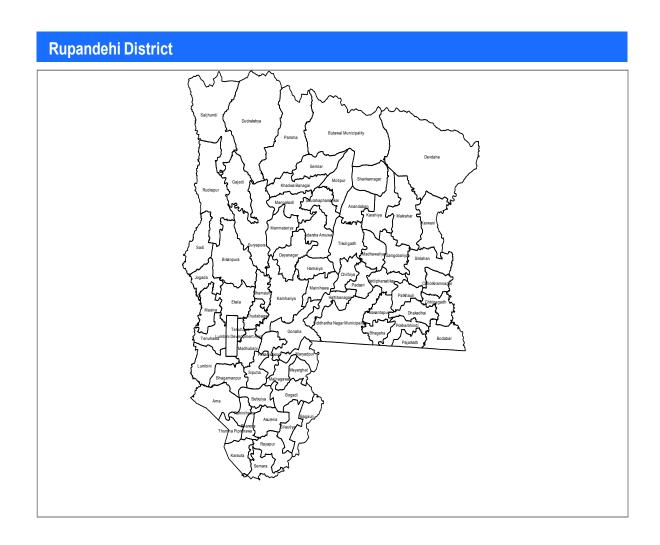
# District Strategic Water, Sanitation and Hygiene Plan (DSWASHP), Rupandehi 2013-2017



District Water Supply, Sanitation and Hygiene Coordination Committee (DWASHCC), Rupandehi

# **PREAMBLE**

Continuous efforts of the District Development Committee (DDC) of Rupandehi district, to focus on the development of drinking water supply facilities and hygiene, is the inherent part of this report. DDC, Rupandehii has been implementing a series of activities from its own fund and human resources and also working hand on hand with other agencies engaged in the development and promotion of the sector. The report is an effort to develop better approaches further for adoption in achieving the target of universal coverage of water supply, sanitation and hygiene goal by 2017 as stipulated by GoN in its' Millennium Development Goal.

The report includes inventories of all the 69 VDCs and 2 municipalities with status of drinking water coverage, all perspectives of poverty and remoteness. The need of development interventions in water in each VDC and municipalities is outlined and required fund and human resources has also been stated accordingly. Also in the effort, areas/pockets facing hardship of WASH by VDCs and municipalities have been identified. VDCs have been ranked by water supply coverage, poverty and remoteness. Accordingly, institutions engaged in the development sector, both at the public and private level have been listed and both the fund and human resources that the institutions have been investing in the WASH sector has been analysed and a gap has been projected so as to achieve the ODF by 2013 and universal coverage of water supply services by 2017. This strategic water, sanitation and hygiene plan (DSWASHP) has been prepared by DWASHCC in close collaboration of the sector agencies both at the public and private levels.

We hope that these strategies will be a guideline to all the agencies/institutions to involve in the development of WASH sector in Rupandehi district and to work in coordinated manner and synergise each others' efforts in achieving the universal coverage of WASH by 2017 in the district as specified by Government of Nepal.

This report is the result of participatory and inclusive process of planning. The target, operational strategies, and plan of actions for development of water supply and total sanitation (post ODF) and environment are also included in this report. As we realize the preparation of this document was not an easy task. Some intensive interactions with multi-stakeholders, political leaders and other knowledgeable persons at district, municipality and VDC levels were performed for the preparation of this report. As the outcome of a very committed and consolidated effort made by all stakeholders, we have the plan in our hand now. We take this as an opportunity to appreciate the passionate participation of the sector agencies active in the district and substantial contribution they made in throughout the preparation of this report.

And finally, we express our commitments to materialize the implementation of this plan and request all the other concerned agencies / resource organizations to extend their continuous support in this regard.

Thank you.
Chairperson, DWASHCC
Local Development Officer, Rupandehii

### **ACKNOWLEDGMENT**

DWASHCC Rupandehi wishes to unfold its intense appreciation to all the institutions and persons for their direct or indirect adjunct, invaluable effort, assistance, and contribution both in terms of fund and time in preparation of this report;

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- Core Team for their untiring efforts in coming—up with information need, data/information collection, management of data, analysis and in preparation of the report.
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- All those who, in one way or the other, made the plan possible; and last but not the least to the Rural Water Supply and Sanitation Project in Western Nepal for providing expert services and sharing the fund for preparation of the plan.

Member Secretary, DWASHCC
Chief, Water Supply and Sanitation Division Office, Rupandehi

Thank You.

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# **Executive Summary**

# **Background**

In line with the thrust of Government of Nepal to achieve universal coverage of water supply facilities and sanitation by 2017, Rupandehi district also aims to achieve the target by then. Therefore, a clearcut strategic plan with integrated approach is a dire need to assert concerted action and clear-cut direction to ensure uniformity in implementation modality and streamlining the funding from various sources. Based on the past experience in WASH sector, need of a strategic plan was felt by all the sector actors in order to undertake concerted actions to achieve universal coverage of WASH in the district as envisioned at the national level. Therefore, DWASHCC,Rupandehi formulated District Strategic WASH Plan (DSWASHP) in common concensus and commitment of the all the stakeholders and political parties to implement the plan to achieve the stipulated target. DSWASHP is a response to widely felt need and an instrument for local actors to drive the WASH sector properly.

# Objectives of the Plan

The major objective of the strategic plan is to contribute to the national goal of achieving universal coverage of water supply facilities in the district by 2017.

### Methodology

A Core Team under DWASHCC was formed to steer ahead preparation of the plan. The plan is primarily based on the published/unpublished reports, existing records, profiles, documents, updated database of WSSDO, DPHO, DEO, DDC, VDC and other institutions active in the district. Policy guidelines and national startegies pertaining to the WASH sector have also been utilised wherever relevant. Accordingly, National Census data/information, 2011 and topographic digitised data of Department of Survey have also been the sources of information in preparation of the plan.

Data/information in NMIP, District Sanitation Strategy and information relevant for the purpose from various published and unpublished documents were utilized. Additional information required were gathered from the VDCs and other institutions existing in the district. The type and nature of information gathered include:

The information collected were collated and edited to maintain consistency and objectivity, and as well revisited to collect missing information from the concerned VDCs and other institutions active in the district. The collected data were coded and digitized in data sheet first. The processed data were analysed by using MS-Excel database computer programme. The information were geo-coded and analyzed using ArcGIS programme. Such an analysis was done by VDCs and Municipalities in order to determine the priority status in the district. A draft plan including activities by year and by milestones was prepared. The draft strategic plan shared with multi-sector forum participated by all the stakeholders, political entities and other persons with knowledge and experience in WASH sector of the district for comments and suggestions. Relevant comments and suggestions received from the forum were incorporated in the draft and finalized. The final report was presented again in the DWASHCC for approval. The relevant comments and suggestions received from DWASHCC were incorporated and finally, the report finalized for dissemination in multi-stakeholders' forum for implementation.

# Water Supply, Sanitation and hygiene Situation in the District

### **Water Supply**

Water supply coverage is recorded as 94.4% of the population in the district, however, the remaining 5.6% people do not have water supply system but they get water from spring, well and river<sup>1</sup>. Out of 94.4% water supply coverage, 28.2% households are using piped drinking water, 65.2% are getting from Shallow Tubewells and 1.0% are using Dugwells.

With regard to the system functionality, out of total 163,835 Households getting water facility, schemes of only around 1% (1,212) Households are not functioning well.

Existing piped water and sanitation schemes in the district have O&M fund with the users committee. It was revealed that there are regular operation and maintenance mechanism like collection of O & M funds on regular basis.

In the district there are total 339 schools. All of the schools have water supply system and no any remains unreached. Out of school water supply systems, 60.8% schemes are functional. 19.5% schemes need minor repair, 8.3% major repair and the remaining 10.9% need rehabilitation.

There are 367 different institutions in the district. 72.8% of them have water supply system and 23.7% do not have. Again, out of those existing water systems in instutions, 89.5% are functioning well, 7.5% need minor repair, 0.7% need major repair and remaining 2.3% need rehabilitation.

### Sanitation

Sanitation coverage of the district seems only 56.08% in total. Still 78,472 Households (43.92% of the total households in the district) do not have toilets with them. However, the district is in the process of declaring ODF in near future.

### **Poverty**

Rupandehi district is also ranked as average in poverty among the 75 districts of Nepal indicating widespread poverty in the district with the wide gap by gender, caste, ethnicity and by llakas and municipality of the district. Caste-based social exclusion has been manifesting in disparities in both poverty incidence and human development indicators. All of these call for adopting meaningful poverty reduction and human right based approach in WASH sector with emphasis on improving the poor's access to resources especially among the powerless. Here in both urban and rural area, people are bound to live in extreme poverty and number is too high. Urban people have more risk in terms of poverty as to the rural people in comparison. Poor people in the city are compelled to live without any work, polluted environment, adjustment in a small room and low wages whereas a person in a rural area is compelled to live with a minimal wages, lack of landownership and unhealthy condition. In this industrial city of Rupendehi, maximum numbers of inbound people are affected a lot due less growth in employment sector.

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<sup>&</sup>lt;sup>1</sup> Water Supply and Sanitation Divisional Office, May 2014

In regard with the demography of the district, caste and ethnic composition shows that there are about 56% population belonging to caste group. Detail composition shows 23.5% Brahmin and Kshetri, 25.2% Dalits of Hill and Terai, 30.8% Aadivaasi-Janajaati, 8% Religious Minority and remaining 12.5% fromother groups.

### **Environment**

Rupandehi is a district which lies almost in terai region touching a few hilly areas in some northern VDCs with plenty of natural resources (forest, water and agricultural land). There is no implementation of any scheme for environment protection & ecological activities in the district. Community people themselves have done some works such as tree plantation and protection of forest area as per need. However, they are facing genuine problem of land erosion, river bank cutting and gully cutting indicating the need of water source conservation. One of the natural resource of this, district is the massive underground water stock. Mostly, where the access of river is not available, the underground water has been managed for the irrigation and drinking purpose. However, the water supplied from the underground water through hand pump is not quality water in all cases.

### **Targets**

A number of crucial activities to materialise the set target on sustained basis have been set and the major milestones crucial in achieving district target by year starting from 2013-2017 are below:

Table 1: Major Targets 2013-2017

Activities	Number of VDC/Municipality by year						
Activities	2013	2014	2015	2016	2017		
Preparation of VWASH/MWASH Plans	30 VDCs	36 VDCs					
Updating of VWASH Plans	5 VDCs						
Preparation of LAPA	Prepared						
Preparation of CAPA	5 VDCs	30 VDCs	36 VDCs				
Preparation of Solid and Liquid Waste Management Plan (SLWMP) of the District	Prepared						
Implementation of SLWMP	Sample Test	Start		Finish			
Study and preparation of Adaptation Plan on Source Depletion of Under-ground Water and Water Quality	Prepared						
ODF Declaration at VDC/Municipality level	14 VDCs	16 VDCs	15 VDCs and Siddharthanagar Municipality	10 VDCs and Butwal Municipality	5 VDCs		
Post ODF Activities	10 VDCs	10 VDCs	15 VDCs	15 VDCs	20 VDCs		
Implementation of Water Safety Plan	5 VDCs	25 VDCs	25 VDCs	16 VDCs			

Source: DWASHCC, Rupandehi

Guiding principles and operational strategy have been formulated in order to ensure the achievement of the set target and stipulated milestones of the activities.

### **Fund Requirement**

Estimate of fund requirement are based on the present unit rate for working person and material prevailing in the district. In the manner, the services are provisioned for the incremental population too.

The fund estimate takes into account inflation rate of 9.95% recorded during the month of June-July 2012 as per the estimate of Nepal Rastra Bank. Accordingly annual population growth rate of 1.43% of 2011 is considered to accommodate the population increase for services in each of the succeeding years.

Fund estimates are based on the activities planned to reach the universal coverage of water supply by 2017 and ODF district by 2017. The projections pin point that fund required from 2013 to 2017 stands relatively of same size for all 5 years. The total fund amount required is estimated Rs. 931,352,000.00 (Nine Hundred Thirty-one Million and Three Hundred Fifty-two Thousand NPR only).

**Table 2: Estimated Fund** 

Year	2013	2014	2015	2016	2017	Total
Fund Estimate (,000Rs)	162,917	179,208	178,417	196,458	216,305	933,305

Source: DWASHCC, Rupandehi

### **Resource Gap**

Allocated budget of 2013 and the trend of it's increment every year calculated on the basis of 10% shows a huge gap of NPR 160 millions between the fund required and projected fund resources exists. Therefore, mobilization of resources either from the national and international sources is an warranted imperative besides efficient use of available resources. There is the need of additional budget of 5 to 10% every year in average to meet the 100% coverage and make all the exisiting schemes functional. At the fore front, actors involved in the development of the WASH sector but more than that of the DWASHCC members need to play a significant role in marketing the DSWASHP for tapping the fund resources from both the national and international sources. Equally, crucial role of the V/MWASHCC is seen in channelling the available fund for the WASH sector as well as tapping the fund resources from the local, district and national levels.

# **Institutional Set-up and Resource Management**

As provisioned in the Sanitation and Hygiene Master Plan 2011, DWASHCC will be the lead mechanism for entire spheres of WASH activities in the district and V/MWASHCC at the VDC and Municipality level. A Core Team to work on behalf of DWASHCC will be responsible in follow-up and monitoring of the plan. Accordingly, a WASH Unit under Core Team in the District and also in V/MWASHCC at VDC and Municipality may also be established in need. Capacity enhancement activities are provisioned for the Coordination Committees at the district and VDC/MUnicipality level in fulfilling their expected roles and responsibilities effectively and efficiently.

WASH Fund at the district level will be established where in the fund earmarked for hygiene and sanitation activities of all the agencies and actors will be deposited. Such a fund will be managed as per

the procedures formulated by DWASHCC. As of now, existing policy and corresponding rules are yet to be tuned in this direction. However, the programme will be implemented by bringing the respective programmes of sector actors under single umbrella till such fund is established. A similar mechanism will be followed in case of VDC/ municipality and at the school level too. The book keeping and record keeping of the funds at the district, VDC and school level will be maintained as per the given financial rules of the government. The progress achieved and expenses made will be made public to ensure financial transparency in the programme.

### **Abbreviations**

CAPA Community Adaptation Plan for Action

CC Coordination Committee

CGD Child, Gender and Disable-friendly
CLTS Community Led Total Sanitation
DDC District Development Committee

DEO District Education Office
DPHO District Public Health Office

DoLIDAR Department of Local Infrastructure Development and Agricultural Road

DTO District Technical Office

DWASH-CC District Water, Sanitation and Hygiene Coordination Committee

DWSS Department of Water Supply and Sewerage

DSWASHP District Strategic Water, Sanitation and Hygiene Plan

FY Fiscal Year

GoN Government of Nepal

HH Household

HWTS Household Water Treatment System

I/NGO International/Non Government Organization

LAPA Local Adaptation Plan for Action
LSGA Local Self-Governance Act

MDG Millennium Development Goal
MLD Ministry of Local Development

MPPW Ministry of Physical Planning and Works

MWASHCC Municipal Water Sanitation and Hygiene Coordination Committee

NMIP National Management Information Program

NPC National Planning Commission

NWSS National Water Supply and Sanitation Strategy

ODF Open Defecation Free

OHT Overhead tank

SLTS School Led Total Sanitation
WUC Water User Committee

VDC Village Development Committee

V/M-WASHCC VDC/Municipality WASH Coordination Committee

V/M-WASHP VDC/Municipality WASH Plan WASH Water, Sanitation and Hygiene

WSSDO Water Supply and Sanitation Division Office

# 1. Background

# 1.1 Introduction

Currently in Nepal, Sanitation and Hygiene promotion has been taken with special importance. However, the history regarding it is not that long. The systematic move of it started only after the announcement of International Decade of Water Supply and Sanitation in 80's decade by UNO. Until now, the efforts of Sanitation promotion have been organized as the integral part of Water Supply project by the equal involvement. Sanitation is regarded as health prosperity and prestige and seen as the foundation of development. Taking this feeling as granted Nepal has put forward different steps and combining all the experiences gained till now and implementing the master plan 2068, thus imagining to move forward has set the precise road map.

The government of Nepal has formulated several Acts, Regulations, Policy, Strategy and guidelines in order to effectively facilitate sustainable development of water resources and sanitation in particular at the local as well as national level. All of these emphasizes on the users participation during planning and development of water resources and sanitation.

