection was collected directly from source or focus group discussion in study field and secondary data was taken from Nepal Red Cross project documents. Basically the study analysis was made of primary data and for comparative analysis, secondary data was also used. The required data was primarily collected by

private interview using semi-structured questionnaire. However, some secondary data was used to synthesize that was to compare previously finding, recommendation and findings of the research.

3.3.1. Questionnaire (Private Interview)

The questionnaire was written after discussions with supervisor and, Red Cross staffs and from various questionnaires with the same purpose, which were used in other surveys.

As the population is heterogeneous, the questionnaire was translated in Nepali.

The questionnaire and FGD were tested in the study field in ward no: 1, latter that ward was selected for the sampling. So a total of 8 ward and 125 women were selected for the individual interviews. After the field test, some questionnaires were slightly changed to make sure that the questions were understandable, and that the enumerators understood the methodology.

3.3.2. Study with "Focus Group Discussions" (FGDs)

The focus group discussion was conducted to provide further information about women's knowledge, attitude and practice and complements the interviews.

During these meetings, a group of women discuss a given topic or problem, or share opinions and experiences. From the FGDs following information were managed:

- Gathering ideas and opinions of an each group of women concerning their attitudes and practices regarding water and hygiene,
- Cross checking the information collected with the questionnaires,
- Collecting qualitative information,

The FGDs were conducted with 10 women per ward. It was guided the discussion. The FDG was the same as the questionnaire, but with open questions and free discussions.

3.4 Data Processing, Analysis, Interpretation and Reporting

The computer programs that were used for computation of the data are, Statistical Package for Social Science (SPSS), and Microsoft Excel. The result of the outcomes of the analysis of data from computer was interpreted for the study.

CHAPTER 4

FINDING OF THE STUDY

Various information were collected under following broad headings; such as Health, personal hygiene, Sanitation management, Water source and Water quality, Knowledge, Attitude and Practice (KAP) of Watsan program.

4.1 Health and Hygiene

After the intervention of Watsan program, Diseases incidence reported by respondents to the household questionnaire to have had disease in the last one year. Among the respondents, 84% are reported to have had disease at some time. 22 % of children under five are said to have had disease within the last one year. The proportion with disease within the last one year is highest among aged above 14 years; Table 4.1.

Table: 4.1

Illness in Family:

Variable		**Frequency**	**%**
Yes		105	84 %
No		20	16%
Total		**125**	**100%**
Variable	**Under 5 Yrs**	**5-14 Yrs**	**>14 years**
	Frequency	**Frequency** **%**	**Frequency** **%**
Diarrhoea	12	6	15
Dysentery	1	1	5
Worms	1	3	1
Typhoid	1	3	6
Cholera	0	1	0
Skin disease	1	1	1
Malaria	0	1	0
Jaundice	3	6	25
Encephalitis	0	0	0
Polio	1	0	0
Other	6	7	35
Total	**26**	**29**	**88**

Source: Field Study 2014.

Before the intervention of Watsan program, during whole year, at least a member of 329 (43.3 %) of the HHs in the VDC was caught by at least one disease. Among these 329 HHs, 26.4% were caught by diarrhoea, 12.1% by dysentery, and 18% by typhoid. These all diseases were water borne diseases which occur due to poor sanitation and hygiene condition and unsafe drinking water.

Table 4.2:

Prevalence's of diseases before Interventions of Watsan Program:

Caught any diseases during the last one year?	**Frequency**
Yes	329
No	431
Total	760
If yes, type of diseases	**Frequency**
Diarrhoea	200
Dysentery	92
Worms	40
Typhoid	137
Cholera	9
Skin	34
Malaria	21
Jaundice	241
Polio	2
Others	204
Total	**760**

After the interventions of Watsan program, respondents were asked where they got their information about what to do for treatment of disease. Their responses are shown in Table 4.3. In focus groups, many people felt that villagers would be more convinced if advice came from health institutions. In case of jaundice, most of people like to treatment at domestic treatment method.

Table 4.3:

Practice of treatment of disease after intervention of Watsan program

Variable	Frequency
Health institution	45
Health worker	1
Traditional Healer	11
Domestic treatment	33
No treatment	6
Total	**96**

Source: Field Study 2014.

After the interventions of Watsan program, households were asked about what they thought caused the most recent episode of disease, in an open-ended question in the household questionnaire. Their answers have been grouped together and are shown in Table 4.4. These answers from individual households are enriched by the views expressed in focus groups about the causes of disease. Table 4.4: shows the views expressed and the percentage of the respondents that mentioned each theme. A higher proportion of respondents (26%) attributed disease to households attend to contaminated water and food:

"Most of households have animal sheds in house and water quality (especially in dry season) is not good. Women have to do the housework and all the farming work so they don't give much notice to food safety and water treatment what the family eats and this causes diseases."

*"*Some respondents (19%) noted the link between ignorance and disease:

"Nearly half of women population are illiterate (4%), among literate most are only primary education level. The ignorance among respondents highly prevails. They don't know use of water purifiers and seeking the referral service for the treatment of disease. Occasionally, mythology about disease causes persists (10% of households): *"The evil side of the God enters home sometimes and causes disease".*

Table 4.4:

Knowledge about cause of disease:

Variable	Frequency
Illiterate	9
Ignorance	24
Lack personal hygiene	8
Contaminated water and food	39
lack of waste management	14
Waste in house and public area	8
Climate change	4
No idea	5
Total	**111**

Source: Field Study 2014.

After the intervention of Watsan program, most of the respondents (70%) were said that they have idea of transmission of diarrhoea. In a FGD they were asked about transmission of diarrhoea. Most of participants said that contaminated water and food are vital transmission routs of diarrhoea.

Participants were asked in focus group discussion (FGD) about how much food and fluids a patient with diarrhoea should be given compared with normal. They were also asked to describe how to prepare Jeevan Jal (Oral Rehydration Treatment-ORT). Another part of the FGD questionnaire asked about the amount of food given and the amount and timing of fluids given during the most recent episode of diarrhoea for each patient. A specific question concerned the use of Jeevan Jal. Table 4.5: shows the respondents knowledge about giving food and fluids during treatment of diarrhoea. Almost 73% think that patience should be given more fluids than usual and 27% said that they have no knowledge and practice about how much food and fluid should be given.

Table 4.5:

Diarrhoea Management:

Presence of Health worker	**Frequency**
Yes	38
No	87
Total	**125**
Knowledge about transmission of Diarrhoea	**Frequency**
Yes	87
No	38
Total	**125**
Knowledge about prevent of diarrhoea	**Frequency**
Yes	91
No	34
Total	**125**
Knowledge about treatment of diarrhoea	**Frequency**
Yes	92
No	32
Total	**125**

Source: Field Study 2014.

4.2 Water Sources and Access to Water

After the intervention of Watsan program, the most common water source is gravity source water (78%) followed by a unprotected well and traditional sources are (7%) and (10%) respectively. There is little reported difference in main water source between wet and dry seasons. As Nepal Red Cross is working there however they have not started the construction of drinking water schemes yet. The main water sources are shown Table 4.6:

Table 4.6:

Source of Drinking Water

Variable	Frequency
Public Tap	60
Private pipe	37
Stream	6
Traditional stone sources	13
Well	9
Other	0
Total	**125**

Source: Field Study 2014.

Before the intervention of Watsan program, the major points of the drinking water in the project area were gravity source (48.%) followed by public tap stands and (30%) which were mostly simple piped water. There were only about 13 tap stands in ward no.1 were well managed tap stands supported by Tamakoshi Sewa Samitee, Ramechhap. . Due to the lack of water sources there was not sufficient water for supply. The source of these piped water mostly stream and rivers. About 10 % of the households were fetched water directly from either un-protected wells or streams/rivers. Only about 5 % of the HHs was draw water from spring sources; Table 4.7.

Table 4.7:

Points of drinking water collection

Variable	Frequency	%
Private piped water	**228**	30 %
Public piped water	**366**	48.16 %
Well	**56**	7.37 %
Stream/Pond/Spring	**35**	4.60 %
Traditional tap/dhungedhara	**75**	9.87 %
Other sources	0	0 %
Total	**760**	**100.00%**

'Safe' water sources are considered to be tap or piped water through spring sources. Stream water and water from a well or kuwa is not considered 'safe'. The definition of reasonable access used by the Department of Water Supply and Sewerage of GoN is based on distance of the water source from the house and the flow rate of water from the source. The definition of reasonable access would approximate to a round trip of up to 15 minutes (including going, collecting water and coming back).