Water resource act 1992 (2049 B.S.) allows the formation of Water User Association by a group of individuals wishing to make use of the water resources for their collective benefit and such association must be registered to facilitate the government for the regulation. Water Resource Act 1992 (section 7) ranks the different uses of water according to their priority: Drinking water and domestic use receives the first priority, second priority is given to irrigation, similarly Agricultural use such as animal husbandry, fisheries is placed on third priority and Hydroelectricity is given fourth priority on use of water resources. The lack of proper, coordinated and inclusive planning at local level without meaningful participation of local people in the development process resulted into lack of ownership of water projects (Nepal Development Forum, 2004). Realizing the lack of ownership the National Water and Sanitation Policy was revised and decentralized approach which recognizes the roles and responsibilities of local communities was introduced. The Local Self-Governance Act 1998 seeks to delegate greater authority and responsibility to local authorities, District Development Committees (DDCs), Municipalities and Village Development Committees (VDCs), as autonomous bodies that can levy certain taxes, enter into loan agreements, acquire assets, and participate in legal suits. These bodies have also been given the rights, roles and responsibilities for protecting water sources and constructing and maintaining water schemes. The Act stipulates that village level projects will be implemented through user committees vested with the power to collect fees from consumers for O & M. Three year interim plan (2007-2010) also envisions high participation of the users group and increased roles of females by increasing their number in users committee.

In the international arena the concept of Integrated Water Resources Management (IWRM) was already recognized in Agenda 21 of the UN Conference on Environment and Development in Rio de Janeiro in 1992. IWRM is defined as a systematic process which promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. The IWRM principle suggests a participatory approach involving users, planners, and policymakers at all levels of

water development and management. The recent debate is the effect of climate change which is believed to be creating more problems in water sector. Water source discharge has been depleting. Conservation and protection of water resources, rain water harvesting, efficient use of water etc. could be instrumental for fighting back climate change at local level.

National Sanitation and Hygiene Master Plan, 2011 made provision of Water, Sanitation and Hygiene Coordination committee (WASHCC) at different levels.

The policy taken, for the promotion of Sanitation by the nation, attempts and experiments in the field of sanitation in the past, implementation of the programs as well as the study of the condition of sanitation in Rupendehi district shows that promoting sanitation and raising the level of health in public by strategic work plan needs to recount the history prior to it. Those sectors have an important role in promoting sanitation in Rupandehi.

Water Supply and Sanitation Subdivision Office, District Development Committee (DDC), District Public Health Office, Nepal Red-Cross Society, Woman Welfare Office including various governmental, national as well as international non-governmental organizations have been working in this field. In assistance with Finnish Government from the decade of 1990, under the then, Lumbini Zone Rural Water Supply and Sanitation Project, the special attention had been taken in the sector of drinking water and sanitation. Continuing the effort, currently working Rural Water Supply and Sanitation Project Western Nepal also maintain it. Likewise, several international organizations as World Vision International, US-Aid SUAHARA Program, and AMDA Nepal etc have made a significant contribution in the promotion of sanitation in this district. Concerned offices of Nepal Government such as DDC, Water Supply and Sanitation Sub-Division Office, District Technical Office, District Public Health Office, District Education Office have also played a prominent role in the promotion of sanitation. Mentioned organizations that played a significant role in the promotion of sanitation in the district have failed to achieve the expected result. In one hand Sanitation Master Plan 2068 has made a commitment to declare Nepal as an Open Defecation Free Nation till the year 2017 AD, the decision as per the Western Regional Water Sanitation and Hygiene Coordination Committee (RWASHCC). Western Development Region has been committed to be declared as Open Defecation Free Region till 2015 on the other hand overall evaluations of Rupendehi district in the context of Nepal has placed it ahead in some development, advancement and human development index. However, the sanitation sector of this district deserved to be compared with Bajura, which is known of its poor sanitation. Of the total 69 VDCs and 2 Municipalities from this district, if 2 municipalities and 15 VDCs along the highway be omitted from the map of Rupendehi definitely will make its condition to get even worse than Bajura has been confirmed by the statistics. The target of the nation to make Open Defecation Free Nation till 2017 definitely comes as a huge challenge for Rupendehi. For the need to take the challenge by common attempts including tactical plan, District Strategic Water, Sanitation and Hygiene Plan (DSWASHP) of Rupandehi conceived have been implemented.

A DSWASH Plan is a response to widely felt need and an instrument for local actors to address water resource and sanitation management issues properly. It is an integrated, participatory and inclusive approach to water resources and sanitation planning. This process ensures identification of available water resources and water needs at local level. It provides a common platform to the local community,

including disadvantaged groups, and empowers them to claim their right for equitable sharing of water and sanitation within and between communities. The DDC is the owner of this plan. DWASHS Action Plan equally emphasizes on social sensitization of community on various issues such as gender and inclusion, environmental aspect and climate change.

Basically, DSWASHP is considered as a planning tool which covers **Water Supply, Sanitation and Hygiene:** water supply schemes (surface, ground, rain water etc.); source improvement/ protection, hygiene, sanitation and latrine construction etc.

Despite formulation of different policies and provisions, the sanitation sector activities in the past remained fragmented, dependency for external hardware supports were proliferated, policy compliance especially for budget allocation remained poor, software aspects of sanitation got little attention and the sector lacked inclusive institutional arrangements to reach the unreached and cater the services in a demand responsive manner. In order to resolve these challenges, the Government of Nepal enforced the *Sanitation and Hygiene Master Plan, 2011* with a broader aim to maintain uniformity and standard in program approaches by means of the guiding principles, unifying stakeholders' scattered efforts through formation and mobilization of WASH Coordination Committees in Central, Regional, District, Municipality and VDC levels, fulfilling resource gaps in the sector through cost sharing, resource pulling/pooling arrangements and co-funding arrangements at local levels and ultimately scale up sanitation at scale through universal coverage approach (*Nepal Country Paper on Sanitation, SACOSAN-V 2013*).

The Master Plan explicitly states that all the concerned government agencies, local bodies, donors, International/Non Governmental Organizations, and other WASH sector stakeholders should strictly adhere to the guiding principles while planning and implementing hygiene and sanitation programs in all water supply projects, other concerned programme packages and projects including approaches and modalities.

The overall objective of the DSWASHP is to develop action plan for drinking water supply to achieve an effective, equitable and efficient use of water at the local level. This should ensure the rational use and equitable sharing of water resources, among and within communities in a sustainable way considering all different needs and requirements of people and promote environmental sanitation at the household level and institutional level.

The specific objectives of a DSWASHP are to:

- Analyse the present situation of Water Supply and Sanitation in the district;
- Prepare Water Supply and Sanitation Action Plan to meet the target of ODF district by 2014 and access of water supply basic level service to all by 2017;
- Align and harmonize WASH sector for effective coordination and collaboration amongst local district level stakeholders
- Analyse the resource gap to meet the set target on basic level water supply service and sanitation
- The overall task focused on the visit, interaction, discussion with the members of DWASHCC, line agencies, I/NGOs on one on one, ad-hoc and group basis both formally and informally. Primary data were generated and collected along with the secondary data based on these activities to proceed further for necessary preparatory works.

### 1.2 Brief Introduction of the District

For the introduction of Rupendehi District it is quite obvious to generate curiosity that how it got its name in the ancient period. The pleasant sub-jungle in Shakya's State lied in the road that was the way to both Kapilvastu and Devdaha State. The pleasant sub-jungle got its name from the Coliya Dynasty, King Anjan's queen Rupa Devi. Addressing the name with the time changed to Rummindehi and finally named to the current as Rupandehi in short. Rupa Devi to Rummin and transformed to Lumbini has been mentioned in the article published by Dr. Jitu Giri's 'Rupandehi in the page of History'.

### Geography

Rupandehi district falls in Terai belt within the Lumbini Zone that consists of 6 districts under Western Development Region of Nepal. Located in 83°12'16" to 83°38'16" Eastern Longitude and 27°20'00" to 27°47'27" Northern Latitude, the district has the boarder Nawalparasi in east, Kapilvastu in west, Palpa in north, Uttar Pradesh (India) in south. Well known as the sacred birth place of Siddhartha Gautam Buddha all around the world, this district is extremely important in terms of its historical, geographical, and tourism prospect. As regarding the geographical height, this district is situated at 100 m above the sea level in the south and 1229m above the sea level in the north. Its total area is 1,360 sq. km.

Out of the vast area of this district 71,873 hectors is cultivable land, 32,006 hectors is jungle and habitats, rivers, rocks and cattle grazing land occupy rest of the area. On the geographical basis, it can be divided into three regions as Chure Region, Bhawar Region and Terai Region. Plain Terai region that occupies 3/4th of the district is known as the Bread Basket of Rupandehi district. In addition, the Chure Region situated in the northern belt is comparatively smaller in area to plain Terai. The jungle covers majority of the area of Chure Region. From the climate point of view all the region of this district boast tropical and sub-tropical- weather except Chure. The temperature recorded here as 43.70°c maximum and 8.75°c minimum. As per the record of the Department of Hydrology and Meteorology, the average annual rainfall per year is around 1,391 mm. Beside Chure and Bhawar region rest of the region have maximum fertile land. Important rivers of this district are Tinau, Rohini, Danab, Pahela, Kanchan, Kothi, Danda, Koilimai etc. Based on the political classification it is divided with 7-constituencies, 16-sectors (Ilaka), 2-municipalities, and 69-VDCs.

### **Political Division**

### Sectors (Ilaka)

Rupandehi district is subdivided into 16 sectors (Ilaka in Nepali)

Table 3: VDCs and Municipalities under Specific Sector (Ilaka)

SN	VDC, Municipality	Distance to District HQ (in Km)	SN	VDC, Municipality	Distance to District HQ (in KM)	SN	VDC. Municipality	Distance to District HQ (in Km)
1	Makrahar	10	7	Semlar	18	13	Dayanagar	11
	Kerbani	14		Butwal Municipality	22		Ekala	10
	Devdaha	13	8	Parroha	18		Khudabagar	9

	Ramnagar	9		Kha. Bangai	14		Masina	14
	Siktahan	10		Motipur	13		Tenuhahawa	12
	Karahiya	10	9	Maanpakdi	12	14	Lumbini	23
2	Padkhauli	7		Manmateria	13		Bhagwanpur	15
	Chhipagadh	9		Farsatikar	12		Aama	17
	Dhakadhai	6	10	Pa. Amuwa	9		Sipuwa	11
	Pokharbhindi	6		Harnaiya	9		Madhubani	10
	Bodhbar	11		Mainahiya	8	15	Semara	18
	Pajarkatti	6	11	Saaljhandi	21		Karauta	18
3	Shankarnagar	11		Dudhrakshya	20		Peprahawa	16
	Aanandaban	9		Rudrapur	17		Pharena	14
	Gangoliya	8		Gajedi	16		Betkuieyn	12
4	Tikuligadh	7	12	Suryapura	13		Rohinihawa	15
	Madhauliya	6		Saadi	14	16	Raipur	17
	Ha. Farsatikar	5		Bishnupura	14		Silautiya	14
5	Chillhiya	4		Jogada	12		Bagauli	16
	Padsari	2		Dhamauli	10			
	Basantapur	3						
6	Bagaha	4						
	Siddharthanag ar Municipality	0						

# **Constituencies**

### 1 (12 VDCs)

Bodhbar, Chhipagadh, Chotki Ramnagar, Devdaha, Dhakdhai, Gangoliya, Kerbani, Makrahar, Pajarkatti, Padkhauli, Pokharbhindi and Siktahan

### 2 (1 Municipality/8 VDCs)

Bagaha, Basantapur, Chillhiya, Hatibangai, Hati Farsatikar, Madhauliya, Mainahiya, Padsari and Siddharthanagar Municipality

### 3 (11 VDCs)

Aanandaban, Dayanagar, Harnaiya, Karahiya, Kha. Bangai, Maanpakdi, Pa. Amuwa, Sau. Farsatikar, Semlar, Tikuligadh and Shankarnagar

### 4 (1Municipality/3 VDCs)

Butwal Municipality, Motipur and Parroha

# 5 (8 VDCs)

Bishnupura, Dudhrakshya, Gajedi, Manmateria, Rudrapur, Saaljhandi, Saadi and Suryapura

# 6 (16 VDCs)

Asuraina, Bagauli, Bayerghat, Betkuieyn, Bogadi, Pharena, Gonaha, Karauta, Majhgawa, Maryadpur, Piprahawa, Raipur, Rohinihawa, Sakronpakadi, Semara and Silautiya

# 7 (11 VDCs)

Aama, Bhagwanpur, Dhamauli, Ekala, Jogada, Kamhariya, Khudabagar, Madhubani, Masina, Sipawa and Tenuhahawa

### Demography

Successful in giving the identification of diversified society, the social structure of this district is no common. This district is home to the people of different culture, language, rituals, costumes, castes, status and background. People have heavily immigrated to this district from all over Mountain, Hill and Terai. Because of this, it has added diversity day by day in this social structure. Some to the major castes living in this district are Tharu, Brahmin, Kshetri, Newar, Yadav, Magar, Gurung, Darai, Kami, Sarki, Lodh, Muslim, Rai, Limbu etc. And the language that are in practice also differ in accordance to the caste Nepali, Bhojpuri, Tharu, Awadhi, Magar and Gurung are the major language that prevail here. As per the record of Census 2068, the population of this district is 880,196. Out of that 432,193 are male and 448,003 are female also the annual growth rate of population is around 2.22. Majority of the people follow Hinduism however, there are remarkable number of people following Muslim and Buddhism religion. Comparatively, being a tropical region, 9 months of a year light and soft cloths remain to be most used one. Ladies put on Saari, Blouse, Kurtha, Salwar, T-Shirt and Pants, whereas gents are normally seen wearing Shirts, Pants, T-shirt, Kurtha, Pajamas etc. With the change in the society due to the development, the get-up and the dresses too have seen gradual change. The common food of this district is Daal, Rice and Roti. A family consists of 5.37 members in an average. Table 4 shows the percent of ethnic groups in the district. The VDC-wise ethnic groups and their households number is given in Annex -1.8.

Table 4: Caste/Ethnic Group Composition

SN	Caste/Ethnic	Population	Percent (%)
1	Dalit	97,777	13.2
2	Janajaati	125,103	16.9
3	Aadivaasi	102,454	13.9
4	Dalit Terai Group	88,619	12.0
5	Religious Minority	59,318	8.0
6	Brahmin and Kshetri	174,079	23.5
7	Others	93,160	12.6
	Total	740,510	100.0

Chart 1: Ethnic Composition of Rupandehi by Percentage of Population

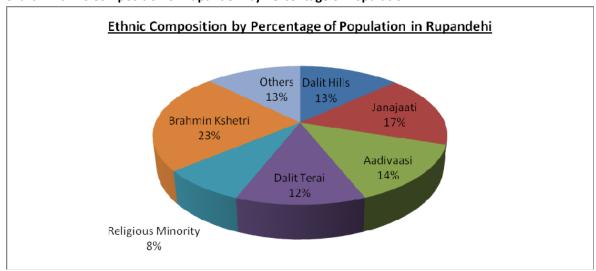
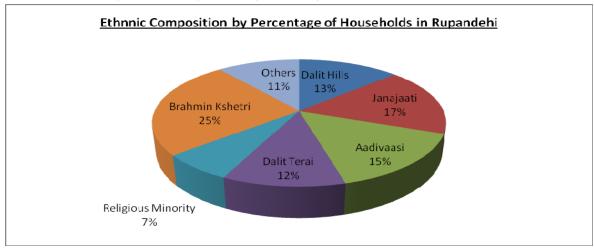


Chart 2: Ethnic Composition of Rupandehi by Percentage of Households



Source: VDCs of Rupandehi - 2069

Chart 3: Top Ten VDCs by Percentageof HHs of Deprived Groups in Rupandehi

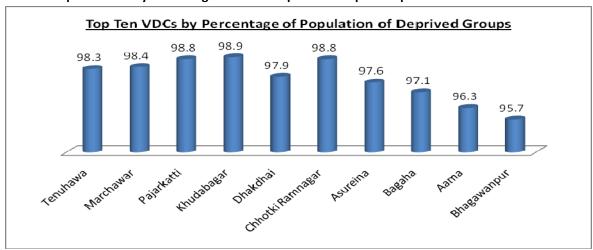
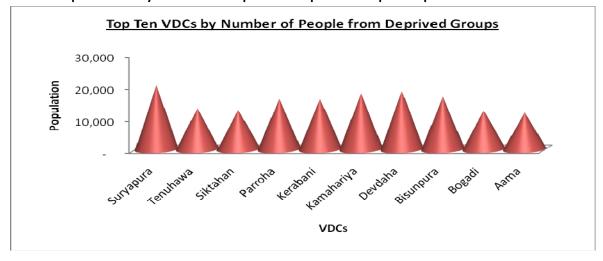


Chart 4: Top Ten VDCs by Number of People from Deprived Groups in Rupandehi



Source: DWASHCC, Rupandehi

The socio cultural practice of all the communities of this district is inherently shaped by a Hindu culture. The dominant ethnic group is "Aadivaasi/Janajaati" followed by Brahmin/Kshetri, Dalit, RM and others. The important festivals celebrated in the area are Dashain, Tihar, Holi, Chaitra Dashain, New Year, Maghe-Sakranti, Janai Purnima, Pitri Puja, Teej, Shivaratri, Krishnastami, Mangsir Purnima, and Chhath. All the communities in the district celebrate these festivals with mutual harmony and respect.

### Climate

We get tropical and sub- tropical regional climate in Rupandehi district. Mostly, Baishakh and Jestha are the hottest period of the year, while we see misty and foggy day in Poush and Magh making extremely cold days. In accordance to the Department of Hydrology and Meteorology, the maximum temperature is 43.70°C and minimum to be 8.75°C. Ashar, Shrawan and the Bhadra are the time with heavy rainfall. The annual rainfall here is around 1,391 mm. Ashoj, Kartik, Mangsir, Falgun and Chaitra are the month of pleasant and moderate weather.

### **Natural Structure**

Rupendehi has hills and Terai region that has a solid rock inside it, which forms Chure Hilly Range in its northern side. Chure Hill base has Bhawar, dense jungle area and in southern area is fertile with soft and cultivable land. Chure Hill spreads from north to east-west. The height of it is 1,229 m and the jungle in the south covers most of the area. The plain region is at the height of 100m from the sea level. With the area the height is also increasing. The areas like Butwal, Bhairahawa, Suryapura, Farsatikar and Rudrapur have seen rapid development in recent time. Tinau, Rohini, Danab, Kanchan are the major rivers of this district. We can also find other small rivers such as Kothi River, Banraha River, Ghamaha stream, Tulthuliya river, Boraha river, Bhalu stream, Bhulahi stream, Laukishwor stream, Ghagha River, Gangobaliya, and Sukaura.

Another natural resource that has made this district rich is its wild jungle. Few years back, a little portion of Charkose Jhadi lied in this district. Because of rapid migration has really had a major impact in the jungle. We can also get many trees as Sal, Sisau, Tik, Khayer, Karam, Jamun etc. Likewise various animals as Chital, Tiger, Bear, Boar, Fox, Nilgai etc and the birds like Kalij, Saras, Peacock, Crow, Vulture, Eagle, Rajdhanes and Hawks are the important animal heritage of this region. With the rapid deforestation and urbanization, the number of Tiger, Bear and Vulture is declining day by day. In this district it is not yet properly discovered how much minerals and ores do lie beneath the earth of this area. However, the minerals, which are normally and easily found in the surface level like pebbles, sand, stones, are the prime minerals.

One of the natural resource of this, district is the massive underground water stock. Mostly, where the access of river is far, the underground water has been managed for the irrigation and drinking purpose. However, the water supplied from the underground water through hand pump is not quality water.

### **Important Historical and Archeological Places**

To support the claim as the historical as well as archeological importance various places, constructions and development are mostly found here. Some historically and archeologically important places are

already proved where as some are in the process of intense research. Till now, those monuments that have lifted the identity of this district are summarized over here.

Bottom of Hill and head of Terai was the suitable and favorable place to live by in the area of near Chure hill region for the pre-ancestral human being. Areas of Rupendehi lie in the same region. There was evidence found in 2037 B.S in the slope of northern side of Butwal Bazar by the joint research team of American and Nepalese scientists. The Teeth of remain was taken to America for further investigation which resulted 11 million years old and belonged to Ramapithekas, that clearly justified the ancient historical importance of Rupendehi district. Several areas that signifies the presence of Proto-History and different archeologically important areas do remain in this district. The history about the ancient Koliya-Raj Devdaha and Shakya Devdaha, their relation do exist in the area of this district. Buddhist literature and Chinese detail showed that Lumbini and Devdaha are the invaluable assets of this district.

Birthplace of Lord Gautam Buddha is located here too, which remain the sacred place for the Buddhists and perfect place for meditation for peace loving people of the world. Ashoka Pillar, Maya Devi Temple as well as archeologically important monuments are presents in this region.

Ranibagiya, Sainamaina open museum are in search of proper care and preservation. Although the conditions of historical and cultural monuments are in poor condition, historical identity remains the significant assets of Rupendehi. Those remains such as Ranikuwa, Pattarkuwa and Bhootkuwa, which represented the ancient history, are extremely neglected and seeking excavation from the concerned one. Ranibagiya north-west currently in Butwal municipality ward no.14 has Charpala Community Jungle, where we get pot, potteries and marvelous statues are lying in danger. However, these stand firm to reflect the historical culture like the Pearl that is thrown in the rubbish. Siddha-Baba-Dham has a historical connection with Bhartrihari which is related with the history of Rupendehi. Dhakdhai, Chhipagadh and Silauta are the ancient places where Chinese visited in the 5th and 7th Century. Fahi-Yan and Hoo-Yan also visited Lumbini while touring this area.

In the period of 8th-12th Century the living standard of Rupendehi was believed to be heavily influenced from the developed Paal Sen Artistic of Bihar state, as a result the archeological remains which was found in Butwal, Sainamaina, Parroha, Simari, Prakateshwor etc embracing social, economical and artistic history of that time, definitely broadens the identity of Rupendehi.

In the 15th Century Rupendehi under the rule of Sen Dynasty Palpali King, historical, economical, social, religious and artistic activities prevailed. Mukunda Sen had built his Mausami Palace in Butwal Fulbari. The remains of that still exists as the assets of Rupandehi.

In the war against the British Army from 1814-16AD, Ujir Singh who captured the Jitgadhi fort in that period remains as one of the monument of Nepal. This currently lies in Butwal Municipality-15. So from that the area got its name as Jitgadhi.

### **Economical Status**

# a) Habitat's Structure:

Rupendehi district has majority of habitants as Pahadi and Madeshi people. In the southern region Madeshi people do live by building the house closely together. As result of it, drinking water supply has

been well managed. However, with it major problem arise in terms of sanitation and sewers. Unplanned habitats have resulted narrow and congested roads and in such places lack of space have made it even more difficult to acquire land to build toilets. Rural area where Pahadi origin people live is comparatively less populated. Nevertheless the desire to live in a town or city area have resulted unmanaged dealing of land ownership, urbanization and high rise in the value of land has forced the people to construct a house even in a small area. Due to this there has been unplanned urbanization. Together with this, new residential areas are built and developed along the bank of rivers, and along the side of highway. These areas developed without any plans and visions are always sure to face the problem of sanitation.

In city area, population is densely populated. Butwal, Tamnagar, Belbas, Bhairahawa, Farsatikar, Saaljhandi, Rudrapur, Devdaha, Semalar, Parroha etc have new areas for residential purpose out of a cultivable land. Rapid migration has also led to the increase in the number of houses

# b) Occupation:

Majority of this area have the occupation as agriculture, business, foreign employment, industry, job etc. Renewed industrial city Butwal is located in the district that provides many opportunities to the job seekers as compared to other district. Finally, number of people coming from other places in search of job is growing significantly.

### c) Land Ownership:

Because of the massive scale of migration from other places, the price of the land has also gone up sharply. Resulting the fractionalization of the area into fast pace. Purchasing less plot of land in high amount has made huge impact in the land ownership of the public. In addition, the locals in the greed of high price have started selling their land that too helped to fractionalize the land. Few landowner possess a lot of land where as many working farmers are still landless.

# d) Poverty:

To study the poverty condition of this district it would be quite reliable to go through the urban and rural areas. Here in both urban and rural area, people are bound to live in extreme poverty and number is too high. Urban people have more risk in terms of poverty as to the rural people in comparison. Poor people in the city are compelled to live without any work, polluted environment, adjustment in a small room and low wages whereas a person in a rural area is compelled to live with a minimal wages, lack of landownership and unhealthy condition. In this industrial city of Rupendehi, maximum numbers of inbound people are affected a lot due less growth in employment sector.

# 2 Water, Sanitation and Hygiene Situation

### 2.1 Water Supply Situation

### 2.1.1 Water Supply Coverage

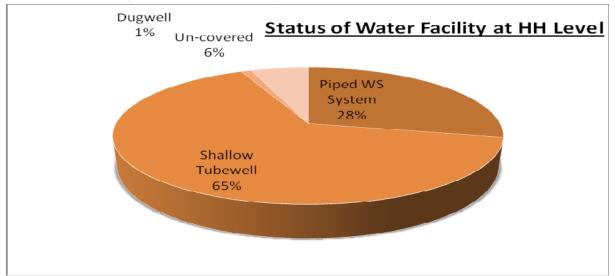
Use of water for drinking purpose receives highest priority among various uses of water resources. The present coverage of piped, Shallow Tubewell and traditional well (Dugwell) water is about 94.4%, of which major part (69.1%) has been covered by the Shallow Tubewell, a very few (only about 1%) by the

traditional well (Dugwell) and the rest by the improved piped system of water supply. The details of VDC wise coverage is presented in **Annex 1.1.** The table 4 shows the existing schemes and their respective coverage.

**Table 5: Drinking Water Supply Situation** 

SN	Water Supply Coverage	Households (HHs)	Percent (%)
1	Piped Water Supply	39,457	28.2
2	Public/Private Shallow Tubewell	91,300	65.2
3	Traditional Well (Dugwell)	1,345	1.0
4	Uncovered	7,829	5.6
	Total	139,931	100.0

Chart 5: Water Facility at Household Level in Rupandehi



Source: WSSDO Rupandehi, 2011

# 2.1.2 Improved Drinking Water Supply System

After the completion of piped system water supply schemes by WSSSDO till now, as many as 103,649 populations have been covered by it, likewise relatively small 48 other piped system water supply schemes covering 84,047 people have been implemented by DDC, VDC and other organizations (RWSSP-WN, FINNIDA) and Nepal Water Supply Authority have covered 170,285 populations. Along the process of providing the facility to the people, WSSSDO, DDC, VDC, and other organizations including the contributions from the users too, have developed Shallow Tubewells at private level covering 404,215 users out of total 758,196 population of the district.

Statistics released by the WSSSDO indicates that some of the Shallow Tubewells have been dried-up due to lack of attention and proper maintenance which has affected the durable and convenient water supply to the beneficiaries. In addition, the major portion of the covered part of the district, the northern belt has been badly affected by the same problem and need alternative water supply options urgently.

To improve the condition of drinking water and sanitation, 20 schemes are in progress on the management of WSSSDO since last eight years and Devdaha water supply scheme came into the existence as a reliable facility through pumping and filtration. Motipur, Sainamaina, Sauraha Farsatikar,

Semlar and Dudhrakshya drinking water projects are simultaneously running on. Of the total coverage of different type of water supply schemes, 28.2% of the households are using piped drinking water and 65.2% of the households are using Shallow Tubewells. The VDC wise functional status of water supply schemes is given in **Annex 1.7.** 

### 2.1.3 Sustainability, Operation and Maintenance

In most rural water supply and sanitation programs the beneficiaries are expected to contribute towards the capital as well as the operation and maintenance costs. The intention of these contributions is to demonstrate the commitment of the beneficiaries and develop a feeling of ownership towards the implemented systems. Involvement of the community from the initial planning stages to the final handing over of the system helps in the long-term sustainability of such schemes. Similarly, regular operation and maintenance is the responsibility of the community themselves.

Existing Water and sanitation schemes in the district has very small O&M fund with the users committee. It was revealed that there is no regular operation and maintenance mechanism like collection of O & M funds on regular basis in most of the schemes. These aspects need to be assessed and rectified in all forthcoming ventures for DWS in the district.

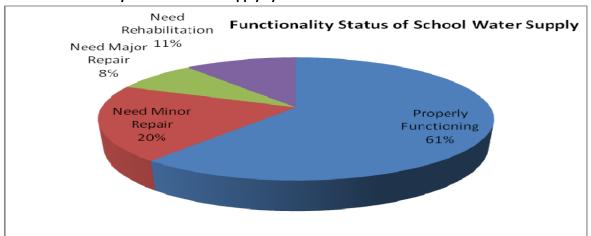
### 2.1.4 Water Supply in Schools and Other Institutions

There were 339 schools surveyed in the district in total which all have water supply facility of different status. Of the total, 208 schools have fully functional water facility, 66 schools need minor repair, 28 need major repair and water supply system of 37 schools need to be rehabilitated. Please be referred VDC wise school water supply status of Rupandehi district in **Annex-1.2.** 

Table 6: Functional Status of School Water Supply System

	• • • •	
Functional Status	Number of Schools surveyed	Percentage
Fully-functioning	208	61
Need Minor Repair	66	20
Need Major Repair	28	8
Need Rehabilitation	37	11
Total	339	100

**Chart 6: Functionality Status of Water Supply Systems of Schools** 



Source: DEO 2068/69

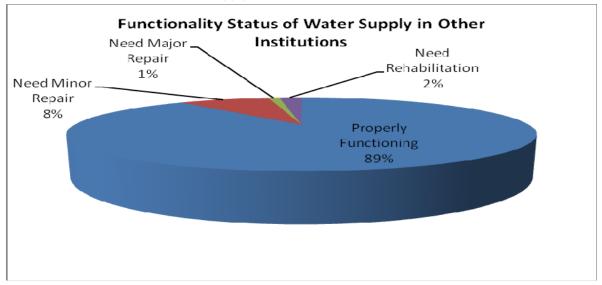
Different Institutions exists in the VDC: VDC Office, health post/sub health post, police post, postal office, cooperatives, local clubs, service centres and so on. Similarly, there are various institutions in the municipalities and of course different district level office centred in the district headquarters. There were 367 institutions surveyed in the district at VDC and Municipality level. Out of them, 267 (72.75%) institutions have water system and 100 (27.25%) institutions don't have improved water supply system at all.

Table 7: Functional Status Water Supply System at Institutions

Status of Drinking Water	Number of Institutions surveyed	Percentage
Fully-functional	239	65.13
Need Minor Repair	20	5.45
Need Major Repair	2	0.54
Need Rehabilitation	6	1.63
Un-covered	100	27.25
Total	367	100.00

Source: DDC, Rupandehi

**Chart 7: Functional Status of Water Supply in Other Institutions** 



Out of 267 institutions with water supply system, 239 (89%) are functioning well, 20 (8%) need minor repair, 2 (1%) need major repair and 6 (2%) need rehabilitation.

# 2.2 Sanitation and Hygiene Situation

### 2.2.1 Household Sanitation

In the past RWSSP had played a vital role for the development of sanitation sector in the district, furthermore, WSSSDO has also been implementing several programs in the project area. Under the initiation of schools and communities, Total Sanitation Programs have been running in Aanandaban, Shankarnagar, Karahiya, Madhauliya, Saaljhandi, Chilhiya, Tikuligadh and all the VDCs that fall in the area of water supply schemes. Following it Shankarnagar, Aandaban, Karahiya, Madhauliya, Devdaha,

Saaljhandi, Parroha, Tikuligadh, Chilhiya and Western Amuwa VDC are declared as the Open Defecation Free VDCs. DDC, VDC, Red-Cross, Women Development Office and other governmental as well as NGOs are taking this matter seriously and as a result the impact has increased rapidly.

As per the District Council 2067, it has decided to allot a sum of Rs. 1000 to each household of the VDCs that has complete sanitation process. It has helped and encouraged the program of sanitation. The incentive amount will be directly handed over to VWASHCC based on the improvement in constructing the toilets. Concerned VDCs has also allotted a minimum amount of Rs. 1,000 per household in VWASHCC fund and continuing the complete sanitation program that has made the campaign one-house one-toilet into reality in fiscal year 2068/69.

Those 13 VDCs and 2 municipalities that are close to the highway, lies in East-West highway and Siddhartha highway has seen considerable progress as per the MDG. If to omit the coverage of those VDCs and Municipalities rest of the area of this district could be compared with the condition of Karnali Zone. Out of the total household number of 139,931 in the district, only 56.1% have their own toilets. The sanitation data collected by DWASHCC of the district through VDC secretaries shows that the sanitation coverage is 56.1%. The VDC-wise access to toilets is given in **Annex 1.4.** 

**Table 8: Toilet Coverage in the District** 

SN	Toilet	Number of Households (HHs)	Percent (%)
1	Households with Toilets	78,472	56.1
2	Households without Toilets	61,459	43.9
	Total	139,931	100.0

Source: Database of VDCs, 2069

Compared to other districts, the access to toilet is quite satisfactory but the target of 100 percent access to toilet 2015 is still a challenge. Hence, a large number of toilets are required to be constructed along with mass awareness campaigns on personal, domestic and environmental sanitation as well as on use of toilets, importance of toilets, habits of hand-washing with soap, etc.