Table 4.8:

Access of Water collection After Intervention on Watsan Program:

Variable	**Frequency**	**%**
Rainy season		
Up to 15 minutes	56	45 %
Up to 30 minutes	45	36%
Up to 1 hour	24	19 %
Upto 3 hours	0	0%
Total	**125**	**100%**
Dry season		
Up to 15 minutes	31	25 %
Up to 30 minutes	50	40 %
Up to 1 hour	44	35 %
Upto 3 hours	0	0 %
Total	**125**	**100%**

Source: Filed Study 2014.

This definition based on time also takes into account any waiting time that may be necessary because of heavy use of a public water source. Based on these definitions of 'safe' water and 'reasonable access', this study indicates that in the rainy season 45 % of the households in Sukajor have accesses to 'safe' water within 15 minutes. In the dry season, the corresponding Table 4 .8: is 25 %. The rates of access to 'safe' water within 15 minutes and the distance between source to house in rainy and dry seasons are shown in Table 4.9.

Table 4.9:

Distance of drinking Water Source from households after intervention of Watsan:

Variable	Frequency	%
In rainy season		
Upto 100 meter	99	79%
Up to 200 meter	15	12 %
Upto 1 km	11	9 %
Total	**125**	**100%**
In dry season		
Upto 100 meter	81	65%
Up to 200 meter	19	15%
Upto 1 km	25	20%
Total	**125**	**100%**

Source: Field Study 2014

After intervention of Watsan program, the study was conducted to find yield of drinking water source whether it is available whole years or partially.70% respondents have good yields of water available 9 to 12 months. 24% respondents said that they have water source only sufficient yield up to 6 month and only 7% households have 6 to 9 month available sources; Table 4.10.

Table 4.10:

Availability of Drinking Water in dry season after intervention of Watsan program:

Variable	Frequency	%
Month in a year		
Up to 6 months	29	23%
6 to 9 months	9	7%
9 to 12 months	87	70%
Total	**125**	**100%**

Source: Field Study 2014.

Before intervention of Watsan program, the available water sources were critical in dry seasons and about 25% of the HHs responded that water sources they are using are dried off during the period of April-June; Table 4.11.

Table 4.11:

Reliability of water sources before intervention of Watsan program:

Variable	Frequency	%
Up to 6 months	61	8%
6 to 9 months	129	17%
9 to 12 months	570	75%
Total	**760**	**100%**

Water is a basis of life. It is used not only for the drinking purposes but also for cooking, washing and bathing purposes. Mostly, women carry water for cooking and drinking purposes in the villages; washing of clothes and utensils and bathing are usually done in the water sources so that carrying minimum water would be sufficient. About 42% of the HHs consumes up to 80 litre and same percentage of households use more than 80 litres of water per day. About 5% consume up to 25 litres per day; Table 4.12.

Table 4.12:

Daily Water Consumption after intervention of Watsan program:

Variable	Frequency	%
Up to 25 lit/day	7	5%
Up to 45 lit/day	14	11%
Up to 80 lit/day	52	42%
Above 80 lit/day	52	42%
Total	**125**	**100%**

Source: Field Study 2014.

Before intervention of Watsan program, about 65.6% of the HHs had consumed more than 80 liters of water per day and about 20% consume 45-80 liters per day; Table 4.13.

Table 4.13:

Water consumption before intervention of Watsan program:

Water consumption per day per family	Frequency	%
Up to 25 lit/day	33	4.4%
Up to 45 lit/day	73	9.6%
Up to 80 lit/day	155	20.4%
Above 80 lit/day	499	65.6%
Total	**760**	**100.0%**

Respondents were asked in FGD what problems, if any, they had experienced with their supply of water. Some households (21%) still have been perceived some problems with their water supply. The problems mentioned by households in response to an open-ended question in the household questionnaire are summarised in Table 4.14. After coding and grouping their responses, clearly, both difficulty of access to a sufficient supply and poor quality were concerns.

In focus groups discussion, the perceived problems with water supply: many participants were mentioned same type problems. Common themes were that the source was too far away in dry season (20%) or the availability of insufficient water. Poor people in particular said that they had to have difficulty finding a good supply of water in some areas:

"We have to cover long distances for water because in dry season because the source yield reduces. So we have to drink well water which is dirty; we give this to the children and they get sick." "It takes much time to collect a container of water."

About 11% of the respondents responded that the taste of water they drink is o.k. while 8% said that the taste was bad. About 24% said to have good colour and about 30% responded that the colour of water was good. Water is considered good if it has no colour, so good colour indicates water without colour. Colour water is bad, and about 9 % of the HHs are drinking water with bad colour.

Table 4.14:

Perception on Water Quality after intervention of Watsan:

Water quality	Respondents perception on water quality		
	Good	OK	Bad
Taste	101	14	10
Colour	90	30	5
Odour	77	38	11

Source: Field Study 2014.

Before intervention of Watsan program, about 62.5% of the respondents responded that the taste of water they drink is o.k. while 2.2% said that the taste was bad. About 80% said to have good color and about 77% responded that the color of water was good. Water is considered good if it has no color, so good color indicates water without color. Colored water is bad, and about 1.6% of the HHs are drinking water with bad color; Table 4.15.

Table 4.15:

Perception on water quality before intervention of Watsan program:

Parameters	HH with opinion of		
	Good	Ok	Bad
Taste	268	475	17
Odor	604	128	27
Color	583	166	12

In rural parts of the country, it is uncommon to purify water before drinking. All of the people drink water directly without boiling, chemical treatments and filtration. Similar is the case in Sukajor as 75% of the HHs drink water directly without purification whatever the source of their water. Perhaps surprisingly, households with a 'safe' water supply are twice as likely to treat their drinking water in some way as households with a water supply not defined as 'safe'. Among the 25% HHs who purify water before drinking, most of (58%) performed boiling as an option; Table 4.16.

Table 4.16:

Water Treatment after intervention of Watsan program:

Practice of water treatment during usage	**Frequency**	**%**
Yes	32	25%
No	93	75%
Total	**125**	**100%**
If yes, practice of water treatment	**Frequency**	**%**
Filtration	10	31%
Disinfection	0	0%
Sodish	4	12%
Boiling	18	58%
Total	**32**	**100%**

Before intervention of Watsan program, as 91% of the HHs drink water directly without purification. Among the 9% HHs who purify water before drinking, most of (74%) performed boiling as an option; Table 4.17.

Table 4.17:

Practice of water purification before intervention of Watsan program:

Do you purify water before drinking?	**Frequency**	**%**
Yes	69	9.1%
No	691	90.9%
Total	760	100.0%
If yes, how?	**Frequency**	**%**
Boiling	51	73.9%
Filter	17	25.0%
Chlorination	0	0.0%
SODIS	1	1.1%
Total	**69**	**100.0%**

More than a two third of households (89%) reported that they usually cover their water containers and most of households (88%) of those observed were cleaned the water vessel with ash and water; Table 4.18

Table 4.18:

Handling of Drinking Water after intervention of Watsan program:

Practice of handling of drinking water	**Frequency**	**%**
Clean glass or cup or jug before taking water from vessel	4	3%
Gagri/class/mug/cup/basket taking water onto	7	6%
cover water vessel	111	89%
clean water source	1	1%
Other	2	2%
Total	**125**	**100%**

The study revealed that there is good practice of water vessel cleaning. Almost all respondents (97%) answered that they all clean the water vessel while fetching the water from points. It was also asked to respondents about means use for cleaning the vessels. About 88% respondents said that they clean vessels with ash water; Table 4.19.

Table 4.19:

Water vessel cleaning after intervention of Watsan program:

Practice of water vessel cleaning	**Frequency**	**%**
Yes	121	97%
No	4	3%
Total	**125**	**100%**
If Yes, Practice of vessel cleaning	**Frequency**	**%**
With water	5	5%
With ash water	110	88%
With stray dust	0	0%
With soap water	10	8%
Other	0	0%
Total	**125**	**100%**

Most of respondents (96%) said that they were stored water in house. The type of water storage vessel they use mostly (89%) in gagri. It was not possible to analyse the

effect of type of water container used because of the number of options and the use of multiple types of containers within individual households; Table 4.20.

Table 4.20:

Water Storage in House after intervention of Watsan program:

Practice of water storage in house	**Frequency**	**%**
Yes	120	96%
No	5	4%
Total	**125**	**100%**
If Yes, Storage vessel	**Frequency**	**%**
Gagri	111	89%
Basket (baltin)	8	6%
Roof tank	0	0%
Underground tank	1	1%
Total	**120**	**96%**

Source: Field Study 2014.

4.3 Sanitation Arrangements

4.3.1 Latrine Coverage

After intervention of Watsan program, sent percent of the households (100%) have a latrine in their premises. The commonest type of latrine (100%) is pacci type of (water flush) latrine. This may be because of project running by Nepal Red Cross since 2013 with a major component of latrine construction. The coverage of latrines in respondents is shown in Table 4.21. After observation of latrine in households, nearly half of households (90 %) were using it properly.

Table 4.21:

Latrine Coverage after intervention of Watsan program

Latrine	**Frequency**	**%**
Yes	125	100%
No	0	0%
Total	**105**	**100%**
Types of latrine	**Frequency**	**%**
Pit	0	%
Pucci (Plinth level only)	125	100 %
Other	0	0%
Total	**125**	**100 %**
Condition of latrine (Observation)	**Frequency**	**%**
Clean	85	68%
Smell	20	16%
Flies	20	16%
Total	**125**	**100 %**

The respondents were asked about use the latrine they constructed in house, most of respondents (69 %) answered that all households members used it; Table 4.22.

Table 4.22:

Use of Latrine after intervention of Watsan program:

Variable	**Frequency**	**%**
Children	9	7%
Adult	6	5%
Sick	6	5%
Female	9	7%
Male	9	7%
All above	86	69 %
Total	**125**	**100 %**

Source: Field Study 2014.

Respondents (97) were asked about benefit of latrines about 32% said that it was home surroundings clean, similarly, 28% said that benefit to children, old and sick while going to defecate at day and night. There were significant numbers of respondents (13%) who said that latrine has created privacy and has increased their prestige in the society.

Before intervention of Watsan program, more than 30% of the HHs do not had latrine in their home. These 30% of the population openly had been defecating in the river banks, forest and other open places. This had not only kept all the population of the VDC at risk of water born diseases but also had hampered the dignity of the people in the VDC. Among the HHs having toilets, only about 90% had Pacci (permanent) type of latrines. About 30% of the non-toilet users responded that they could not build toilets in their homes due to lack of money to invest while about 17% said that they didnot know how to Build toilets; Table 4.23.

Table 4.23:

Latrine coverage and types before intervention of Watsan program:

Do you have latrine?	Total HHs	%
Yes	532	70
No	228	30
Total	**760**	**100.0**
If yes, what types of latrines?		
Pit latrine	53	10
Pacci	479	90
Total	**532**	**100.0**
Where do you defecate in absence of toilet?		
Open space	27	11.8
Back side of house	29	12.7
Forest	20	8.7
River banks	70	30.6
Indiscriminately	79	34.6
Road sides	3	1.6
Total	**228**	**100.0**

Why didn't you build latrine?		
Don't know to build	41	17.8
Lack of investment	164	72.0
Habit to defecate in open space	9	4.0
Lack of land	14	6.2
Total	**228**	**100.0**

Among Latrine users, 44% had been using latrines for more than 5 years. When asked to latrine users who had been using latrines for 1 or more than 1 years about the benefit they received from using toilets, about 62% said that it was convenient for children, aged and sick people. Similarly, 47% said that after the construction of latrines the environment of their house and yards had become clean. There were significant numbers of HHs who said that latrine had created privacy and had increased their prestige in the society; Table 4.24.

Table 4.24:

Use of latrines and investment before intervention of Watsan program:

Since when you are using latrine?	**Frequency**	**%**
Upto 1 year	118	22.0%
Up to 2 years	104	19.6%
Upto 3 years	78	14.7%
Above 5 years	232	43.7%
Total	**532**	**100.0%**
What benefit have you received from using toilet?	**Frequency**	**%**
Convenience for children, aged and sick	110	61.9%
Clean environment of house and yard	251	47.2%
Privacy	43	8.04%
Free from diseases	65	12.2%
Social prestige	7	1.4%
Protect from wild animal	56	10.5%
Total	**532**	**100%**

It was reported that about 95% of the latrines in Sukajor were constructed by the HH themselves without external supports from any agencies; and most of the latrines constructed had investment below 5000 rupees.

After intervention of Watsan program, most of respondents (85%) have knowledge about diseases due to defecating in open space. They said that diarrhoea holds 69% and cholera holds 11% while defecate open area; Table 4.25.

In focus group discussion, nearly all women hold the belief that cattle excreta are less hazardous than human excreta and many believe that baby excreta are less hazardous than adult excreta.

Table 4.25:

Benefit from Latrine after intervention of Watsan program:

Variable	**Frequency**	**%**
Benefit to Children, old and sick	35	28%
Home surroundings clean	40	32%
Privacy	16	13%
safe from disease	20	16%
Social Prestige	6	5%
safe from wild animals	5	4%
Self esteem	3	2 %
Total	**125**	**100%**

Source: Field Study 2014.

After intervention of Watsan program, study shows that most of households (90%) have practiced of livestock; use its excreta for manure and more than half use the excreta for this purpose. Most (70%) households have an animal shed in their house and 15% have the animal shed surroundings to the house; Table 4.26.

Table 4.26:

Livestock Management after intervention of Watsan program:

Practice of raised livestock	**Frequency**	**%**
Yes	112	90%
No	13	10%
Total	**125**	**100%**
If yes, Practice of livestock keeping	**Frequency**	**%**
Shed in house	87	70%
Home surrounding	19	15%
Uphill from house	2	2%
In-house	3	3%
Other	1	1%
Total	**112**	**90%**
Practice of disposal of dug	**Frequency**	**%**
Compost pit	70	56%
Make fire dryer	0	0%
dispose anywhere	42	34%
Total	**112**	**90%**

Source: Field Study 2014.

Before intervention of Watsan program, in the project VDC, about 90% of the HHs had livestock in their homes. Among them, about 87% had shelter and more than 98% dispose their waste in manure pits; Table 4.27.

Table 4.27:

Livestock before intervention of Watsan program:

Do you have livestock?	HH	%
Yes	686	90.3
No	74	9.7
Total	**760**	**100.0**
Do you have Goth (shelter)?		
Yes	608	88.6
No	78	11.4
Total	**686**	**100.0**
Where do you dispose the animal wastes?		
Manure pits	674	98.3
Guitha(Dung cake) for cooking	7	1.0
Indiscriminately	-5	0.7
Total	**686**	**100.0**

4.4 Personal Hygiene

Among 125 respondents 47% responded that they wash their hands after defecation but only about 49% of them used soap and water to wash their hands. Similarly, about 19 of the respondents responded that they wash their hands after touch waste but washing hands with soap is uncommon. More than 11% responded that they wash their hands before each meal but only few people responded to use soap. Washing hands was found to be normal but they need to be taught that washing hands only with water is not sufficient for protecting them from water related disease. So, they need to use soap for the purpose; Table 4.28.

Table 4.28:

Hand washing practice and means after intervention of Watsan program:

Practice of hand washing time	**Frequency**	**%**
After defecation	58	47%
Before Cooking	9	7%
Before meal	14	11%
After meal	7	6%
Wash child anal	3	2%
After touch waste	21	17 %
After field works	13	10%
After chemical/fertilizer touch	0	0%
Other	0	0%
Total	**125**	**100%**
Practice of means of hand washing	**Frequency**	**%**
With only water	44	35%
Ash water	19	15%
Soap water	61	49%
No hand washing	0	0%
Soil	1	1%
Total	**125**	**100%**

Source: Field Study 2014.

Before of intervention of Watsan program, among 760 respondents 92.6% had responded that they wash their hands after defecation but only about 45% of them used soap and water to wash their hands. Similarly, about 94 of the respondents had responded that they wash their hands before cooking but washing hands with soap was uncommon. Almost all the respondents, more than 98%, had responded that they wash their hands before eat meal but only few people had responded to use soap. Washing hands in this VDC was found to be highly encouraging; Table 4.29.

Table 4.29:

Hand Washing Practices before intervention of Watsan program:

Variable	Hand Washers	Means of washing hands		
	No	Only water	Ash and water	Soap and Water
After defecation	704	114	207	340
Before cooking	715	654	39	15
Before meal	749	702	4	43
After meal	743	698	27	21
After cleaning children's buttock	655	174	167	317
After touching any dirty things	688	360	71	257
After work at field	695	456	40	200
After using pesticide and fertilizers	711	103	50	559

More than two third respondent (70%), 88 out of 125 , responded that they take bath once a week Very few, 4% of the respondents were found to take bath alternative day. 5% of the respondents said to take bath after once couple of weeks; Table 4.30.

Table 4.30:

Frequency of taking bathe after intervention of Watsan program:

Variable	Frequency	%
Daily	0	0%
Alternative day	5	4%
Twice a week	26	21%
Once a week	88	70%
once a couple of weeks	6	5%
Once a month	0	0%
Total	**125**	**100%**

Source: Field Study 2014

Before intervention of Watsan program, about half of the population-410 out of 760, had responded that they used to take bath once a week. Very few, 1.6% of the respondents had found to take bath daily. More than 4% of the respondents had said to take bath after one month; Table 4.31.