Water is an essential requirement for Human life and is also vital for most agricultural and industrial operations. From the social and technical assessment it is observed that the personal, domestic, and environmental sanitation status in all VDCs and Municipality of Rupandehi district seems poor due to lack of knowledge followed by cultural practices/taboos and poor housing conditions. Major diseases prevalent in the district are gastro-enteritis, intestinal worm, the water borne diseases like diarrhoea, typhoid, Jaundice, cholera, dysentery and respiratory infection. The incidence of diarrhoea and water borne diseases is given in **Annex 1.11.** 

Poor indoor air quality due to fuel wood burning in unventilated house conditions and taking of tobacco products are the major causes of respiratory diseases. Disposal point of human excreta and urine safely in order to create healthy environment is usually known as Hygienic Toilets. Types of the toilet depend upon the soil type, topography, materials used, used technology and the purchasing capacity of the households. Following charts show only 10 top most VDCs in rank with highest and lowest coverage in percentage respectively:

**Table 9: Top Ten VDCs with Highest Access in Sanitation Facilities** 

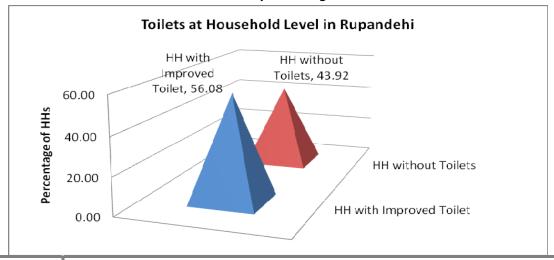
SN	Municipalities/	Total	Number of Household	% of Household
	VCDs	Household	using Toilet	using Toilet
1	Shankarnagar	4,155	4,155	100
2	Aandaban	2,293	2,293	100
3	Karahiya	3,234	3,234	100
4	Madhauliya	1,723	1,723	100
5	Devdaha	5,499	5,499	100
6	Saaljhandi	2,344	2,344	100
7	Parroha	4,775	4,775	100
8	Tikuligadh	1,987	1,987	100
9	Chillhiya	794	794	100
10	Sauraha Farsatikar	1,674	1,674	100

Source: DWASHCC, Rupandehi (2070)

Table 10: Top Ten VDCs with Least Access to Sanitation Facilities.

SN	Municipalities/	Total	Number of Household	% of Household
	VCDs	Household	using Toilet	using Toilets
1	Kamhariya	1,845	25	1.36
2	Silautiya	1,276	18	1.41
3	Jogada	910	15	1.65
4	Sakron Pakadi	731	13	1.78
5	Bagauli	1,409	29	2.06
6	Raipur	1,222	33	2.70
7	Farena	695	24	3.45
8	Bogadi	1,049	37	3.53
9	Maryadpur	811	30	3.70
10	Bodhbar	1,275	52	4.08

**Chart 8: Situation of Household Sanitation by Percentage of Toilets** 



Source: DWASHCC, Rupandehi (2070)

Chart 9: Twenty least covered VDCs by Toilet Facility at HH Level in Percentage

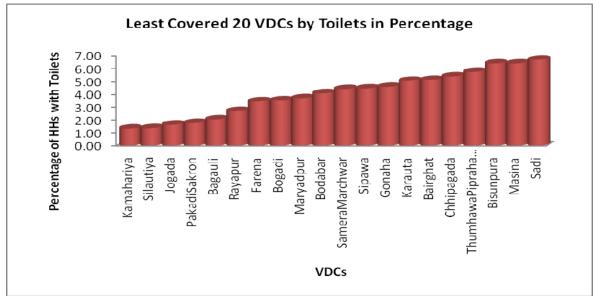
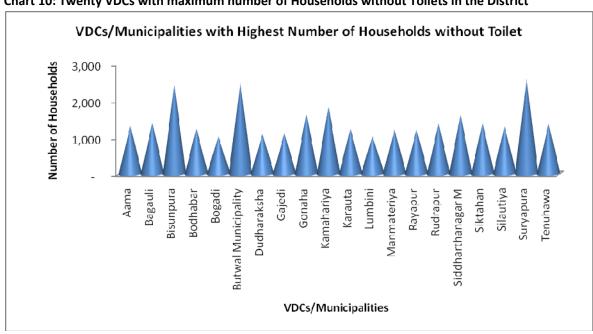


Chart 10: Twenty VDCs with maximum number of Households without Toilets in the District



Source: DWASHCC, Rupandehi

### 2.2.2 School Sanitation

However, more and more schools are established and upgraded without ensuring basic sanitation facilities, like toilet and availability of adequate water. Quality education can never be achieved without healthy and hygienic environment and without giving due consideration to establishment, use and maintenance of sanitation facilities. Hence, upgrading of schools, which is necessary and inevitable with the surge of population should always be aided, supported and accompanied by basic sanitation facilities which is also demanded by the policies.

Table 11: Types and Number of Schools in Rupandehi

SN	Types of Schools	Number of Schools
1	Community Schools	362
2	Madarasa/Community	82
3	Institutional/Private	144
	Total	588

Source: DDCRupandehii – 2069/70

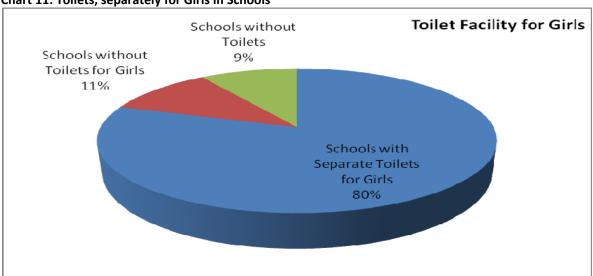
Rupandehii district has a wide network of public and private schools from nursery child care centre to higher secondary schools totalling up to 588. Above Table 11 shows the clear picture of public schools in the district.

Schools in Rupandehi are generally found to have more Toilet facilities but less urinal facilities. Out of 339 schools surveyed 307 (91 %) schools have toilet facilities, whereas urinal facility is limited to 179 (53%) schools only. This is solely due to the fact that construction of urinals was not in high priority during the bygone years. The toilet and urinal coverage in schools of VDC wise is given in Annex 1.5.

**Table 12: Schools having Toilet and Urinal Facilities** 

Number of School having Toilet Facility		Number	of School having U	Jrinal Facility	
Boy's Toilet	Girl's Toilet	No Toilet	Boy's Urinal	Girl's Urinal	No Urinal
307	271	32	179	137	160

**Chart 11: Toilets, separately for Girls in Schools** 



Source: DEO and PABSON Rupandehi, 2012

Being a terai district there is possibility of a number of shallow and deep Tubewell. But still, related facilities such as hand washing basin and soap facility are still confined to 63 schools out of 339 schools surveyed and 137 institutions out of 367 institutions surveyed respectively. Similarly, waste management system exists in 113 schools out of 339 schools and in 154 institutions out of 367 institutions surveyed. Only after the establishment of reliable child and gender friendly water and related facilities and proper operation and maintenance of toilets and urinals at the school, only the proper sanitation behaviours could be ensured.

Table 13: Schools having Soap, Washing Basin and Waste Management Facilities

Number of Schools having Soap at Handwashing			Number of	Schools having	Wash Basin for
Place				Handwashir	ng
Yes	No	Blank	Yes	No	Blank
63	271	5	56	278	5

Source: DEO and PABSON Rupandehi, 2012

### 2.2.3 Environmental Sanitation

56.1 % of households have access to toilets and the remaining households practice open defecation, which is causing environmental hazards and contamination of water bodies in the surrounding areas. So, it is obvious and essential that excreta disposal systems are to be designed and constructed in such a way that it does not pollute the water sources.

Solid wastes are unwanted/unhygienic/hazardous solid/semi-solid substances produced by human and animal activities. There are various types of solid waste like agro-waste, construction waste, industrial waste, carcasses, households waste etc. In the village level the major wastes are agro-waste, households waste and carcasses etc. People have traditionally practiced to collect the cow-dung making a pit nearby the house. There are no fixed spots to dispose the carcasses, and people are used to throwing the carcasses anywhere. Thus, it causes environmental hazards and contamination of water bodies.

### 2.2.4 Incidence of Water Borne Diseases in the District

Of the different water borne diseases such as Typhoid, Acute Gastritis, Amoebic dysentery, bacillary dysentery, Diarrhoea, Cholera, Intestinal Worm and Jaundice, in the year record 2068/69 no cholera incident was found in the district. However, intensity of diarrhoea and typhoid was found higher in the month of Shravan and Bhadra. Incidence of intestinal worms was found in all seasons.

The efforts made to attain the target of universal coverage in water supply facilities and sanitation is in upward trend in the whole country and so in the distict. Comparing with the national milestone targets 2012/13, in both sub components of WASH and water supply in Rupandehi district is ahead. MDG target by 2015 is already achieved. However, achievement of universal access to water by 2017 needs a really concerted effort from all dimensions.

Commitments from political arena are indicated in achieving the universal target and TBC has become an important agenda in the district. Harmonizing these efforts has been a great concern of the DWASHCC in the district. Providing access to improved sanitation and safe drinking water to people of the poor communities and marginalized groups is a challenge ahead. The following pertinent issues are to be taken care of:

# **Water Supply**

Increasing rehabilitation and reconstruction of old schemes

- Water depletion due to climate change
- Huge resources gap of NPR 34 million between the fund required and projected fund resources exists per year
- Institutional strengthening of the users committees for O&M
- Disaster preparedness and response on WASH

### Sanitation:

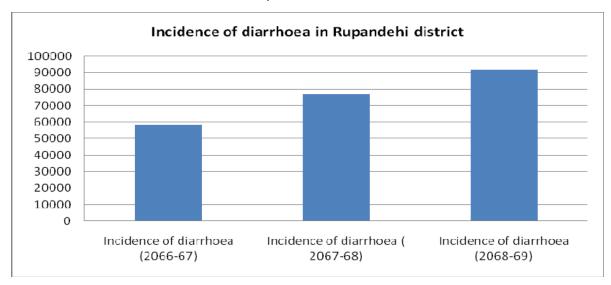
### School toilets

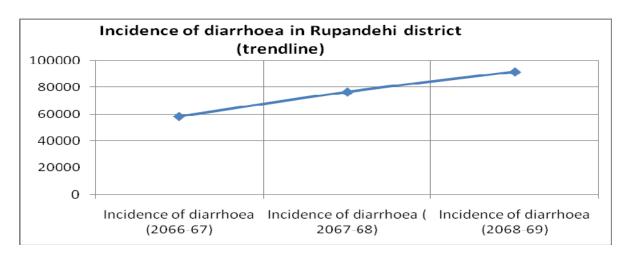
- Less Child/gender/disable friendly school toilets with water facilities
- Regular O&M mechanism

# Institutional and public toilets

- Coverage of institutional toilets- HP/VDC
- Public toilets
- O&M systems in institutional and public toilets

Chart 12: Diarrheal Diseases Incidences in Rupandehi





Source: DPHO, Rupandehi

# 3 Key Challenges

# 3.1 Water Supply

In Rupandehi district, more than 94.4% households have access to improved water supply service. Remaining 5.6% people do not have improved system but they rely on different sources like spring, dugwell, canal, ponds and river. There are 66.2% households out of total covered with the facility of only Shallow Tubewell and Dugwell.

Challenges prevail in how to reach the remaining 5.6% uncovered area and beneficiaries and to improve the quality of drinking water of above spelled 66.2% households. Most of the unreached/left out parts are either human settlement in upland, higher than water source in the vicinity, or water source remained inadequate in the plain area.

In the case of completed schemes, sustainability is the key issue. There may be different reasons for scheme defunct. Policy, approach, scheme age, design, use of material quality/ workmanship and management are important contributing part for sustainability. Another important issue underlying is water quality. In the hill area there are two sources of drinking water available i.e.; spring and stream. Normally, it is considered that spring water is pure and safe but without a proper lab test it is not a reliable conclusion. Water quality testing has not been done for water of almost all the completed schemes.

The basic need of drinking water is in level terms with the National target however, majority of hand pumps are unsafe. As per the study, conducted by WSSSDO, water from 65% of hand pumps in Rupandehi district are unsafe for drinking purpose. Finally, to supply quality and safe drinking water to the public is really a challenging task. Following are the challenges on upgrading the water supply facility in the district:

- 65% hand pumps of 20 projects under WSSSDO, which are unsafe for the drinking purpose, approximately cost around 50 million NPR per project.
- Other projects implemented by various sectors are also in poor state. Inadequacy of budget for proper maintenance has also affected the distribution of hygienic water.
- Majority of those handed over projects seemed successful however; the user's committees do
  not have adequate skills of management. Those committees are not even provided with proper
  training.
- Though private hand pumps are considered to be unsafe, yet usage of new shallow Tubewells are growing sharply.
- Lack of proper policy towards underground water resource, drinking water borings/ hand pumps including boring for the irrigations are also in practice near to it. Due to that decrement of water level is felt.
- The water level in the northern belt is decreasing day by day that causes the drying up of old hand pumps during the winter season. Those areas that enjoy much of the facilities are facing most of the problems of drinking water.
- The continuous flow of water in the boring for the irrigational purpose has caused the decrement of underground water due to that nearby hand- pumps are drying out.

- The challenges and difficulties that could be faced by nation to achieve the target are mainly due to lack of awareness in water resource conservation, poor investments, lack of investment or demand of new projects and gap in the resources supply.
- Population growth is increasing day by day and the water sources are depleting.
- Application of Arsenic mitigation measures at household level is quite difficult.
- Deep Tubewell and overhead project/scheme is costly.
- Inadequate financial resources

# 3.2 Sanitation and Hygiene

Rupendehi district falls in 11<sup>th</sup> position in terms of Human Development Index (HDI). However, in perspective of Sanitation in Nepal out of 75 districts it falls in 39<sup>th</sup> position. Rupendehi is known as one of the industrial district of Nepal. After each political change, it has been able to give important political figure, yet it is lagging behind in sanitation, which seems surprising.

As in other parts of the country, Rupandehii district is also leaping forward towards semi urbanization gradually. Market arenas are developing along the highway areas. There is no sewerage system in the district. In those areas septic tank has been used for the disposal of human excreta. Tendency of disposing sewage direct to river is been increasing that threaten to health hazard.

Number of Institutional and public toilets are not sufficient to meet minimum requirement. Similarly, school toilets still needs to be maintained well. There is neither any proper solid waste management system established in the district nor recycling and dumping site prepared at the municipality too.

Major challenges of the sector are listed below:

- Attitude of using open area for toilet since ancient time.
- Lack of technical knowledge and skills in building toilets.
- Not to be in the high priority list amongst decision maker, politician, policy makers in the past.
- Lack of coordination between the organizations and having different donation policy.
- Seeking grant from the government even those well placed communities and people.
- Program not being able to reach to the concerned and marginalized people and not effectively practiced where it is available.
- In the past lack of commitment in the field of sanitation from district organizations, local organizations, political parties have eluded the information about its negative effect in the health.
- In Terai region, ground water level near by the surface, which makes difficult to construct toilet and would be costly.
- Lack of awareness programs and promotions.
- Lack of effective inspection and evaluation programs.
- Unknown about the fact that indirectly human waste might be consumed without having proper toilet system.
- Lack of political will to promote sanitation programme
- Inadequate and poorly used resources
- Low prestige and recognition

- Poor policy at local levels
- Poor institutional framework
- Inappropriate approaches
- Neglect of consumer preferences
- Ineffective promotion and low public awareness
- Reaching the unreached
- · Cultural taboo and beliefs
- Fragmented policies, guidelines and programmes
- Lack of coordination
- Lack of technical skill and knowledge to construct the Toilets
- Lack of effective monitoring and evaluation system
- Infrastructure damaged by flood and landslides each year
- High level water table in rainy season

# 3.3 Poverty, Gender Equality and Social Inclusion (PGESI)

Poverty analysis has been done by taking the poverty index of different VDCs. A project falling in a particular category of VDC is assumed to benefit the percentages of the poor living in the VDC as estimated from the poverty analysis. The VDC wise poverty level is given in **Annex 1.9.** 

Table 14: Better conditioned VDCs in GESI

SN	VDCs	Marks obtained after	Ranking According to the
		Analysis	Analysis
1	Aanandaban	14	2
2	Tikuligadh	16	2
3	Devdaha	17	2
4	Pa. Amuwa	18	2
5	Shankarnagar	19	2
6	Dudhrakshya	19	2
7	Motipur	20	2
8	Khudabagar	20	2
9	Sauraha Farsatikar	20	2
10	Parroha	21	2

Source: DDC Rupendehi (2070).

Table 15: Lower conditioned VDCs in GESI

SN	VDCs	Marks obtained after Analysis	Serial No. According to the Analysis
1	Ekala	32	4
2	Pokharbhindi	32	4
3	Masina	31	4

4	Siktahan	31	4
5	Semara	31	4
6	Pajarkatti	31	4
7	Rudrapur	31	4
8	Farena	30	4
9	Silautiya	30	4
10	Kamhariya	30	4

Source: DDC Rupendehi (2070)

The social assessment diagnosed lack of women participation in local development activities in the district. The women in the district have not been able to contribute in the development activities due to illiteracy, poor health, poverty, cultural taboos and social and traditional conservative attitude towards them due male dominance in the society among all ethnic groups.

Given this situation, the social assessment solicited opinion of gender involvement in different activities. The purpose of this assessment include identifying key issues and explore opportunities of involvement of different groups like women, Dalit, Janajaati, underprivileged and marginalized groups in WASH plan preparation and implementation.

Major challenges of the sector are:

- In most of the schools girls are suffering from not having gender friendly toilets.
- Households are excluded from the facilities because of not being able to pay the tarrif.
- Location of tapstands are fixed without consulting women in the community.
- Poor Households are deprived from accessing WASH facilities.

### 3.4 Environment, Climate Change and Disasters

There is no implementation of any scheme for environment protection & ecological activities in the district. Community people themselves have done some works such as tree plantation and protection of forest area as per need. However, they are facing genuine problem of land slide, river bank cutting and gully cutting indicating the need of water source conservation.

There are some industries established since the last 2-3 decades and exists the possibility of being industrial pollution. However, river pollution with grey water has been increasing. Different Government Offices like District Forest Office, Office of Soil Conservation and Water Shed Management etc. are working on environmental and climate change issues. Being touched with the hilly part also, landslide is the major risk for the hilly VDCs. Disaster vulnerability shows that Rupandehi district has mapped VDCs' vulnerability to landslides, flood and soil erosion.

Taking the concept of DWASHP under consideration and maintaining the environmental sanitation in the priority by the plan, up-gradation in access of sanitation will assist the environmental sanitation. If environmental sanitation maintained properly, safe drinking water can be supplied regularly without any disturbance. Taking it into account, these projects mostly focused on such issues. Imbalance has decreased the level of underground water, drying out the water causing the rise in soil temperature.

Because of it there problem will be arised in water supply and food supply. Imbalance has also caused serious problem such as heavy rainfall and low rainfall. Because of it poverty rises which directly affects sanitation, condition of habitants and natural environment. Minimal sanitation and state of poverty much more have a negative impact in the environment. Therefore, this plan put emphasis in plantation, conservation of springs, and program on awareness in environmental conservation, and prohibiting the people from extracting water via hand pump without prior permission. To maintain the environmental sanitation of the river and to focus on the following aspect of the policy are all unified to this environmental conservation policy:

- a) To make the river clean and keep the river no defecation area, a temporary toilet will be constructed nearby rivers and encourage the workers to use it properly.
- b) Deploying the local to stop throwing garbage in the river.
- c) Those industries located within the river or nearby it mixing and throwing, any wastewater, toxics gases, sewages and hazardous materials should strictly prohibit. Public awareness programs should be conducted.
- d) Strict prohibition on poisoning, bombing and diverting the river should be done and for the awareness of it, a special training and inter-action should be organized.
- e) Plantation in the possible area of the river and mobilizing the local people to stand for the conservation and distribution of its benefits.
- f) Forbid people to dump waste in the nearby the river area. For this VDCs and Municipalities will be responsible to conduct it properly.
- g) For the internal management, investigation committee be formed with regular updating to overcome the up-coming problem.
- h) Firstly, identifying the prohibited area and then placing the hoarding boards the entrance gate of the river
- i) Those areas where people are permitted to extract river related resource should be clearly identified hoarding boards with required information in it. And manage the people to fill the internal supply order from the entrance of the river than recording the quality control methods.

Climate change and its impact is a global and cross boundary issue. It has greater impact on water, vegetation and agriculture thus affecting also human life. While talking about climate change, it is closely linked with environmental and disaster issues. However, exact measuring of the adverse impacts of climate change is challenging.

# 4. Rationale, Objectives and Methodology for Preparation of DSWASHP

# 4.1 Rationale

Plenty of efforts and resources delivered in the district WASH sector in the past. Local government led development activities with local peoples' decision and participation is the essence of LSGA 1999. Past development practices has been generated immense learning in the development.

However, universal coverage, quality, sustainability and scaling up of the services and built on behaviour change in water, sanitation and hygiene are still the underplaying issues or sector demand in the district. Improved water supply and sanitation coverage in the district is 94.4% and 56.1% respectively. Remaining

5.6% improved water uncovered areas have different types of challenges (settlement, no water source and geography). Similarly, out of completed schemes only a very few are well functioning and the remaining need repair rehabilitation and extension. Water quality is found heavily neglected. Water quality tested and treatment schemes hardly found. Behavioural change practice is time taking that needs to be continued. TBC-WASH monitoring is crucial to see the outcomes and impact. The District Strategic WASH Plan will be crucial to address the underplaying issues and strategic planning visioning both for input and output, outcomes and resources within next five years (2013-2017) period.

DSWASHP will response to widely felt need and be an instrument for local actors to drive the WASH sector properly. It is an integrated, participatory and inclusive approach to WASH sector planning. This process ensures identification of needs at local level. It provides a common platform to the local community, including disadvantaged groups, and empowers them to claim their right for equitable sharing of WASH services within communities. The DSWASHP equally lays emphasis on social sensitization of community on various issues such as gender and inclusion, environmental aspect, and climate change.

Essences of the DSWASHP can be further point out.

- Align and harmonize WASH sector for effective coordination and collaboration amongst local district level stakeholders
- Show the way on how the district can achieve MDG targets on 2015 and Universal Targets by 2017 in water supply
- Map and organize all available human and financial resources to be used effectively
- Introduce decentralized and coordinated monitoring of the activities
- Prioritize the areas for support needs
- Promote transparency and awareness among the partners and beneficiaries of the district
- Attract external funding for the implementation of the plan
- Guide district project prioritization in annual planning process
- Institutionalize WASH planning and implementation at district level
- Build the DDC and VDC WASH sector capacity
- Formulating district-specific MDG indicators and establish WASH baseline
- Get support from political parties in WASH implementation
- Help to recognize WASH sector in the district periodic plan and in the district profile
- Promote equity and inclusiveness in WASH

#### 4.2 Objectives

### 4.2.1 Overall Objective

The overall objective of District Strategic Water, Sanitation and Hygiene Plan (DSWASHP) is to contribute to the national goal of achieving universal coverage of water supply and total sanitation (post ODF) by 2017 as envisioned by the government of Nepal by setting district targets, milestones and formulating implementation strategies.

## 4.2.2 Specific Objectives

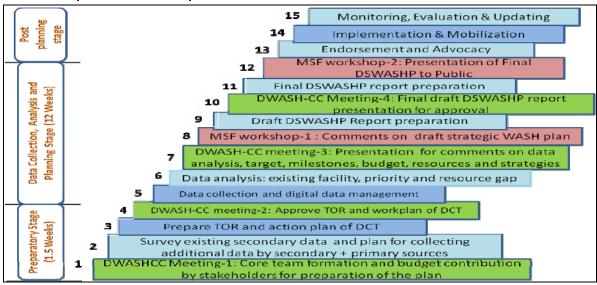
The specific objectives of DSWASHP are to:

- i. assess existing WASH situation in the district;
- ii. set target and milestones for the district in line with goal envisioned by National Rural Water Supply and Sanitation Policy, 2004;
- iii. prepare plan of actions to achieve the district milestones;
- iv. estimate available fund resources and resource gap for implementation of the planned activities; and
- v. formulate strategies to bring sector actors active in the district under single umbrella for implementation of the plan

## 4.3 Methodology for Preparation of DSWASHP

District Water, Hygiene and Sanitation Coordination Committee (DWASHCC) of Rupandehi decided to prepare District Strategic Water, Sanitation and Hygiene Plan (DSWASHP) and formed a task force core team to complete the task. The District Core Team planned to prepare DSWASHP in following stages.

**Chart 13: Steps of DSWASHP Preparation** 



To accomplish the task of planning stage, the Core Team hired a consulting team. The consulting team prepared the District Strategic WASH Plan following the steps approved by the DWASHCC. The consulting team collected and analysed both the secondary and primary data to prepare the District Strategic WASH Plan. The information collected were collated and edited to maintain consistency and objectivity. Also it was revisited and collected the missing information from the concerned VDCs and other institutions active in the district. The collected data were coded and digitized in data sheet first. The processed data were analysed by using MS-Excel database computer programme. Such an analysis was done by VDC and Municipality in order to determine the priority status in the district. A draft plan including activities by year and by milestones was prepared. The plan was shared with multi-sector forum participated by all the stakeholders, political entities and other persons with knowledge and experience in WASH sector of the district for comments and suggestions. Relevant comments and suggestions received from the forum were incorporated in the draft and finalized. The consulting team analysed the data provided by the District Core Team, presented the preliminary findings of the strategy and collected feedback. The consulting team refined the draft strategy and submitted to DDC for the final feedback.

The final report was presented again in the DWASHCC for approval. The relevant comments and suggestions received from DWASHCC were incorporated and finally, the report was finalized for dissemination in multi-stakeholders' forum for implementation.

### 4.4 Planning and Development Strategy

GoN has recognized water and sanitation as basic human right. It has goal of attaining 100 % coverage of water supply and sanitation by 2017. The GoN goal is also considered for the planning. The planning is equally sensitive to gender, inclusion and poverty.

DSWASHP adheres to following planning and development strategies:

- The DWASHCC will coordinate with stakeholders and other agencies to ensure implementation of the strategic plan.
- WASH sector agencies working in the district will plan their activities mandatorily aligning with the strategy, target and action plans framed by the district strategic WASH plan.
- VDC / Municipality will prepare their VWASH/MWASH plans to prioritize their detailed plan of action targeting to ODF by 2014 and basic water supply coverage by 2017.
- Local bodies (DDC, VDC and Municipality) will allocate at least 50% and 20% of their total capital budget before and after ODF respectively for the WASH activities.
- All VDCs and Municipalities will prepare Community Adaptation Plan for Action (CAPA) to reduce effect of climate change and for local adaptation strategies.
- DWASHCC will formulate solid waste management plan of the district focusing on mitigating problems of core-urban, sub-urban and highway corridor and implement selected pilot projects.
- DWASHCC will carry out study on access and status of groundwater aquifer in the district, water quality and pollution risk, recharge status, water table depletion problem and preparation of local policy and strategy for groundwater use for adaptation and sustainability.
- Capacity development plan will be prepared and implanted to enhance capacity of DWASHCC,
   VWASHCC and MWASHCC members.
- DWASHCC is responsible for monitoring and updating of the strategic WASH plan of the district.
   VWASHCC and MWASHCC are responsible for monitoring and updating of their VWASH and MWASH plans.
- DWASHCC and stakeholders will support VDC/VWASHCC and Municipality/MWASHCC for achieving target of ODF by 2015 and basic water supply coverage by 2017.
- VDC/VWASHCC, Municipality/MWASHCC and user committees/groups are the implementers of activities/schemes.
- Basic level water supply service will be provided by 2017
- DWASHCC will prepare water use management policy for ground water recharge, water source depleting, biological and chemical pollution etc.
- DWASHCC will responsible for managing the financial resource, implement the programme and the monitoring and evaluation of the programme.

# 5 District WASH Targets and Strategies

## **5.1 District WASH Targets**

In line with the Rural Water Supply and Sanitation National Policy 2004 of GoN, Rupandehii district aims to provide basic level services of water supply facilities to 100% of the population by the year 2017. In the effort, the major milestones of the activities set by the district are crucial in achieving targets for each year starting from 2013. See the table below. Accordingly, guiding principles and implementation strategy have been formulated in order to ensure the achievement of the set target and stipulated milestones of the activities.

**Table 16: Major Targeted Activities** 

Activities	Number of VDC/Municipality by year						
Activities	2013	2014	2015	2016	2017		
Preparation of VWASH/MWASH Plans	30 VDCs	36 VDCs					
Updating of VWASH Plans	5 VDCs						
Preparation of LAPA	Prepared						
Preparation of CAPA	5 VDCs	30 VDCs	36 VDCs				
Preparation of Solid and Liquid Waste Management Plan (SLWMP) of the District	Prepared						
Implementation of SLWMP	Sample Test	Start		Finish			
Study and preparation of Adaptation Plan on Source Depletion of Under-ground Water and Water Quality	Prepared						
ODF Declaration at VDC/Municipality level	14 VDCs	16 VDCs	15 VDCs and Siddharthanagar Municipality	10 VDCs and Butwal Municipality	5 VDCs		
Post ODF Activities	10 VDCs	10 VDCs	15 VDCs	15 VDCs	20 VDCs		
Implementation of Water Safety Plan	5 VDCs	25 VDCs	25 VDCs	16 VDCs			

Source: DWASHCC, Rupandehii

## **5.2 Principle WASH Strategy**

The District Strategic WASH Plan will be crucial to address the underplaying issues and strategic planning visioning both for input and output, outcomes and resources within the next five years (2013-2017) period. Trend and situation analysis helps to draw strategies. In fulfilling the strategy, good approaches are important. Based on strategies, yearly plan can be prepared. The strategies will be one of the important parts of the district perspective plan. In the following text the sub component wise strategies are presented.

The fundamental aim of the DSWASHP is to streamline the scattered and uneven efforts of the stakeholders for achieving the set WASH targets for the district. Therefore, all the government and non-government institutions and private sector working in the district will strictly adhere to these principles while planning and implementing their WASH projects:

- DWASH-CC will be responsible for maintaining coordination with stakeholders and other agencies
  to ensure implementation of the strategic plan and to raise financial resources to meet the
  resource gap of the plan.
- ii. WASH sector agencies active in the district will plan their activities aligning with the strategy, target and action plans framed in the District Strategic WASH Plan on mandatory basis.
- iii. VDC / Municipality will prepare their respective VWASH/MWASH plans for water supply coverage by 2017.
- iv. VDCs and Municipality will allocate at least 10 % of their total capital budget for WASH activities annually. Similarly, DDC will allocate at least 10 % of their capital budget to support the WASH activities in the district. Such annual allocation of budgets by local authorities may need to be increased upon nature and extent of activities in the respective areas.
- v. All VDCs and Municipality will prepare Community Adaptation Plan for Action (CAPA) aiming at reducing adverse effects of climate change as well as prepare adaptation plan in order to cope with possible risks emanating from climate change.
- vi. DWASHCC will formulate District Solid Waste Management Plan with primary focus on mitigating problems of core-urban, sub-urban and highway corridor. Accordingly, it will implement at least two projects on pilot basis in order to see operation of the activities on sustained basis.
- vii. DWASHCC will carry out study on status of water quality, pollution risk, water table depletion problem and access of people in the district.
- viii. A significant gap between the fund requirement and projected fund resources at disposal of the sector actors at district level exists. Therefore, mobilization of resources at disposal of the sector actors at local level with concerted efforts is a warranted task in achieving the set target of the plan on one hand and tapping the external fund resource on the other is compelling challenge in materialising the stipulated target of the Strategic Plan. Therefore, institutional capacity enhancement of the DWASHCC members and VWASHCC and MWASHCC members in tapping of the fund resources, channelling the fund and human resource as underlined in the strategic plan is a warranted need. Therefore the capacity enhancement of the WASH institutions forms an important strategy in the plan.
- ix. DWASHCC holds responsibilities of monitoring and updating the District Strategic WASH Plan. VWASHCCs and MWASHCC are made responsible for monitoring and updating of their respective VWASH and MWASH plans.
- x. DWASHCC will coordinate the concerned stakeholders in the district in smoothing fund and human resource supports for materialising planned activities of VDCs/VWASHCCs and

Municipality/MWASHCC in achieving set target of ODF by 2015 and basic water supply coverage by 2017.

- xi. VDC/VWASHCC, Municipality/MWASHCC and user committees/groups hold the sole responsibilities of implementation and smooth operation of activities/schemes planned for their respective areas in line with the spirit of decentralization and Sanitation and Hygiene Master Plan of GoN.
- xii. Drinking Water Strategy
- By the end of 2017, universal coverage of drinking water in the district (household level, school level and institution level) will be achieved
- All the schemes will be functional
- Water Safety Plan (WSP) will be implemented in all the VDCs and municipality as well as school and institutional water supply systems
- 50% of total population will have improved water system (A category level)
- New water supply schemes will be constructed with climate change and environment friendly perspective. Similarly, rehabilitation and repair schemes will also be considered from climate change perspectives
- Knowledge to the people on climate change adaptation measures will be provided through schools and institutions

## 5.3 Sustained Sanitation and Hygiene Behaviour Change Strategy

- By the end of 2017 the district will be declared Post ODF stage.
- Improved public toilets will be constructed in the needful locations and will be fully operational.
- Solid waste management program will be implemented in the municipality (recycling and dumping the waste).
- Grey water flow to the river will be controlled through sewerage treatment systems.
- All schools and institutions will have organic and non organic solid waste management system.
- Eco-san, bio-gas and urine application technologies will be promoted in the feasible areas.
- WASH related behaviour will be adopted through Total Behaviour Change (TBC) approach including 5+1 indicators.

## **5.4 Operational Strategies**

Overall new WASH implementation approach and strategy will be integrated in such a way that it combines water supply, sanitation and hygiene behaviours with livelihood/income generation programs in a way of sustainable, affordable, durable and led/manageable by community.

## **Key components**

The following components are the major ones:

- Water Supply Schemes with appropriate technological option
- Institutional WASH activities (schools, VDC office, health facilities, etc)
- Community and household level sanitation and hygiene activities
- Inclusive WASH governance

## 5.4.1 Water Safety Plan (WSP)

Water Safety Plan is an eternal participatory plan and action to be performed by users themselves to ensure their health by sustaining safe /drinkable quality of water right from the source to the consumption points of the people and by maintaining the system functional to its full design period. Following activities must be in-built under the WSP:

- WSP Group Formation
- Analysis of Water Supply Systems
- Analysis of possible hazardous points in W/S
- Implement Control Mechanisms
- Water Quality Monitoring and Certification
- Training to users' committee on regular O&M of the system
- Establishment of adequate O&M fund
- System for regular collection of water tariff
- Provision of Maintenance Worker (MW)
- Regular surveillance monitoring and follow-up of the system by MW and WUSC and taking timely corrective measures which ensure water quality as well as functionality of the scheme.
- Adoption of Point of Use (POU) method treatment of drinking water at household level
- Boiling
- Filtration (Ceramic filtration, Bio-sand filtration)
- Chlorination (use of Water guard, Piyus drops)
- SODIS (Solar disinfection)

VWASHCC and DWASHCC needs to be institutionalized for WSP and sustainability of the schemes/project/program. They play role on policy harmonization, coordination and exploring financing.