Table 4.31:

Frequency of taking bathe before intervention of Watsan program:

Frequency of taking bath	Frequency	%
Daily	12	1.6%
Alternate day	40	5.2%
Twice a week	181	23.9%
Once a week	410	53.9%
Once in a fortnight	84	11.1%
Once a month and above	33	4.4%
Total	760	**100.00**%

There are no facilities of public sewer; hence, more than 50% of the households throw their liquid waste (grey water) in kitchen garden. About 16% of the households throw their liquid wastes in their pit. This is a good practice, but 10% HHs throw their waste in everywhere which is not good practices. 50 (40%) respondents clean their kitchen

utensils in the in the yards while 45 (36%) households clean in washing plate form (Juthelno); Table 4.32.

Table 4.32:

Liquid Waste Disposal after intervention of Watsan program:

Disposal of grey water	**Frequency**	**%**
Pit	20	16%
Kitchen garden	79	63%
Road side drain	14	11%
Everywhere	12	10%
Total	**125**	**100%**
Practice of utensil washing	**Frequency**	**%**
Washing plate form	44	35%
In house	8	6%
Anywhere	11	9%
Yard	50	40%
Tap	12	10%
Total	**125**	**100%**

Source: Field Study 2014

Before intervention of Watsan program, about 44% of the HHs had practice to throw their liquid wastes in their kitchen garden but more than 13% HHs had practice to throw their solid waste in yards or road sides and 17% throw in the open places which were not good practices. 426 HHs had practice to clean their kitchen utensils in the *Juthelno* while 299 HHs clean in the yards; Table 4.33.

Table 4.33:

Liquid and solid waste disposal before intervention of Watsan program:

Where do you dispose the liquid waste?	**Frequency**	**%**
Pits	420	55.3
Kitchen garden	331	43.6
Public sewer or drain	8	1.0
Total	**760**	**100.0**
Where do you dispose the solid waste?	**Frequency**	**%**
Pits	406	53.4
Yard or roads sides	103	13.5
Public lands	128	16.9
Burning	113	14.9
Local collectors	10	1.3
Total	**760**	**100.0**
Where do you clean your kitchen utensils?	**Frequency**	**%**
Juthelno	426	56.0
Inside home	15	2.0
Indiscriminately	20	2.7
Yard	299	39.4
Total	**760**	**100.0**

After intervention of Watsan program, during the study, households of respondents were observed and found that flies were seen in 58% houses. Same time, 67% households found clean surroundings; Table 4.34.

Table 4.34:

Domestic hygiene after intervention of Watsan program:

Flies in house (Observation)	**Frequency**	**%**
Yes	72	58%
No	53	42%
Total	**125**	**100%**
Clean of house surroundings (Observation)	**Frequency**	**%**
Yes	84	67%
No	41	33%
Total	**125**	**100%**

Respondents were asked about knowledge of food safety and observed the habits of covering the meal. Most of respondents (90%) cover meal in the kitchen to preserve having knowledge (62%) of safe from flies, insects and domestic animals. Similarly 86% households found that meal was covered in the kitchen; Table 4.35.

Table 4.35:

Food safety after intervention of Watsan program:

Knowledge about food safety	**Frequency**	**%**
Cover meal	113	90%
Not have timed meal	6	5 %
Proper washing fruit/vegetable)	6	5%
Total	**125**	**100%**
Knowledge about preserve meal	**Frequency**	**%**
Safe from flies, insect and domestic animal	78	62%
safe from mouse	4	3%
safe from disease	43	35%
Total	**125**	**100%**
Covered the meal (observation)	**Frequency**	**%**
Yes	107	86%
No	18	14%
Total	**125**	**100%**

CHAPTER 5
EFFECT OF VARIABLES ON THE WATER AND SANITATION IN WOMEN OF SUKAJOR

Introduction:

The relation between independent variables and KAP on Watsan has been examined.This is in order to find out the possible strategic ways to increase KAP level by changing the levels of associated variables. For this reason, the analysis concerns mainly those things that are relatively amenable to change: such as literacy, presence of latrines, type of water source, treatment of drinking water, disease. The analysis has been done taking by consideration of independent variable such as: age, ethnicity, education, family type and marital status.

Knowledge, Attitude and Practice on Watsan

To find out the KAP level on water and sanitation program in women of Sukajor, the questions about these were therefore deliberately included in the questionnaire. The variables examined are: type of water source; perceived water quality; treatment of drinking water; covering of water container; hand washing practices; presence and use of latrines; and literacy of respondents.

5.1 Knowledge on Water and Sanitation Program

5.1.1. Knowledge about Disease after Open Defecation

It was asked to respondents about presence absence of knowledge about disease when they go to defecate open area or not defecate in latrines. Most of 16-29 age group respondents answered that they had knowledge about adverse effect to health defecating open area. There also seems the relation that when age groups increase the yes knowledge found decrease in case of Naglebhare; Table 5.1.

Table 5.1:

Knowledge about disease after open defecation by age:

Knowledge about disease	Age			
	16-29 Yrs	30-44 Yrs	45-60 Yrs	>60 Yrs
Yes	48	37	15	6
No	6	11	1	1

We can see that generally the correlation between literacy and knowledge about disease after defecation is directly proportional. Higher literacy is higher the knowledge; Table 5.2.

Table 5.2:

Knowledge about disease after open defecation by literacy:

Knowledge about disease	Literacy	
	Literate	Illiterate
Yes	63	43
No	6	15

Based on the analysis of data collected from households' questionnaires, the knowledge about disease after open defecation by marital status seems high in married respondents than unmarried; 5.3.

Table 5.3:

Knowledge about disease after open defecation by marital status:

Knowledge about disease	Marital status	
	Married	Unmarried
Yes	90	15
No	19	0

5.1.2. Knowledge about Illness in Family

The study come to conclusion that the knowledge about illness in households is high in 16-29 age group that than other ones. Gradually it found decrease when age bar is higher than 16-29 age groups; Table 5.4.

Table 5.4:

Knowledge about Illness in households by age:

Knowledge about Illness	Age			
	16-29 Yrs	30-44 Yrs	45-60 Yrs	>60 Yrs
Yes	42	50	14	7
No	11	7	3	0

Same the conclusion above as, 74 % married women have knowledge about illness in family and only 10% unmarried have of it. This shows that married have high knowledge that unmarried one; Table 5.5.

Table 5.5:

Knowledge about Illness in households by marital status:

Knowledge about Illness	Marital status	
	Married	Unmarried
Yes	93	13
No	16	4

47% of literate women have knowledge about illness in family and 37% unmarried have same. If it analyzes, we can come to conclusion that literate have higher knowledge of it than unmarried one; Table 5.6.

Table 5.6:

Knowledge about Illness in households by literacy:

Knowledge about Illness	Literacy	
	Literate	Illiterate
Yes	59	46
No	9	13

5.1.3. Knowledge about Transmission of Diarrhea

33% of 16-29 yrs age group, 24 % of 30-44 yrs age group, 10% of 45-60 yrs and 3% of >60 yrs age group have positive knowledge on transmission of diarrhea. It shows that knowledge on transmission of diarrhea decreasing pattern when age bar is increasing; Table 5.7.

Table 5.7:

Knowledge about transmission of Diarrhea by age:

Diarrhoea Transmission	Age			
	16-29 Yrs	30-44 Yrs	45-60 Yrs	>60 Yrs
Yes	41	30	13	4
No	13	18	5	4

The married women (61%) and unmarried (9%) have yes knowledge about transmission of diarrhea, the data collected from households questionnaires showed. Conclusively, we can say that married have greater knowledge than unmarried on transmission of diarrhea; Table 5.8.

Table 5.8:

Knowledge about transmission of Diarrhoea by marital status:

Diarrhoea Transmission	Marital status	
	Married	Unmarried
Yes	76	11
No	34	5

44% literate and 26 % illiterate have knowledge about transmission of diarrhea. This means that literacy and knowledge about transmission of diarrhea have positive correlation. Higher the literacy is higher the knowledge on transmission of diarrhea; 5.9.

Table 5.9:

Knowledge about transmission of Diarrhea by literacy:

Diarrhea transmission	Literacy	
	Literate	Illiterate
Yes	55	33
No	13	26

5.1.4. Knowledge about Prevent of Diarrhea

When we see knowledge about prevent of diarrhea in different age groups, 33%, 31%, 10% and 3% respondents of age groups of 16-29 yrs, 30-44 yrs, 45-60 yrs and above 60 yrs respectively. This data shows that knowledge about prevent of diarrhea is

decreasing trend when age groups is increasing. This is directly correlation to age groups; Table 5.10.

Table 5.10:

Knowledge about prevent of diarrhea by age

Prevent of diarrhea	**Age**			
	16-29 Yrs	**30-44 Yrs**	**45-60 Yrs**	**>60 Yrs**
Yes	39	38	16	4
No	14	11	5	4

The relation between marital status and knowledge about prevent of diarrhea was examined. This examination shows that married have greater knowledge than unmarried on prevent of diarrhea; Table 5.11.

Table 5.11:

Knowledge about prevent of diarrhea by marital status

Prevent of diarrhea	**Marital status**	
	Married	**Unmarried**
Yes	81	11
No	29	5

46% of literate and 28% of illiterate have clear knowledge about prevent of diarrhea. The illiterate have lesser knowledge than literate one. Therefore, literacy has direct relation to knowledge about prevent of diarrhea; 5.12.

Table 5.12:

Knowledge about prevent of diarrhea by literacy

Prevent of diarrhea	**Literacy**	
	Literate	**Illiterate**
Yes	58	35
No	10	24

5.1.5. Knowledge about Treatment of Diarrhea

When we try to find out the relation between age and knowledge about treatment of diarrhea, it shows that increasing the age bars decrease the knowledge about treatment of diarrhea. This means that 16-29 yrs age group have greater than 30-44 yrs age group than 45-60 yrs age group than >60 yrs age group on knowledge about treatment of diarrhea; Table 5.13.

Table 5.13:

Knowledge about treatment of diarrhea by age:

Treatment of diarrhea	**Age**			
	16-29 Yrs	**30-44 Yrs**	**45-60 Yrs**	**>60 Yrs**
Yes	43	34	13	5
No	11	14	5	23

It was asked to respondents on knowledge about treatment of diarrhea using households' questionnaires. Answers were collected and coding was done then analyzed it properly. After analysis, we can the result that relation of marital status between knowledge about treatment of diarrhea seems positive correlation. Married (66%) have greater knowledge than unmarried (9%) on treatment of diarrhea; 5.14.

Table 5.14:

Knowledge about treatment of diarrhoea by marital status:

Treatment of diarrhea	**Marital status**	
	Married	**Unmarried**
Yes	83	11
No	28	5

Knowledge about treatment of diarrhea was seen higher in literate respondents against illiterate respondents. 46 % literate and 29% have knowledge about it which is clearly less percentage in illiterate respondents; 5.15.

Table 5.15:

Knowledge about treatment of diarrhoea by literacy:

Treatment of diarrhea	Literacy	
	Literate	Illiterate
Yes	58	38
No	10	13

5.2 Attitude (Behaviour) on Water and Sanitation Program

5.2.1 Flies in House

Observation was conducted during collection of households data of respondents' related. Contrary, as knowledge and practice level is greater in 16-29 yrs age groups, but behavior part of them was found opposite. The matrix shows that households flies seen higher than increasing age bars. That means that higher the age bars higher the positive behavior or attitude; Table 5.16.

Table 5.16:

Flies in house (observation) by age:

Flies in house	Age			
	16-29 Yrs	30-44 Yrs	45-60 Yrs	>60 Yrs
Yes	33	23	13	6
No	23	25	5	4

As seen the households of respondents and analysis was conducted to find out the relation between marital status and flies in house (action), the result we can see that married households have more flies than unmarried; Table 5.17.

Table 5.17:

Flies in house (observation) by marital status

Flies in house	Marital status	
	Married	Unmarried
Yes	63	10
No	46	6

By observation of respondents households, relate to it with literacy of respondents-we can make conclusion that literate have less flies in their households than illiterate .This is to say that attitude level of literate is more positive than illiterate on households' sanitation. However, flies in house also cause of animal shed in or near the households; Table 5.18.

Table 5.18:

Flies in house (observation) by literacy

Flies in house	**Literacy**	
	Literate	**Illiterate**
Yes	31	41
No	36	16

5.2.2. Clean of House Surroundings

Cleanness of respondents' households was observed during the data collection time. Then coding of data was done and analysed. The results show that cleanness is higher in lower age groups than higher age groups. This means that attitude on households cleanness is positive in lower age group; Table 5.19.

Table 5.19:

Cleanness of house surroundings (observation) by age

Cleanness of house surroundings	**Age**			
	16-29 Yrs	**30-44 Yrs**	**45-60 Yrs**	**>60 Yrs**
Yes	40	30	10	4
No	13	18	8	4

The married women have higher attitude of cleanness of households surrounding than unmarried one. 59% married women and 8% unmarried women have observed households cleaned during the time; Table 5.20.

Table 5.20:

Cleanness of house surroundings (observation) by marital status:

Cleanness of house surroundings	Marital status	
	Married	**Unmarried**
Yes	74	10
No	36	6

Same way, comparatively respondents' households were observed with literacy of respondents. The coding results show that literate have higher positive attitude than illiterate one on cleanness of households surroundings; Table 5.21.

Table 5.21:

Cleanness of house surroundings (observation) by literacy

Cleanness of house surroundings	Literacy	
	Literate	**Illiterate**
Yes	46	38
No	20	21

5.2.3. Covered the meal

16-29 age group has higher the attitude/belabour on covered the meal than other age group. This is decreasing trend when age groups is increasing; Table 5.22.

Table 5.22:

Covered the meal (observation) by age

Covered the meal	Age			
	16-29 Yrs	**30-44 Yrs**	**45-60 Yrs**	**>60 Yrs**
Yes	48	39	13	4
No	6	9	5	4

The relation between marital status and attitude on covering the meal in households were observed in this study. The study shows that married (74%) women have greater positive attitude than unmarried one; Table 5.23.

Table 5.23:

Covered the meal (observation) by marital status:

Covered the meal	Marital status	
	Married	**Unmarried**
Yes	93	14
No	16	1

The households' observation, it was found that literate (49%) women have more action that illiterate on covering the meal. This means that more literate have positive attitude Table 5.24.

Table 5.24:

Covered the meal by literacy:

Covered the meal	Literacy	
	Literate	**Illiterate**
Yes	61	46
No	6	13

5.3 Practice on Water and Sanitation Program:

5.3.1. Source of water

'Safe' water sources (tap and spring) were compared with other water sources (stream and well). The study revealed that "**Lower the age in woman in a house have higher a 'safe' water practice".** (Table 5.25)

It seems that 16-29 years of respondents are more conscious about health that may be right to have a high regard for the quality of their water. People apparently judge water quality mainly on the basis of such things as taste, smell and colour; but water which is heavily contaminated with pathogenic organisms may appear perfectly good quality; Table 5.25.

Table 5.25:

Water source by age:

Safe water source	Age			
	16-29 Yrs	30-44 Yrs	45-60 Yrs	>60 Yrs
Yes	26	24	9	5
No	26	24	9	2

The analyses on practice of using safe water source by respondents with their literacy were examined. According to results of the study, it seems that literate respondents have higher percentage of safe water source used. The literacy of respondents has not higher level education in Sukajor . Most of respondents have got school level education only; Table 5.26.

Table 5.26:

Water source by literacy:

Safe water source	Literacy	
	Literate	Illiterate
Yes	44	36
No	22	22

The relation was observed between marital status of respondents and they were using safe water source for drinking water. The analysis finds that higher the number of married respondents is higher the safe water source usage; Table 5.27.

Table 5.27:

Water source by marital status:

Safe water source	Marital Status	
	Married	Unmarried
Yes	71	9
No	37	8

5.3.2 Treatment of Drinking Water

As mentioned above, very few households do anything to their water before drinking it, whatever its source. Among respondents having water treatment before drinking, 16-49 years age group seem higher practice of it; Table 5.28.

Table 5.28:

Water treatment by age

Water Treatment	**Age**			
	16-29 Yrs	**30-44 Yrs**	**45-60 Yrs**	**>60 Yrs**
Yes	15	6	5	1
No	37	41	12	6

The water treatment practice with literacy of respondents, we can easily see that the practice is higher in literate women than illiterate. It was crossed checked in households' observation and found strong correlation with this practice; Table 5.29.

Table 5.29:

Water treatment by literacy:

Water treatment	**Literacy**	
	Literate	**Illiterate**
Yes	26	5
No	40	54

Also a examination was conducted whether there was any correlation between marital status and water treatment practice in their households. It is found that married women have higher practice of water treatment than unmarried; Table 5.30.

Table 5.30:

Water treatment by marital status

Water treatment	**Marital status**	
	Married	**Unmarried**
Yes	25	6
No	85	10

5.3.3. Hand Washing Practices

It seems likely that hand washing practices, especially of those who prepare food, are related to age, literacy and marital status. However, in practice this is difficult to investigate. A straight question such as 'do you wash your hands before preparing food?' is likely to elicit a positive answer, whatever the actual practice. The question used here about 'when do you wash your hands?' in the event produced so many different and combined answers that it has not proved possible to demonstrate a vivid relation with independent variables.