## 5.4.2 WASH in Emergency

During disasters, the situation of WASH becomes worse due to lack of proper and adequate water and sanitation facilities. Rupandehi district also faces threats of disasters such as floods and landslides, and epidemics. So, to cope with them it should make plans for preparedness and responding to the emergency in coordination with the District Disaster Relief Committee (DDRC). As suggested in the national sanitation and hygiene master plan, following measures can be taken up in this regard:

- Emergency sanitation fund in the district
- Stock of chlorines and medicines in the district
- Stocks of toilet building materials
- Water quality testing tools/equipments, and
- Trained facilitators/ volunteers for emergency water and sanitation and hygiene.

The emergency water and sanitation fund will be established in each of the high flood prone and epidemic prone parts of the district. The fund will be mobilized for community awareness, water source protection, water quality surveillance, toilet building, volunteer mobilization, transportation, etc. The District Public Health Office (DPHO) including WSSD/SDO will keep a stock of chlorine and other medicines in case of outbreak of diarrhoea and cholera and other epidemics. A number of sanitation and

hygiene volunteers, Female Community Health Volunteers (FCHVs), facilitators will be trained on emergency sanitation and hygiene in each district.

# 6 Priority Ranking of VDCs for WASH Program Interventions

Implementation of WASH activities is not possible to start one time in all the VDCs/municipality both from the financial and human resources. Therefore, implementation of the activities has to be phased by VDCs and municipality considering the service level and pertinent cross-cutting issues persisting in the respective VDCs. In determining the weightage a total of 25 points for service level and 10 for cross-cutting indicators considering remoteness and socio-economic realities existing in the district have been applied to. The indicators and corresponding weightage include:

**Table 17: Indicators with Corresponding Weightage** 

Indicators	Weightage
Uncovered by Water Supply	25
Poverty	5
Remoteness	5

### Major indicators Description:

**Household water supply coverage:** To calculate household water supply coverage, number of households of each VDC that need new water supply system is considered.

**Poverty:** To measure poverty, the poverty map prepared by DDC is used. Based on the map, the highly poor VDCs are assigned 5, medium poor VDCs 3, and less poor VDCs 1 weight, respectively.

**Remoteness:** For remoteness, distance from headquarter and access to motor road are considered. The VDC without access of motor road is assigned one weight and the VDC with access of motor road is assigned zero weight. Similarly, most remote VDC is assigned maximum weight and so on.

**Note:** Other criteria such as sanitation and hygiene, diseases, functionality of schemes, etc have deliberately been omitted. The sanitation criteria were omitted as all the VDCs and municipalities have obtained around 100% coverage and hence weightage is not so much applicable. As the sanitation situation is similar in all the VDCs, prevalence of diseases also doesn't apply effectively. The data for functionality of water supply schemes were not so much reliable; hence omitted from the VDC selection criteria.

The VDCs for implementation of WASH activities will be done on priority basis using the total composite index calculated from the above weighted score.

Based on DAG Mapping and GESI analysis, the program conducted for the benefits of backward group and area has been prioritized on 9 indexes. Prioritized areas are confined and have kept them in schedule 2. Based on the statistical analysis, which are poor in WASH, those VDCs are prioritized accordingly to execute the program activities. Primarily confined 10/10 VDCs in WASH are as follows:

**Table 18: Prioritized VDCs in WASH** 

SN	VDCs	Marks obtained after Analysis	Ranking according to the Analysis
1	Ekala	32	4
2	Pokharbhindi	32	4
3	Masina	31	4
4	Siktahan	31	4
5	Semara	31	4
6	Pajarkatti	31	4
7	Rudrapur	31	4
8	Farena	30	4
9	Silautiya	30	4
10	Kamhariya	30	4

Source: DDC Rupendehi (2070)

Similarly, VDCs with better and poor state based on various 11 indexes, those have the access of water supply, Sanitation, Institutional and Domestic sanitation has been prioritized upon their mix results. Following are the list of 10 VDCs with better condition and 10 VDCs with poor condition and all the municipalities and VDCs of the district have been listed in prioritizing under schedule. Those VDCs, which were, excellent in the field of water supply, sanitation and hygiene compared to other as follows:

Table 19: Better and Poor conditioned 10/10 VDCs in WASH sector

10 prime	VDCs in Poor Sta	ate	10 prime VDCs in Better State			
VDCs	Obtained	Ranking	VDCs	VDCs Obtained		
	Marks after	based on 11		Marks after	based on	
	11 indexes of	indexes of		11 indexes of	11 index	
	WASH	WASH		WASH	of WASH	
Bogadi	47.1	1	Shankarnagar	6.1	1	
Padkhauli	42.2	2	Siddharthanagar	7.5	2	
Bodhbar	41.9	3	Aanandaban	8.1	3	
Betakuiya	41.1	4	Karahiya	8.3	4	
Dhamauli	40.6	5	Madhauliya	12.4	5	
Semara Marchawar	38.7	6	Motipur	13.2	6	
Thumhapiparahawa	38.4	7	Sau. Farsatikar	13.6	7	
Dhakdhai	38.0	8	Semlar	13.7	8	
Hatibangai	37.7	9	Rudrapur	14.5	9	
Asuraina	37.0	10	Butwal	16.2	10	

Source: Basic Survey D-WASH-CC CORE TEAM Rupendehi (2070)

Please be referred VDC wise composite ranking in terms of mentioned indicators of Rupandehi district in **Annex-2.** 

# 7 Programme of Action

## 7.1 Water Supply

### 7.1.1 Establishment of New Water Supply Schemes

At present, available NMIP database, reveal that a total of 6.6% (adding 1% covered by Dugwell) households in the district have been using water from unprotected sources such as open dugwell/Kuwa, river, canal, pond and other water sources. Therefore, new water supply systems will be established to serve this section of population in the district by different water supply technologies - gravity flow systems, overhead pumping systems of various sizes, and filtration systems. However, 94.4 % population of the district has access to basic water supply services, only 28.2% of those populations are served by piped and functional water supply schemes. At present, 65.2% households of the district are un-served by improved water supply systems and using only the shallow tubewells and are in need of appropriate technological option. Moreover, drinking water quality is yet to be assured by most of the water supply schemes in the district. For the implementation of water supply project the VDCs are ranked in different order on the basis of water supply coverage i.e. VDCs with low water supply coverage are prioritized. The priority order is given in **Annex 1.1**. Table 20 below provides the HHs to be served by these different type of water supply schemes.

Table 20: Households to be served by type of Schemes

Type of Planned Scheme	Percentage of Total in District	Total Planned Households
New Establishment	6.6	9,166
Repair, Maintenance and Improvement	7.3	10,240
Total	13.9	19,406

## 7.1.2 Establishment of Water Supply System in School and Other Institutions

Out of total 588 schools, 339 schools were surveyed which all have the water supply facility. From among the left schools, 82 schools are proposed for new schemes and from the running schemes of the schools, 85 are proposed for repair. Likewise, out of total surveyed 367 institutions 100 institutions were uncovered by WS facility. Including them 161 institutions are proposed for new water supply schemes and 83 institutions are proposed for repairing the water systems.

Table 21: Improvement needs in Water Supply Systems in School & Other Istitutions

SN	Activities	School	Other institutions
1	Establishment of new scheme	82	161
2	Repair, Maintenance and Improvement	85	83
	Total	167	244

## 7.1.3 Implementation of Water Safety Plan

Quality of water from the existing schemes for drinking purpose has been questioned in various occasions calling for immediate improvement. Water safety plan will be integrated into the design phase of new schemes to be constructed and in case of existing schemes, provision for physical improvement programme has been made to ensure safe water to the people in the district. In the front, all the VDCs/Municipality will implement Water Safety Plan in all the water points and schemes on mandatory basis. For the purpose, repair and rehabilitation of existing sickpoorly functioning schemes is planned in all the VDCs before implementation of Water Safety Plan. The universal coverage by water supply with assured quality will be achieved in all VDCs each starting from the year 2014. Priority ranking of VDCs in order and type of programme activities to be implemented are provided in **Annex 3**. Provision for Basket Fund has been made to facilitate the purchase of laboratory equipments and reagents and human resource to ensure the safe quality water in the supply system in each VDC/Municipality of the district.

# 7.2 Sanitation and Hygiene

Declaration of ODF in the district as a whole planned by the year 2014 and post ODF activities will follow by 2017 accordingly.

Table 22: ODF and Post ODF Activities in VDCs and Municipalities

Milestones	VDC/Municipality by Year						
Milestolles	2013	2014	2015	2016	2017		
ODF Declaration in VDCs	20	16	16	11	8		
Post ODF activities in VDCs		20	36	52	63		

The **Hygiene and Sanitation Master Plan** was approved by the GoN in August 2011. The overall objective of the Master Plan is to create an enabling environment to ensure that Nepal will attain Millennium Development Goals (MDGs) and national goal of sanitation. The Master plan defines key terms related to sanitation, e.g., basic sanitation, improved sanitation facilities; open defecation free (ODF); child/gender and disabled (CGD) friendly features; and total sanitation.

To achieve the intended results on hygiene and sanitation, the DWASHS Action Plan consist of a comprehensive sanitation and hygiene plan. Under this plan, it includes both software and hardware activities. Promotion of sanitation and hygiene needs more software activities whereas access to improved sanitation needs hardware activities. Under the software activities awareness raising programme; training, demonstration of pit latrine and construction at households level and school level; health and education programme; awareness towards waste disposal at households level; awareness towards personal, domestic and environmental sanitation; are considered and are intended and proposed to be communicated at various programmes organized on the occasion of 'Sanitation Week', 'World Water Day' and 'World Environment Day'. Likewise under the hardware part, households and institutional toilets are proposed to be built along with DWS schemes.

56.1% household have improved latrine facilities in the district. Only 5 VDCs have declared as ODF. The district plans to be declared ODF district by July 2017. Still 61,459 households in the district do not have

safe toilet and are using open land for defecation. The lowest toilet coverage is in Kamahariya VDC (only 1.36%). Fourty-eight VDCs have toilet coverage of less than 50%.

For the implementation of sanitation activities, VDCs are ranked in different order on the basis of toilet coverage i.e. VDCs with low toilet coverage are prioritized. The priority order is given in **Annex 1.4.** 

There is no toilet facility in 9.4% schools of the district and only 79.9% schools are able to provide access to an improved toilet to the Girl-Students. Similarly, 47.2% schools, they don't have urinals at all and only 40.4% schools are able to provide urinals separately for Girls. In general, Toilet coverage in schools remains 90.6% and by Urinals remains 52.8% within the district.

There are 367 institutions in the district and the sanitation facility users are 16,103 including 1,732 officials of theinstitutions. Out of 367 institutions 65.7% have toilets and 34.3 % institutions do not have toilets. Similarly, out of 367 institutions 28.9 % retain the urinal facility in their offices and 71.1% institutions do not have urinal facility in their offices. As the reality, only 34.3% institutions have separate toilets for women and 13.9% institutions have female urinals.

The DWASHCC should indentify the need of public toilets and each VDC should construct the public toilet as per their needs. Every institution is responsible for the construction of toilet in their premises

## 7.3 Solid and Liquid Waste Management

The district's most of the parts cover the terai area, which lures the migration of people in plain area causing rapid urbanization. Many places of the district are growing as semi-urban and peri-urban areas. The solid waste and liquid waste management are the major challenges in environmental sanitation in the district. The solid and liquid waste management require sophisticated technology and high cost. There is a need of separate study in this regard.

## 7.4 Climate Change Adaptation

Climate change effect and impact has been the global issue. Nepal Government is giving high importance on climate change issue. Preparation of CAPA (Community Adaptation plan for Action) will start from 2014 and completed by 2016 in all the VDCs as such Local Adaptation Plan of Action (LAPA) has already been prepared in the district. Only a very limited number of VDCs are targeted to plan the CAPA since many preparatory works such as guidelines and required human resource need to be prepared for planning the CAPA.

### 7.5 Income Generation and Livelihoods Promotion

Time saved from fetching water and improved health due to having the facility of WS and promotion of hygiene and sanitation activities needs to be utilized for potential income generation in the district. Therefore, women, poor and deprived groups will be focused with regard to their livelihoods promotion. A mechanism with the related institutions –District Agriculture Office (DAO), District Vetrinary Office (DVO), Irrigation Division Office, WCDO and Cooperatives & other finacial institutions, etc. will be developed to link these people for income generation activities. They will also be linked with financial institutions and with the institution/s active in organizing various skill development events and in market promotion front.

## 7.6 VDC WASH Plan Preparation

Formulation of VDC/Municipality WASH plan for implementation of WASH activities will be the first step in each VDC. DWASHCC will prepare VWASH/MWASH Plan preparation guidelines in order to ensure uniformity in preparing the plan by VDCs/Municipality. NGOs will be engaged in assisting the VWASHCC in preparation of the plan. Capability of NGOs will be carefully taken into account in mobilizing them in assisting the VWASHCC/MWASHCC. DWASHCC will organize orientation programme to the selected NGOs. In the manner, VDCs/Municipality will prepare their WASH plans starting from 2013. Based on the projection of fund and human resource available, the VWASH plan preparation is phased for three consecutive years starting 2014. Likewise, preparation of CAPA will be start from 2013 and completed by 2016 in all the VDCs. Updating of the VDC WASH plan prepared in the past will be update by the 2017 and that of the plan prepared from 2014 onward will be updated upon the lapse of each 3 year. The VDCs and Municipality shall be phased in order in preparation of the plans according to the composite priority rank presented in Annex 2.

Table 23: Preparation and Updating of V/MWASHPs

Activities		VDC/Municipality by year					
Activities	2013	2014	2015	2016	2017		
Preparation of VWASH/MWASH plans	20	16	16	11	8		
Review/updating of VWASH /MWASH plans	5	20	21	11	14		
Preparation of CAPA	5	30	30	5	1		

## 7.7 Institutional Development and related Capacity Building needs

District Development Committee (DDC) is the overall WatSan service provider in the district. The WSSDO is responsible for executing water supply, sanitation and hygiene projects/schemes for a population of over 1,000 in urban and rural areas. However, Rural Water Supply and Sanitation Fund Development Board (RWSSFDB) also execute rural water and sanitation project/schemes in rural area having less than 1,000 populations. The small projects/schemes (less than 1,000 populations) executes through District Technical Office (DTO). The NGOs are the service provider in the district which is good in social mobilization but lack the technical manpower to implement the WASH programme. The Water Users and Sanitation Committees (WUSC) are responsible for managing and sustaining the WASH schemes, but they largely lack the financial, institutional and technical knowhow to sustain the schemes. The District Education Office (DEO) takes care of the WASH in schools and the District Public Health Office has its access to ward level through Female Community Health Volunteer (FCHV).

Table 24: Capacity Building Activities on WASH sector

Activities		VDC/Municipality by year					
Activities	2013	2014	2015	2016	2017		
Strengthening DWASHCC	1	1	1	1	1		
Strengthening V/MWASHCC	71	71	71	71	71		
Capacity Building Events at District Level	50	50	50	50	50		
Capacity Building Events at VDC Level	40	32	32	22	16		
Capacity Building Events at Community Level	360	288	288	198	144		

Training events/Workshops/seminars will be held regular on basis to strengthen the capacity of the respective coordination committees as well as overview the progress in planned activities, resolving the problems/constraints faced and to streamline the planned activities as intended. Cross study visits also will be organized to learn from the best cases.

Human Resource Development (HRD) is a backbone of the development. The knowledge and skills are transformed to a productive force through HRD intervention such as training, orientation, workshop, seminar, study visit, etc. Besides, involvement in Research and Development activities enhance willingness, commitments and competitiveness.

The successful implementation of this strategy will depend on adequate and quality human resources at all levels of implementation. Thus, there will be the need to develop capacity development training for some stakeholders, to provide them with the knowledge, attitudes and skills required for the effective fulfillment of their roles. Training should cover managers at the central and intermediary levels, field staff, beneficiaries, media professionals, traditional communicators or artists and designers. A more comprehensive training plan should be developed, describing the training needs, intended audiences, general goals and objectives, major axes of the content, responsible people, time-span and other relevant aspects.

## 7.8 Coordination, Monitoring and Updating of DSWASHP

Coordination meetings will be held on trimester basis to review the progress and resolve the problems faced. Accordingly, workshop to coordinate the actions of the actors to meet the resource gap will be held on half-yearly basis. Moreover, one event in each year will be held in participation of multi-stake holders, political party representatives, mass media and other relevant persons in the sector to update the progress and prepare plan of actions for the remaining period of the plan (table 21).

Table 25: Coordination and Updating of DSWASHP

SN	Activities	Events
1	Coordination meeting with WASH (Trimester)	20
2	Workshop to streamline financing the planned activities (Half-yearly)	10
3	Review and update the action plan (annual)	5

# 8 Resource Analysis

### 8.1 Fund Requirement

Estimate of fund requirement are based on the present unit rate for man and material prevailing in the district. The fund estimate takes into account the inflation rate of 9.95% recorded during the month of June 2012 as per the estimate of Nepal Rastra Bank in the succeeding years of 2013- 2017. Accordingly annual population growth rate of 1.43% recorded in the year 2011 is considered to encompass the population increase in the district in each of the succeeding years.

In the manner, the services are provisioned for the incremental population too. Budget allocation mentioned for every year has been based on at least 10% increment from the budget of particular base-year. In this way, NPR 933,305,000.00 (Nine Hundred Thirty-three Million Three Hundred Five Thousand Rupees only) seems the requirement to accomplish all of the targeted activities.

VDCs and Municipality are the actor and benefactor of DSWASHP. VDC and Municipality should allocate 30 % of the total budget for WASH programme. DDC should allocate 50 % of total budget of the district budget on priority basis (priority and remoteness is given in **annex 1.10**) for WASH programme. The sector stakeholders should increase their budget and programme to be implemented on the priority basis in the areas. The DWASHCC will explore the resource gap to meet the set target.

## 8.2 Projection of Fund

Fund requirements are estimated based on the activities planned to reach the universal coverage of water supply by 2017 and ODF district by 2013.

**Table 26: Fund Requirement by planned Activities** 

SN	WASH Activities	Total	,	Year-wise All	ocation of B	udget ('000)	
		Budget for Five Year	2013	2014	2015	2016	2017
1	WSS Plan & VWASH Plan preparation and updating	27,600	13,800	15,180	-	-	-
2	Water supply facility improvement	305,460	61,092	67,201	73,921	81,313	89,445
3	Toilet promotion and construction	359,692	71,938	79,132	87,045	95,750	105,325
4	Post ODF activities	21,300	4,260	4,686	5,155	5,670	6,237
5	Long term Mitigation/Adaptation to Arsenic Risk	8,264	1,653	1,818	2,000	2,200	2,420
6	Sustainability improvement of WSS & implementation of Water Safety Plan (WSP)	21,300	4,260	4,686	5,155	5,670	6,237
7	Solid and Liquid waste management	10,800	2,160	2,376	2,614	2,875	3,162
8	Climate change adaptation activities	9,400	1,880	2,068	2,275	2,502	2,753
9	Human Resources Development	1,167	233	257	283	311	342
10	Institutional Development	7,600	1,520	1,672	1,839	2,023	2,225
11	Monitoring and Updating of DSWASHP	600	120	132	145	160	176
	Total budget for five years (at present value)	773,183	162,917	179,208	178,417	196,458	216,305

Average per year 186,661.00 Source: DWASHCC, Rupandehi

### 8.3 Institutions active in WASH in the District

DDC is the umbrella body for water supply and sanitation service provider in the district. The sector stakeholders are categorized in three groups. The group-wise institutional name list is given below:

Table 27: Actors active in the District

<ul> <li>District Administration Office</li> <li>District Development Office</li> <li>District Technical Office</li> <li>Water Supply and Sanitation Division Office</li> <li>District Education Office</li> <li>District Education Office</li> <li>District Public Health Office</li> <li>District Women and Children Development Office</li> <li>Municipality</li> <li>Village Development Committee</li> <li>Health Centers and Sub-</li> <li>District Administration District Non-governmental Organization UNDP</li> <li>UNDP</li> <li>RWSSP/WN</li> <li>USAid/Suaahara</li> <li>Gorkha Welfare Scheme</li> <li>Scheme</li> </ul>	Government Agencies	Non-governmental Organizations	UN Agencies and
Office  District Development Office District Technical Office Water Supply and Sanitation Division Office District Education Office District Public Health Office District Women and Children Development Office Municipality Village Development Committee  District Possible Swornim (RWSSFDB) Nepal Red Cross Society Environment Public Health Organization, Nepal Water Supply and Sanitation User Committees (Fed. WatSan) Forest User Groups (FeCoFUN) Mother Groups Youth Clubs Civil Society Political Parties			INGOs
	Office  District Development Office  District Technical Office  Water Supply and Sanitation Division Office  District Education Office  District Public Health Office  District Women and Children Development Office  Municipality  Village Development	<ul> <li>Swornim (RWSSFDB)</li> <li>Nepal Red Cross Society</li> <li>Environment Public Health Organization, Nepal</li> <li>Water Supply and Sanitation User Committees (Fed. WatSan)</li> <li>Forest User Groups (FeCoFUN)</li> <li>Mother Groups</li> <li>Youth Clubs</li> <li>Civil Society</li> </ul>	<ul><li>UNICEF</li><li>UNDP</li><li>RWSSP/WN</li><li>USAid/Suaahara</li><li>Gorkha Welfare</li></ul>
health Posts	Health Centers and Sub-		

## 8.4 Fund Sources and Gap

The total budget available in the next five years is NPR 773,183,000. However, the projected budget required for meeting the demand is estimated at NPR 933,305,000 for the same period. This shows that there will be a budget deficit of NPR 160,122,000 in total. If we calculate the budget deficit every year based on the available yearly budget, it will be nearly NPR 32 Million each year in average.

**Table 28: Fund Requirement and Gap** 

Source		Bu	dget by Year	•		Total
Source	2013	2014	2015	2016	2017	TOLAI
Support Agency (required fund)	162,917	179,208	178,417	196,458	216,305	933,305
Support Agency (existing budget trend)	153,478	154,926	154,926	154,926	154,927	773,183
Deficit	-9,439	-24,282	23,491	41,532	-61,378	-160,122

Source: DWASHCC, Rupandehi

The budget of the stakeholders will be invested in a coordinated framework to implement the action plans of DSWASHP. DWASHCC will coordinate with sector agencies working in the district to plan their activities mandatorily complying with the target, approach, priority and frame of action of the district strategic WASH plan.

# 9 Endorsement and Advocacy

The DSWASHP at the district level, is an official district strategy and will be endorsed by the District Council, therefore, it is an official policy document to be followed by all WASH stakeholders in the District. The plan is to be endorsed by the District Council in order to become an official district policy document. After then, the DWASHCC will soon organise a dissemination workshop in participation of multi-stakeholders and representatives of political parties as the first step of advocacy of the plan for VDC secretaries and VDC-WASH Coordination Committee (VWASHCC) members in all VDCs of the district. It will be followed by workshop and coordination meetings in every six months to review the progress, identify the problems and support needs. Finally the concerned WASH stakeholders will be reminded to adhere the DSWASHP strictly. Moreover, there is a significant gap between available fund and required amount for entire implementation of planned activities therefore, DWASHCC should make its utmost efforts to tap the fund especially from the government at the centre and also in convincing the multi/bilateral donors active in the sector for their support in this regard.

# 10 Implementation, Monitoring and Updating of the Plan

#### 10.1 Implementation of the Plan

The study has indicated that 94.4 % of the population in the district has access to piped/tube well/dug well water, primarily implemented by the DWSSDO, DDC, local governing bodies, NGOs etc. The quality of water being used is also questionable. Likewise only 56.1% of household have access to permanent water seal type toilets. Hence, these scenarios of the district reflect the need of WASH implementation. The district will face various constraints like financial investment, community mobilization and participation, technical and managerial skills, and technical manpower for its implementation. So, the selection of the proposed VDC for implementation will maintain the prioritization order as fixed by the district. Hence, the DWASHCC hopes for full support from all potential support organization for its successful implementation. DWASHCC will be responsible to ensure that the concerned WASH stakeholders implement the activities defined in DSWASHP in the spirit of the Local Self Governance Act and the Principles underlined in the Water Supply and Sanitation Strategy (2004), national water quality standard and SH Master Plan guideline 2070.

### 10.2 Monitoring of the Plan

For the monitoring purpose DWASHCC will form a five members monitoring committee including media. The immediate concern in this planning exercise is updating and reviewing the achieved progress by the members of the DWASHCC each year. However, a longer vision will be adopted based on these information and continue process of resource identification, planning and implementation of the schemes on the priority basis and updating of WASH plan database by the district. Therefore, to maintain the dynamism of the whole exercise, the DWASHCC will carry this exercise and develop a sound platform to improve the quality of life of the local people, environmental conditions, and increased opportunities to improve rural livelihoods through rational, equitable and sustainable use of water at the village level. Monitoring system will be established at the district and VDC level. The existing District Core Team within DWASHCC will be responsible for periodic monitoring of the WASH activities undertaken in the district. At the VDC, VWASHCC will form a Monitoring Team. Such team may include member/s of V/MWASHCC, school teacher, political representatives, people listened by community etc. The team on behalf of the

DWASHCC and V/MWASHCC will be responsible to oversee the monitoring of the planned activities. For monitoring purpose, a set of objective output and process indicators will be developed. The Monitoring Team will carry out the monitoring of the activities in participation of the users, user committee/s and agencies engaged in facilitating the activities.

## 10.3 Review and Updating of the Plan

Review of the plan will be undertaken at the end of each year both at the VDC and district level and it will be the responsibility of the DWASHCC. Level of the progress achieved against the planned activities and problems/constraints faced will be the main aspects to analyse and recommend required adjustment in planned activities and update the plan accordingly, but not compromising with target of achieving universal coverage of water supply and ODF by 2017.

## 11 Institutional Set up and Resource Management

VDCs and Municipality are the WASH programme implementers. Master Plan, 2011 has provisioned a Sanitation Unit in DDC for sector stakeholders' coordination and sanitation programme implementation in Municipality/VDCs. This unit will be equipped with Sanitation Experts (SE) and Social Development Expert (SDE) in this regard. With the support of DWASHCC, the sanitation unit will explore and manage the resources need for WASH programme in the district. Individual responsibilities of all major stakeholders have been explained below:

## 11.1 DWASHCC, District Core Team and District WASH Unit, V/MWASHCC

## **DWASHCC**

DWASHCC will lead the forum for planning, programming, coordination, monitoring and advocacy of WASH sector in the district and the V/MWASHCC at the VDC level. The composition of office bearers in DWASHCC and V/MWASHCC will be as guided by Sanitation and Hygiene Master Plan 2011. Roles and responsibilities of the coordination committees in implementation of the plan are:

- Prepare a strategic plan on DSWASHP and get it endorsed by District Council
- Coordinate; provide support and assistance to VDCs and Municipality in preparing procedures and formulating of their V/MWASH plans.
- Carryout performance monitoring of the WASH activities being implemented in VDCs and Municipality
- Establish and manage the WASH Fund at the district level
- Help extending fund support to VDCs and Municipality from the District Wash Fund and encourage them in achieving the ODF and the universal coverage of water supply in their areas.
- Organise workshop and meetings on regular basis to review the WASH programme going in VDC and Municipality.
- Organise meeting/workshop to review and update DSWASHP activities in every six months.
- Prepare implementation and monitoring plan upon common consensus of the stakeholders for undertaking DSWASHP activities.

- Help create conducive environment to encourage private sector for their involvement in WASH sector.
- Establish District WASH Resource Centre and update its data base.
- Monitor and supervise on regular basis the expenditure incurred from WASH funds established at the district, VDC and Municipality level
- Get support required for implementation of WASH Plan in cordial relation with stakeholders of civic society and external support agencies.
- Maintain coordination and cooperation with regional and national WASHCCs for mutual exchange of information WASH
- Asses and analyse resource available with stakeholders to utilise in implementing the WASH plan.

#### **District Core Team and District WASH Unit**

A Core Team under DWASHCC is responsible to see that programme management will be formed in the district and a Unit responsible for entire WASH programme under the supervision of the Core Team will be established under DDC. Similarly, a WASH Unit under V/MWASHCC may also be established at VDC and Municipality level depending upon the need. Capacity enhancement of the Coordination Committees at the district and VDC level will be strengthened in fulfilling their expected roles and responsibilities effectively and efficiently. Accordingly, the VWASHCC and MWASHCC – the instrumental entities which are in frontline in implementation of WASH programme need to be institutionally strengthened equally. Therefore, various activities such as training, workshop, seminars, study visits etc., to the office bearers of entities are planned in the direction.

## **V/MWASHCC**

- Prepare and update the V/MWASH Plan together with budget, plan of action and responsibilities and get it endorsed from the Village Council
- Analyze WASH issues and strategies to overcome the implementation barriers
- Form a monitoring team monitor and provide technical backstopping services to the communities and schools.
- Organize review workshop and other events during implementation and monitoring of their plans.
- Maintain coordination and cooperation with DWASHCC
- Look for the actors and fund/human resources to expedite effective implementation of planned activities
- Organize meetings in each 3 month to assess the progress status in the respective of the VDCs/municipality

#### 11.2 WASH Basket Fund

WASH Fund at the district level will be established where in the fund earmarked for hygiene and sanitation activities of all the agency and actors engaged in development of WASH sector will be deposited. Such a fund will be managed as per the procedures formulated by DWASHCC. As of now,

existing policy and corresponding rules are yet to be tuned in this direction however, the programme will be implemented by bringing the respective programmes of sector actors under single umbrella till such fund is established. Similar mechanism will be followed in case of VDC/ municipality and at the school level too. The Book keeping and record keeping of the funds at the district, VDC and school level will be maintained as per the given financial rules of the government. The progress achieved and expenses made will be made public to ensure financial transparency in the programme.

A gap of Rs.171,942,000.00 between the fund required and projected fund resources at the disposal of the sector actors at the district level exists, therefore mobilization of resources either from the national and international sources is an warranted imperative besides efficient use of available resources. At the fore, actors involved in the development of the WASH sector but more that of the DWASHCC members will play a significant role in marketing the DSWASHP for tapping the fund resources from both the national and international sources. Equally crucial role of the V/MWASHCC is seen in channelling the available fund for the WASH sector as well as tapping the fund resources from the district and national levels.

## 11.3 Roles and Responsibilities of Sector Actors

Roles and responsibilities of the relevant actors in implementation of the plan are followed succeedingly.

#### **DDC**

- Instruct local bodies to implement WASH policies and plan and monitor implementation status of the planned activities.
- Allocate at least 10 percent of total capital budget for WASH activities and take the lead role in raising fund resources to implement the planned activities of DSWASHP (DDC needs to decide).
- Construct and help construct public/community toilets
- Allocate budget for hygiene and sanitation activities and for cash reward to ODF VDCs and Municipality.

### **WSSDO**

- Ensure coordination of all WASH activities in the district
- Extend/provide technical support to DDC and other agencies engaged in WASH activities
- Prepare a roster of resource persons and facilitators and mobilize them in need
- Prepare and implement Stand Alone Sanitation activities in the manner that overcome the persisting weaknesses at present
- Extend support and assistance to various agencies in implementing program like Eco-san and POU in translating the concept of ODF VDC and municipality
- Coordinate and cooperate the DWASHCC and V/MWASHCC in operation of WASH program
- Take lead role in declaring the district a "Open Defecation Free Zone"

#### **DEO**

- Take lead role in establishing water supply and CGD friendly toilets in the schools in the district.
- Mobilize schools to celebrate Baishakh as Sanitation Month and to observe National Sanitation
   Week
- Ensure that schools are equipped with CGD friendly water supply and sanitation facilities and help school in achieving ODF in catchment areas of schools under SSHE and SLTS Approach.
- Establish Sanitation Desk in Resource Centers of schools

#### **DPHO**

- Establish Sanitation Desk in all Health Post, Sub-health Post, Health Centers and Hospitals
- Maximize mobilization of FCHVs and CMs network in awareness raising drive on hygiene and sanitation at household level in the district

#### DTO

- Integrate latrine construction and promotion activities in water supply and sanitation projects to contribute in achieving ODF VDCs
- Extend/provide technical support in other agencies WASH activities
- Extend support in implementing WASH activities in the district
- Provide help and support DWASHCC and V/MWASHCC in operation of WASH program.
- Carry out technical monitoring and audit in the district

#### WCDO

• Integrate hygiene and sanitation activities in income generating activities of women groups including gender activities.

### **VDC/Municipality**

- Prepare and update the V/MWASH Plan together with budget, plan of action and responsibilities and get it endorsed from the Village/Municipal Council
- Allocate at least 10 percent of total capital budget for WASH activities (Each VDC/municipality needs to decide)
- Analyze WASH issues and strategies to overcome the implementation barriers
- Manage construction of toilets in schools
- Promote latrine construction poor dominated and landless settlements in coordination with NGO and WASH stakeholders
- Drive hygiene and sanitation activities as integral part of ODF movement in respective areas
- Establish and update database on WASH
- Establish public and community toilets in needy locations and ensure smooth operation of these toilets
- Maintain coordination and cooperation with DWASHCC
- Look for the actors and fund/human resources to expedite effective implementation of planned activities
- Organize meetings in each 3 month to assess the progress status in the respective of the VDCs/municipality

#### **FEDWASUN**

- Facilitate WUSC registration and affiliate in the district FEDWASUN
- Orient WUSC on water right
- Advocate for users right and responsibilities
- Member of joint monitoring team

#### **NGO Federation**

- Ensure coordination with different NGOs active in the district
- Implement awareness raising activities through the medium of NGO Networks.
- Provide support and assistance to fortify the communication and political commitment.