5.3.4. Latrines

It was asked to women to show the latrine where they defecate, so it could check the type of latrine used the state, and the cleanness: The study showed that 100 % respondents having latrine, 95% have pacci (water flush latrine) and 5% having water flush but weak structures.

The study also examined the correlation between use of latrine and age of respondents. The practice of use of latrine seems higher in 16-29 age bars than other. Perhaps it might be that the practice of latrine use in households lately introduced; Table 5.31.

Table 5.31:

Latrine by age:

Latrine	**Age**			
	16-29 Yrs	**30-44 Yrs**	**45-60 Yrs**	**>60 Yrs**
Yes	42	36	9	3
No	11	12	9	5

The relation between latrine having and literacy was found that literate respondents have higher number of latrines in their households Table 5.32.

Table 5.32:

Latrine by literacy:

Latrine	**Literacy**	
	Literate	**Illiterate**
Yes	55	35
No	12	24

The married women have higher percentage of latrine use that unmarried out of 125 respondents. This correlation is positive that there is relation between; Table 5.33.

Table 5.33:

Latrine by marital status:

Latrine	**Marital status**	
	Married	**Unmarried**
Yes	80	9
No	29	7

CHAPTER 6
SUMMARY AND CONCLUSIONS

6.1 Summary

The KAP study revealed that promotion of households' latrines appears considerable with 71% of respondents claiming to always their own latrines for defecation day and night. Although this was a self-reported answer and thus, open to exaggeration, it was evident respondents' knowledge of the importance of households' latrine is extremely high.

The population is still suffering from a high incidence of severe diseases relating to poor water and unsanitary practices. There has to raise health standards in villages, beneficiaries require a more comprehensive health education package. Agencies should, in co-ordination actively in the sector, consider expanding their water use and hygiene promotion activities into other health areas such as the promotion of good food hygiene practices, nutrition and hand washing, particularly amongst the younger generation.

The study showed that before consumption of the water, only 75% of the women don't do anything now. The others filtrate (8%), sodish for water (3%) or boil the water (14%). This shows clear that There should change in water consumption pattern.

The visual quality of the water remains the main criteria for the choice of the water point for 72% of the population. Then the taste of the water is an important criterion for near than 81% of the population and other important factor for selecting the water is color for 62% pollution.

As a very good result of the study, almost everybody (97%) have practice of water vessel cleaning, among them 88% clean vessels with ash water.

Respondents said that the presence of health worker in the community households is very low (30%), although government has appointed in every wards of Village Development Committee.

The study revealed that, as a good practice, 93% women cover the water vessel during handling of drinking water. The 89% respondents store drinking water in gagri (pot).

The use of soap is seen encouraging practice (49%) before and after cooking or eating, and after defecation. Nearly half of population has the practice of hand washing after defecation.

6.2 Conclusion

Through the WATSAN project, community people have enhanced their capacity on safe water handle and sanitation and hygiene practice after the program. Every people have increased their behavior on health and hygiene practice and water handling also. They also have increased their hands washing practice on 5 critical time viz. before eating and feeding, after defecating, before cooking and after working. These are the major important events of hygiene and sanitation practice. It may help to keep good health of the community people also. Regular hands washing practice on critical time can reduce effect of water borne diseases by 45%. Similarly, community people have increased their safe water handling practice smoothly. It also can reduce the chance of attacking by the water borne diseases in community. Community people also have used toilet regularly. It habit is good for the social prestige and to be good for making healthy. These practices has been done by the community people regularly. So that, we found that the health status of community people are going incrementally. Now days, in community the mortality and morbidity rate are gradually reducing due to the increased of good hygiene practices.

If the community people followed the water, sanitation and hygiene practice regularly, it can reduce the waterborne diseases in society. For meeting this objectives community people should follow-up the following good hygiene practices in future:.

1. Community people should use their toilet properly.
2. People must wash their hands on critical times regularly.
3. People should clean around their house and yard regularly.
4. People should use water treatment process regularly.
5. People should conduct awareness campaign in community partially.

The community people must follow the sanitation and hygiene practice in their society regularly, it will be better for the people to keep their good health.

REFERENCES

Carter, R.C., Tyrrel, S.F., and Howsam, P. (1999). "Impact and Sustainability of Community Water Supply and Sanitation Programmes in Developing Countries", *Journal of the Chartered Institution of Water and Environmental Management*, Vol. 13, August. 292-296.

Dahal, M.K. and Guru-Gharana, K.K. (1998). "Environment and Sustainable Development: Issues in Nepalese Perspective", *Environment and Sustainable Development: Issues in Nepalese Perspective*. Edited by Dahal, MadanK. and Dahal, Dev R. Foundation for Advanced Studies (NEFAS), Kathmandu, Nepal, November.

District Development Council (2002). *District Profile (2058/59-2063/64).* District Development Council, Nepal.

Ramechhap *"District Profile*, 2069

Familoni, K.A. "*The Role of Economic and Social Infrastructure in Economic Development: A Global View*"

GVT. of Nepal "*Sanitation Master Plan- 2068*"

HMG Nepal, Ministry of Health. "*Fertility, family planning and health survey, 1991. Ramechhap, 1993"*.

HMG Nepal, Ministry of Health. Nepal family health survey 1996, preliminary report. Ramechhap 1996.

HMG Nepal, Central Bureau of Statistics, National Planning Commission Secretariat.

His Majesty's Government of Nepal. *Economic Survey (2002-2003).* Ministry of Finance, His Majesty's Government of Nepal, 2003.

Hutton, G. *Economic Evaluation and Priority Setting in Water and Sanitation Interventions*. Edited by Fewtrell, Lorna and Bartram, Jamie. IWA Publishing, London, UK. ISBN: 1 900222 28 0, 333-359.

IRC (2001). *Newsletter 1*. International Reference Centre for Community Water Supply and Sanitation (IRC), Hague, Netherlands, October.

Kanel, N.R. (2003). *Guidelines to Format Theses and Dissertations: A Quick Reference*. New Hira Books Enterprises, Kirtipur, Kathmandu, Nepal.

Lorenzen, E. *Drinking Water, Sanitation and Health Education in Rural Nepal*, n.d., n.p., n.pag.

Mishra, N. K. *Policy on Sanitation, Problems and Recommendation*, n.d., n.p., n.pag.

Nepal, N. R. (2002). *Economic Theory of Valuing the Environment and Natural Resource*. Unpublished hands-out, Environmental Economics, Central Department of Economics, Tribhuvan University, Kirtipur, Kathmandu, Nepal.

NEPECON (2002). *Water Supply and Sanitation Profile/Development Plan of Banke District.* A Report Submitted to Mid-western Regional Directorate, Department of Water Supply and Sewerage, His Majesty's Government, Birendranagar, Surkhet, Nepal, March.

NEWAH (2004). *"Summary of Completed Water Supply and Sanitation Project".*Unpublished Office Record Document. Nepal Water For Health, Mid-far Regional Office, Nepalgunj, Banke, Nepal.

Nepal Living Standards Survey Report 1996; "*Main Findings Volume One*". Kathmandu, December 1996.

Plan Nepal. *Summary of Baseline Survey 2004.* Unpublished office record document. Plan Nepal, Banke program unit, Nepalgunj, Banke, Nepal, 2004.

National Planning Commission, HMG Nepal and UNICEF-Nepal. "*Nepal Multiple Indicator Surveillance: Health and nutrition - cycle 1*", Jan-March 1995. March 1996.

National Planning Commission, HMG Nepal. "*Nepal Multiple Indicator Surveillance, Second cycle – primary education*" December 1996.

Nepal Red Cross Society, Kathmandu, "*Drinking Water, Sanitation and Hygiene Policy and Procedures 2066."*

UNDP (2003). "Clean Water and Sanitation for the Poor", *Fast Fact*. United Nations Development Program, One United Nations Plaza, New York, NY 1007, USA, March.

USAID (1982). "Domestic Water and Sanitation", *USAID Policy Paper*. Bureau for Program and Policy Coordination, U.S. Agency for International Development, Washington, D.C. 20523, May.

Sukajor, *"VDC Baseline Survey*".

Sukajor, "*VDC Profile*"

Wolf, Howard K. and Pant, Prem R. *A Handbook for Social Science Research and Thesis Writing.* Buddha Academic Enterprises Pvt. Ltd., Kathmandu, Nepal.

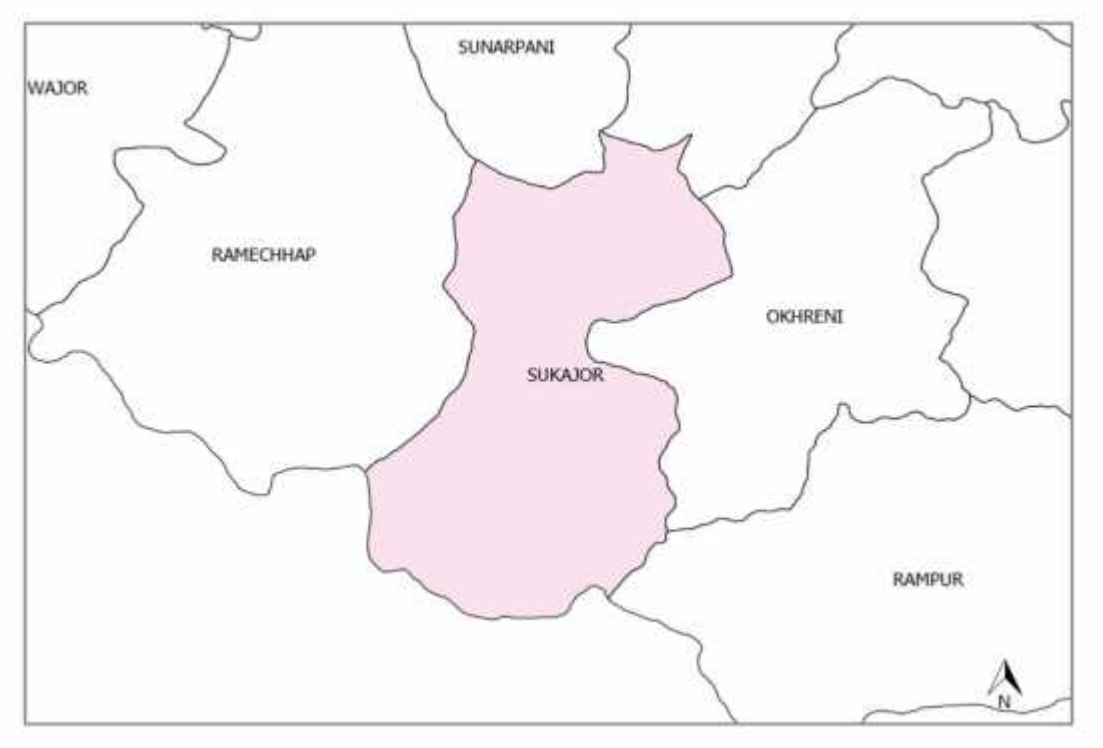
World Bank (1997). "Indicators of Pollution Management", *Pollution Prevention and Abatement Handbook.* The World Bank, Washington, DC.

World Health Organization (2004). "Facts and Figure", *Water, Sanitation and Hygiene Links to Health.* World Health Organization, March.

World Health Organization. "Trends in Socioeconomic Development", *Country Health Profile-Nepal*. World Health Organization, July 20, 2004. <http://www.whosea.org/countryhealth/nepal/nepsocio.htm>

World Health Organization. *Tools for assessing the O&M status of water supply and sanitation in developing countries.* World Health Organization, Geneva, 2000. <http://www.who.int/docstore/water_sanitation_health/wss/O_M.htm>

SUKAJOR VDC MAP:



SAMPLE OF QUESTIONNAIRE:

KAP SURVEY ON WATER AND SANITATION PROGRAM
SUKAJOR VDC
RAMECHHAP 2014

वडा नं.....

घरमूलीको नाम..... लिंग १. पुरुष २. महिला

अन्तरवार्ता लिनेको नाम .....

उत्तरदाताको पृष्ठभूमि

प्र.नं.	प्रश्नहरू	कोडिङ्गमा जाने	
१	उत्तरदाताको नाम ..... उत्तरदाताको लिङ्ग : १. पुरुष २. महिला		
२	तपाईं कति वर्षको हुनुभयो ?	पूरा भएको वर्ष..... ☐☐	
३	तपाईले कति कक्षासम्म पढ्नु भएको छ ?	कहिल्यै स्कूल नगएको ..... ०१ प्राथमिक तह (१-५) ..... ०२ निम्न माध्यामिक तह (६-८) ..... ०३ माध्यमिक तह (९-१०) ..... ०४ एस.एल.सी. पास गरेको ..... ०५ प्रमाणपत्र तह वा सो भन्दा माथि..... ०६ अनौपचारिक शिक्षा..... ०७	
४	तपाईंको जातीयता के होला ?	ब्राह्मण /क्षेत्री ..... ०१ आदीवाशी जनजाती..... ०२ दलित..... ०३ मुस्लीम..... ०४	

५	तपाईंको परिवारको बनावट कस्तो छ ?	एकल परिवार..... ०१ संयुक्त / वृहत परिवार..... ०२	
६	तपाईंको परिवारमा कतिजना सदस्यहरू छन् ?	पुरुष..... महिला.....	
७	५ वर्ष मुनिका बच्चाहरूको संख्या	.....	
८	तपाईंको परिवारको आम्दानीको मुख्य स्रोत के हो ?	कृषि..... ०१ व्यापार (थोक व्यापार, खुद्रा व्यापार)..... ०२ परम्परागत पेशा -गोल/कोइलाको काम गर्ने, सिलाइ) ..... ०३ नोकरी ..... ०४ दैनिक ज्यालादारी..... ०५ वैदेशिक रोजगारबाट आएको रकम..... ०६ दक्ष कामदार..... ०७ अन्य -खलाउने).....	
९	तपाईंको परिवारको सरदर वार्षिक आम्दानी कति होला ? ***(आम्दानी सवै जोडने)*** ***(नोटः कृपया कृषि उत्पादन, वैदेशिक रोजगारबाट प्राप्त आम्दानी ,नोकरी तथा अन्य आम्दानी लाई मुल्यमा परिणत गर्नहोस् र सवै जोडेर राख्ने***	रू	
१०	तपाईंको आफ् खेतीपातीको उव्जनीले कति महिना खान पुग्छ ?	महिना खलाउने..... जग्गा जमीन नभएको.....	

करेसाबारी

११	तपाईंको घरमा उन्नत तरीकावाट करेसावारी लगाउनुभएको छ ? **अवलोकन गर्नुहोस ।**	छ ..... ०१ छैन..... ०२	
१२	यदी छ भने करेसावारी के उदेश्यले लगाउनुभएको हो ?	आफ्नै परीवारको लागी..... ०१ बेच्न..... ०२ दुवै..... ०३	

रोग तथा स्वास्थ्य

१३	तपाईंको परिवारमा १ वर्षभित्र कसैको मृत्यु भएको छ ?	छ.....	०१	
		छैन.....	०२	
१४	यदि भएको थियो भने ५ वर्ष मुनिका कसैको मृत्युभएको छ ?	छ.....	०१	
		छैन.....	०२	
१५	उनी केटा थिए कि केटी	केटा.....	०१	
		केटी.....	०२	
१६	के रोग लागेर ऊ/उनीको मुत्यु भएको थियो ?	झाडा पखला.....	०१	
		जण्डीस.....	०२	
		निमोनिया.....	०३	
		दादुरा.....	०४	
		अन्य रोग.....	०५	
		थाहा छैन.....	०८	
१७	विगत १ वर्षको अन्तरालमा तपाईंको परिवारमा कस्तो- कस्तो खालको रोग लागेको छ ?	झाडा पखाला.....	०१	
		हैजा.....	०२	
		रगतमासी.....	०३	
		आँखाको रोग.....	०४	
		जण्डिस	०५	
	(एकभन्दा बढी उत्तर आउन सक्छ)	पेट दुख्ने.....	०६	
		रुघा खोकी.....	०७	
		टाइफाइड.....	०८	
		अन्य रोग.....	०९	
		केही नभएको.....	८८	
१८	तपाइहरुले उक्त समस्याको उपचार स्वास्थ्य संस्थामा गराउनु भएको थियो ?	थियो.....	०१	
		थिएन.....	०२	
१९	यदी नगराउनु भएको भए किन होला ?	समय नभएर.....	०१	
		स्वास्थ्य संस्थामा औषधी नै हुदैन.....	०२	
	(एकभन्दा बढी उत्तर आउन सक्छ)	टाढा भएर.....	०३	
		घरेलु औषधी गरेकोले.....	०४	
		सामान्य समस्या भएकोले.....	०५	
		धामीकोमा गएकोले.....	०६	

		स्वास्थ्य संस्थामा स्वास्थ्य कर्मी नै नहुने.. ०७ थाहा छैन..... ८८ अन्य खुलाउने.....	
२०	के तपाइहरु उक्त समस्याको उपचार गर्न धामीकोमा पनी जानुभएको थियो ?	थियो..... ०१ थिएन..... ०२	
२१	तपाईको परीवारमा बिरामीको स्वास्थ्य उपचार को लागी बार्षिक सरदर कति रकम खर्च हुन्छ होला ?	रू ..... **(जांचफी, आउने जाने, बस्नेखाने र औषधी खर्च र साथी को खर्च समेत जोडेर जम्मा खर्च लेख्ने)**	
२२	तपाइको विचारमा झाडा पखलाका लक्षणहरु के के होलान ? *(एकभन्दा बढी उत्तर आउन सक्छ)*	ज्वरो..... ०१ दिशामा रगत देखिनु..... ०२ तिर्खा लाग्नु/पानीको कमी..... ०३ चक्कर लाग्नु..... ०४ पातलो दिसाउनु..... ०५ ओठ र मुख सुक्नु..... ०६ थाहा छैन..... ०८	
२३	तपाईंको परिवारमा विगत २ हप्तामा ५ वर्ष माथि सदस्यहरुलाइ झाडापखाला लागेको छ ?	छ..... ०१ छैन..... ०२	
२	पछिल्लो २ हप्तामा तपाइको छिमेक चिनजानमा झाडापखाला लागेको छ ?	छ..... ०१ छैन..... ०२	
२५	के तपाईंलाई थाहा छ झाडा पखाला कसरी लाग्छ ? *(एकभन्दा बढी उत्तर आउन सक्छ)*	जथाभावी दिसापिसाव गर्नाले..... ०१ दुषित पानीबाट..... ०२ फोहर जथाभावी फ्याक्नाले..... ०३ व्यक्तिगत सरसफाइको अभावबाट..... ०४ दुषित खानावाट..... ०५ केही थाहा नभएको..... ०८ अन्य खलाउने.....	
२६	तपाइको समुदायमा स्वास्थ्य र सरसफाइ संवन्धि काम गर्ने कनै संस्था छ होला?	छ ..... ०१ छैन..... ०२	

२७	अव म तपाइ सँग ५ वर्ष मुनिका बच्चालाई **गत ३ महिना** भित्रमा निम्न किसिमको स्वास्थ्य समस्याहरु भएको थियो ? पढेर सुनाउने		

	स्वास्थ्य समस्याहरु	थियो	थिएन
१	झाडा पखला	१	२
२	रुघाखोकी (कडा खोकी छातीबाट निस्कने)	१	२
३	निमोनिया	१	२

खानेपानी

२८	तपाईंको परिवारको लागि खानेपानीको मुख्य स्रोत के हो ?	पाइपको निजी..... ०१ सार्वजनीक धारा.(पाइपको)..... ०२ कुवा/ इनार..... ०३ खोला /पोखरी / झरना..... ०४ ढुगेंधारा..... ०५	
२९	घरबाट गएर पानी लिएर आउन लाग्ने समय(पानी लिन जाने र आउने)	**मिनेटमा** खुलाउने.....	
३०	खानेपानीको सन्दर्भमा तपाईले के के समस्या भोग्नु परेको छ ? *(एकभन्दा बढी उत्तर आउन सक्छ)*	१. धमिलोपन २.फोहोर ३. पानीमा किरा ४. गन्हाउने/ नराम्रो गन्ध ५. पानी अपर्याप्त ६ मुल सुरक्षित छैन ७. केही छैन	
३१	के तपाई पानीलाई शुद्धिकरण गरेर खानुहुन्छ ?	छ..... ०१ छैन..... ०२	
३२	यदि शुद्धीकरण गर्नुहुन्छ भने, **प्राय** कसरी गर्नुहुन्छ ?	क्लोरिन..... ०१ थिग्राएर/फिल्टर गरेर..... ०२ सोडिन गरेर(घाम पानी विधि)..... ०३ उमालेर..... ०४ कपडाले छानेर..... ०५	
३३	**अवलोकन गर्ने** भाँडाको मुख छोपेको छ कि छैन ?	छ..... ०१ छैन..... ०२	
३४	**प्राय** घरबाट निस्केको फोहर पानीलाई के गर्नुहुन्छ ?	करेसावारीमा फ्याक्छु..... ०१ जताततै फ्याँक्छु ..... ०२ खाल्डोमा फ्याँक्छु..... ०३	

		आँगनमा फ्याँक्छु..... ०४	

हात धुने

३५	तपाइको विचारमा ३ वटा हात धुनु पर्ने अवस्थाहरु के के होला ? *(एकभन्दा बढी उत्तर आउन सक्छ)*	खाना खाएपछि..... ०१ फोहारमा काम गरेपछि..... ०२ ट्वाइलेट गएपछि..... ०३ खाना पकाउनु अघि..... ०४ बच्चाको दिसा धोएपछि..... ०५ खाना खानु अघि..... ०६	
३६	तपाईं **प्राय** हात केले धुनु हुन्छ ?	पानी..... ०१ पानी र साबुन..... ०२ पानी र माटो वा वालुवा..... ०३ पानी र खरानी..... ०४	
३७	तपाईंले सवैभन्दा अन्तिम पटक दिशा गरीसकेपछि हात केले धुन भयो?	पानी..... ०१ पानी र साबुन..... ०२ पानी र माटो वा वालुवा..... ०३ पानी र खरानी ..... ०४ हात नै नधोएको..... ०५	
३८	तपाईले गर्ने गरेको हात धुने बारेमा कहांबाट थाहा पाउनुभयो ? *(एकभन्दा बढी उत्तर आउन सक्छ)*	साथीभाई नातागोता ..... ०१ बिद्यालय जाने केटाकेटीहरुबाट ..... ०२ स्वास्थ्यकर्मी..... ०३ महिला स्वास्थ्य स्वयंसेविका ..... ०४ रेडीयो ..... ०५ टेलिभिजन ..... ०६ पत्र पत्रिका ..... ०७ अन्य -खुलाउने)	

चर्पी

३९	तपाईंको घरमा चर्पी छ ?	छ..... ०१ छैन..... ०२	
४०	यदि छ भने कस्तो चर्पी छ ?	खाल्डे चर्पी (सुधार नगरीएको)..... ०१ खाल्डे चर्पी (सुधार गरीएको)..... ०२	

		सेफ्टी टयांकी जोडीएको.....	०३	
४१	**अवलोकन गर्नुहोस्,** चर्पीको अवस्था कस्तो छ ?	सफा छ.....	०१	
		गन्ध आउँछ.....	०२	
		भिंगा भन्केको छ.....	०३	
		दिशा देखिएको.....	०४	
४२	**अवलोकन गर्नुहोस्,** चर्पी भित्र वा चर्पी नजिक हात धुने के के व्यवस्था छ ?	हात धुने सावन राखेको.....	०१	
		पानी मात्र.....	०२	
		केही नभएको.....	०३	

वातावरणीय सरसफाइ

४३	तपाइको घरमा प्राय भाडाकुडा कहाँ माझ्नु हुन्छ ?	परम्परागत जुठेल्नो.....	०१	
		सुधार गरीएको आधुनिक जुठेल्नो.....	०२	
		जताततै.....	०३	
		धारा नजिक.....	०४	
४४	तपाईंहरू प्रायः भाडाकुडा माझेर कहाँ राख्नुहुन्छ ? (भाडा माझेर कहाँ घोप्टाउनु वा सुकाउनु हुन्छ)	भूईमा.....	०१	
		मचान/बाँस वा फलेकको टाँड.....	०२	
		ढुगांमा.....	०३	
		बाटामा.....	०४	
४५	तपाईहरू **प्रायः** घर आँगनको फोहोर कहाँ फ्याक्नुहुन्छ ?	निश्चित फोहोर खाल्डोमा	०१	
		जहाँपायो तही वा अन्यत्र	०२	
४६	तपाइको घरमा खाना पकाउनको लागी सुधारीएको चुलो छ की छैन ?	छ.....	०१	
		छैन.....	०२	
४७	**अवलोकन गर्नुहोस्,** वरिपरी हिडदा खुल्ला दिशा गरेको वा भएको ठाउँ देखिन्छ कीदेखिदैन	देखिएको.....	०१	
		नदेखिएको.....	०२	
४८	**अवलोकन गर्नुहोस्,** के घरमा भिंगा भन्केको छ ?	छ.....	०१	
		छैन.....	०२	
४९	**अवलोकन गर्नुहोस्,** के घर वरिपरि सफा छ ?	छ.....	०१	
		छैन.....	०२	

व्यक्तिगत सरसफाइ

५०	तपाईंलाई पानीको कारण के कस्ता रोग लाग्छ भन्ने थाहा छ ?	छ..... ०१ छैन..... ०२	
५१	तपाइले निम्न कुराहरु कति कति दिनमा गनुहुन्छ?	नुहाउने.....दिनमा लुगा धने.....दिनमा दाँत माझ्ने .....दिनमा नङ काटने .....दिनमा कपाल कोर्ने .....दिनमा	