#### **Political Parties**

- Mobilize the ancillaries in the VDC and Municipality as committed at the district level
- Make effort in finding resources and their mobilization for contributing to implementation of planned WASH activities
- Include hygiene and sanitation messages in the publicity materials

• Participate in the monitoring of WASH activities

# Media (Paper, FM radio and TV channels)

- Media monitoring, feature writing, news, dissemination of awareness on water and sanitation
- Catch up WASH related news and disseminate. Help advocating if any related issues.

# **Donor Agencies**

 Provide financial, material, technical and human resource supports for the implementation of planned WASH activities approved by the District/VDC/Municipal Councils based on WASH strategy.

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Annex – 1: Existing WASH Situation of VDCs and Municipalities by Indicators

Annex – 1.1: Priority Order of VDCs and Municipalities by Water Supply Situation at Household Level

		Total		Household u	sing improved w	vater systems		Priority rank
VDC code	Name of VDC/Municipality	Household in VDC	Piped System	Shallow Tubewell	Dugwell	Total HH	Coverage (%HH)	by water supply coverage
490046	Maryadpur	811	0	650	0	650	80.1%	1
490029	HatiBangai	1,243	0	1,004	0	1,004	80.8%	2
490055	Rayapur	1,222	0	993	0	993	81.3%	3
490017	Chilhiya	794	0	648	0	648	81.6%	4
490059	Saljhundi	2,344	800	1,114	0	1,914	81.7%	5
490053	Patekhouli	896	0	745	2	747	83.4%	6
490069	Tenuhawa	1,588	0	1,332	0	1,332	83.9%	7
490042	Majhagawa	734	0	627	0	627	85.4%	8
490006	Bagauli	1,409	0	1,214	0	1,214	86.2%	9
490056	Roinihawa	747	0	650	0	650	87.0%	10
490038	Lumbini	1,318	0	1,150	0	1,150	87.3%	11
490061	Semalar	1,884	285	1,367	0	1,652	87.7%	12
490035	Kerbani	2,964	0	2,605	0	2,605	87.9%	13
490010	Bhaganpur	1,093	0	962	0	962	88.0%	14
490004	Asurena	994	0	877	0	877	88.2%	15
490036	KhadawaBangai	1,140	0	1,013	0	1,013	88.9%	16
490014	ButawalN.P.	19,888	17,940	0	0	17,940	90.2%	17

490028	Harnaiya	681	0	616	0	616	90.5%	18
490071	Tikuligadh	1,987	0	1,802	0	1,802	90.7%	19
490023	Ekala	1,361	0	1,236	0	1,236	90.8%	20
490003	Amuwa	2,045	0	1,860	0	1,860	91.0%	21
490025	Gajedi	2,321	-	2,112	5	2,117	91.2%	22
490070	ThumhawaPiprahawa	505	=	461	=	461	91.3%	23
490009	Betakuiya	599	=	550	=	550	91.8%	24
490012	Bodabar	1,275	-	1,178	-	1,178	92.4%	25
490049	Padsari	1,632	-	1,509	-	1,509	92.5%	26
490057	Rudrapur	4,490	ı	4,153	-	4,153	92.5%	27
490048	Motipur	3,626	1	3,382	-	3,382	93.3%	28
490020	Dhakadhai	1,166	175	922	-	1,097	94.1%	29
490060	SameraMarchwar	748	16	690	-	706	94.4%	30
490013	Bogadi	1,049	1	992	-	992	94.6%	31
490018	Dayanagar	1,617	1	1,538	-	1,538	95.1%	32
490045	Manpakadi	1,025	1	975	-	975	95.1%	33
490050	Pajarkatti	931	-	891	-	891	95.7%	34
490022	Dudharakchhe	3,818	1	3,670	-	3,670	96.1%	35
490005	Bagaha	776	1	752	-	752	96.9%	36
490002	Aanandaban	2,293	2,226	-	-	2,226	97.1%	37
490047	Masina	704	-	684	-	684	97.2%	38
490063	SiddharthNagarN.P.	9,521	5,283	4,000	-	9,283	97.5%	39
490016	ChhotakiRamnagar	853	-	833	-	833	97.7%	40

490043	Makrahar	2,583	-	2,520	5	2,525	97.8%	41
490034	Karauta	1,288	-	1,271	-	1,271	98.7%	42
490039	Madhbaliya	1,723	1,539	111	51	1,701	98.7%	43
490037	Khudabagar	643	1	634	-	635	98.8%	44
490033	Karahiya	3,234	1,200	1,994	-	3,194	98.8%	45
490062	Shankarnagar	4,150	4,108	-	-	4,108	99.0%	46
490041	Mainahiya	1,228	-	1,218	-	1,218	99.2%	47
490068	Suryapura	2,976	-	2,960	-	2,960	99.5%	48
490066	Sipawa	1,054	-	1,050	-	1,050	99.6%	49
490058	Sadi	1,017	-	1,015	-	1,015	99.8%	50
490026	Gangoliya	1,213	-	1,210	1	1,211	99.8%	51
490051	PakadiSakron	731	-	730	-	730	99.9%	52
490044	ManMateriya	1,498	-	1,496	-	1,496	99.9%	53
490064	Sikatahan	1,712	-	1,710	-	1,710	99.9%	54
490001	Aama	1,435	234	1,201	-	1,435	100.0%	55
490007	Bairghat	782	-	782	-	782	100.0%	56
490008	Basantapur	1,222	6	1,216	-	1,222	100.0%	57
490011	Bisunpura	2,566	-	2,566	-	2,566	100.0%	58
490015	Chhipagada	872	-	872	-	872	100.0%	59
490019	Devadaha	5,499	3,970	1,388	141	5,499	100.0%	60
490021	Dhamauli	743	-	742	1	743	100.0%	61
490024	Farena	695	-	695		695	100.0%	62
490027	Gonaha	1,680	11	1,649	20	1,680	100.0%	63

100000	HatiPharsatikar	000		000		000	100.00/	6.4
490030	Hatifilarsatikar	826	-	826	-	826	100.0%	64
490031	Jogada	910	105	805	-	910	100.0%	65
490032	Kamahariya	1,845	4	1,821	20	1,845	100.0%	66
490040	Madhuwani	1,031	1	1,030	1	1,031	100.0%	67
490052	Parroha	4,775	1,457	2,220	1,098	4,775	100.0%	68
490054	Pokharvindi	932	-	932	-	932	100.0%	69
490065	Silautiya	1,302	97	1,205	-	1,302	100.0%	70
490067	SourahaPharsatikar	1,674	-	1,674	-	1,674	100.0%	71
	Total	139,931	39,457	91,300	1,345	132,102	94.4%	

Annex-1.2: Priority order of VDCs and Municipalities by Water Supply Facilities in Schools

		Total com	munity schools Madars		Nbr of schools having	Schools	Conditions of water supply systems (%)				
SN	Name of VDC/Municipality	Number of students	Number of teachers and officials	Total user	Number of school	improved water supply systems	having improved water supply systems (%)	Good	Fair	Major repairs	Rehab
1	Aama	1,826	57	1,883	7	7	100.0	100.0	1	1	-
2	Aanandaban	2,862	126	2,917	6	6	100.0	50.0	33.3	16.7	-
3	Amuwa	2,228	80	2,308	8	8	100.0	75.0	12.5	12.5	-
4	Asurena	794	26	820	3	3	100.0	33.3	33.3	33.3	-

5	Bagaha	530	8	538	1	1	100.0	100.0	-	-	-
6	Bagauli	1,746	29	1,775	3	3	100.0	100.0	-	-	-
7	Bairghat	667	15	682	2	2	100.0	-	-	-	100.0
8	Basantapur	617	15	632	1	1	100.0	100.0	-	-	-
9	Betakuiya	1,657	36	1,693	2	2	100.0	100.0	-	-	-
10	Bhagawanpur	3,555	86	3,641	7	7	100.0	100.0	-	-	-
11	Bisunpura	2,265	71	2,336	7	7	100.0	100.0	-	-	-
12	Bodawar	1,497	50	1,547	3	3	100.0	66.7	33.3	-	-
13	Bogadi	1,157	35	1,192	4	4	100.0	-	25.0	-	75.0
14	Butawal N.P.	9,868	458	10,326	22	22	100.0	50.0	27.3	13.6	9.1
15	Chhipagada	842	36	878	3	3	100.0	100.0	-	-	-
16	Chhotaki Ramnagar	760	32	792	3	3	100.0	66.7	33.3	-	-
17	Chilhiya	954	29	983	3	3	100.0	33.3	33.3	33.3	-
18	, Daya Nagar	2,262	69	2,331	5	5	100.0	60.0	20.0	20.0	-
19	Devadaha	4,199	190	4,389	13	13	100.0	7.7	92.3	-	-

Î											
20	Dhakadhai	1,808	43	1,851	2	2	100.0	-	50.0	-	50.0
21	Dhamauli	1,279	32	1,311	3	3	100.0	100.0	-	-	_
22	Dudharakchhe	3,455	137	3,592	9	9	100.0	55.6	33.3	-	11.1
23	Ekala	1,483	50	1,533	4	4	100.0	100.0	-	-	_
24	Farena	552	14	566	2	2	100.0	50.0	50.0	-	_
25	Gajedi	2,820	97	2,917	5	5	100.0	60.0	20.0	-	20.0
26	Gangoliya	769	35	804	3	3	100.0	100.0	-	-	-
27	Gonaha	2,066	51	2,117	5	5	100.0	20.0	-	40.0	40.0
28	Harnaiya	449	18	467	2	2	100.0	100.0	-	-	-
29	Hati Bangai	1,307	32	1,339	3	3	100.0	-	-	-	100.0
30	Hati Pharsatikar	1,101	47	1,148	4	4	100.0	75.0	25.0	-	-
31	Jogada	1,435	35	1,470	3	3	100.0	100.0	-	-	-
32	Kamahariya	3,001	79	3,080	6	6	100.0	-	-	-	100.0
33	Karahiya	2,033	119	2,152	8	8	100.0	75.0	25.0		-
34	Karauta	2,051	35	2,086	4	4	100.0	100.0	-	-	-

35	Kerbani	2,660	105	2,765	10	10	100.0	70.0	10.0	-	20.0
36	Khadwa Bangai	955	27	982	2	2	100.0	50.0	50.0	-	-
37	Khudabagar	1,026	21	1,047	1	1	100.0	100.0	-	-	-
38	Lumbini	758	29	787	4	4	100.0	75.0	-	25.0	-
39	Madhbaliya	1,393	62	1,455	4	4	100.0	25.0	50.0	-	25.0
40	Madhubani	1,162	42	1,204	5	5	100.0	100.0	-	-	-
41	Mainahiya	1,917	55	1,972	5	5	100.0	80.0	20.0	-	-
42	Majhagawa	1,652	34	1,686	1	1	100.0	100.0	-	-	-
43	Makrahar	2,675	136	2,811	8	8	100.0	87.5	-	12.5	-
44	Man Materiya	1,227	33	1,260	3	3	100.0	100.0	-	-	-
45	Man Pakadi	2,028	54	2,082	5	5	100.0	60.0	-	40.0	-
46	Maryadpur	1,506	32	1,538	3	3	100.0	_	_	33.3	66.7
47	Masina	999	26	1,025	2	2	100.0	50.0	-	-	50.0
48	Motipur	1,629	53	1,682	4	4	100.0	50.0	25.0	-	25.0
49	Padsari	575	20	595	4	4	100.0	75.0	-	25.0	-

F0	Dajarkatti	788	20	808	2	2	100.0	50.0	50.0		
50	Pajarkatti	788	20	808	2		100.0	50.0	50.0	-	-
51	Pakadi Sakron	860	24	912	3	3	100.0	-	-	-	100.0
52	Parroha	4,436	123	4,559	9	9	100.0	44.4	22.2	22.2	11.1
53	Patekhouli	563	20	583	2	2	100.0	50.0	50.0	-	_
	ratekiloan	303	20	363			100.0	30.0	30.0		
54	Pokharvindi	914	31	945	3	3	100.0	66.7	33.3	-	-
55	Rayapur	2,404	51	2,455	5	5	100.0	80.0	-	20.0	-
F.C.	Daiaibaura	408	11	410	2	2	100.0	100.0			
56	Roinihawa	408	11	419	2	2	100.0	100.0	-	-	-
57	Rudrapur	5,222	210	5,432	12	12	100.0	66.7	25.0	8.3	-
58	Sadi	854	26	880	2	2	100.0	100.0	-	-	-
59	Saljhundi	2,309	87	2,396	6	6	100.0	50.0	16.7	16.7	16.7
	,	,									
60	Samera Marchwar	673	16	689	3	3	100.0	33.3	33.3	33.3	-
61	Semalar	1,497	89	1,466	5	5	100.0	40.0	40.0	20.0	-
62	Shankar Nagar	2,150	79	2,229	6	6	100.0	33.3	50.0	16.7	_
02	onamai ragai	2,130	, , ,	2,223		<u> </u>	100.0	33.3	30.0	10.7	
63	Siddharth Nagar N.P.	7,307	274	7,581	16	16	100.0	75.0	12.5	12.5	-
64	Sikatahan	1,525	34	1,559	4	4	100.0	ı	75.0	-	25.0

65	Silautiya	2,282	50	2,332	4	4	100.0	-	25.0	50.0	25.0
66	Sipawa	412	11	423	1	1	100.0	-	-	-	100.0
67	Souraha Pharsatikar	2,029	71	2,100	6	6	100.0	100.0	-	-	-
68	Suryapura	4,387	124	4,809	10	10	100.0	90.0	10.0	_	-
69	Tenuhawa	1,434	40	1,474	2	2	100.0	100.0		_	_
03	renanawa	1,434		1,474			100.0	100.0			
70	Thumhawa Piprahawa	587	7	594	1	1	100.0	-	100. 0	-	-
71	Tikuligadh	1,957	85	2,026	8	8	100.0	75.0	12.5	-	12.5
	Total	133,055	4,484	137,658	339	339	100.0	61.4	19.5	8.3	10.9

Annex – 1.3: Priority order of VDCs and Municipalities by Water Supply Facilities in other Institutions

		Total	community in	nstitutions s	urveyed	Institutions having	Institutions do not have	Condition	Conditions of water supply systems (%)				
SN	VDC name	Numbr of officials	Number of visitors per day	Total user	Number of Instituions	improved water supply systems (%)	improved water supply systems (%)	Full functional	Minor repairs	Major repairs	Rehab		
1	Aama	4	35	39	3	66.7	33.3	100.0	-	1	ı		
2	Aanandaban	18	155	173	3	100.0	_	100.0	-	-	1		

1											
3	Amuwa	33	105	138	4	50.0	50.0	100.0	-	-	-
4	Asurena	13	110	123	3	66.7	-	100.0	-	-	-
5	Bagaha	10	77	87	3	100.0	-	100.0	-	-	-
6	Bagauli	21	175	196	5	60.0	40.0	100.0	-	-	-
7	Bairghat	21	62	83	5	40.0	60.0	100.0	-	-	-
8	Basantapur	17	130	147	3	100.0	-	100.0	-	-	-
9	Betakuiya	8	62	70	4	50.0	25.0	100.0	1	-	-
10	Bhagawanpur	10	55	65	2	-	-				
11	Bisunpura	28	135	163	5	60.0	40.0	100.0	1	-	-
12	Bodawar	21	201	222	5	60.0	40.0	100.0	-	-	-
13	Bogadi	8	94	102	6	16.7	83.3	100.0	-	-	-
14	Butawal N.P.										
15	Chhipagada	7	40	47	2	50.0	50.0	100.0	-	-	-
16	Chhotaki Ramnagar	6	53	59	2	100.0	-	100.0	-	-	_
17	Chilhiya	10	157	167	7	28.6	71.4	50.0	-	-	50.0
18	Daya Nagar				6				-	-	

		36	290	326		100.0	-	100.0			-
19	Devadaha	307	1,886	2,193	32	100.0	-	100.0	-	-	-
20	Dhakadhai	9	58	67	4	100.0	-	100.0	-	-	-
21	Dhamauli	4	40	44	1	-	100.0				
22	Dudharakchhe	10	225	235	3	100.0	_	100.0	-	-	-
23	Ekala	4	55	59	1	100.0	-	100.0	-	-	-
24	Farena	12	180	192	3	66.7	33.3	100.0	-	-	-
25	Gajedi	11	66	77	5	60.0	40.0	100.0	-	-	-
26	Gangoliya	59	158	217	5	100.0	-	100.0	-	-	-
27	Gonaha	6	69	75	3	66.7	33.3	50.0	50.0	-	-
28	Harnaiya	5	39	44	1	100.0	-	-	-	100.0	-
29	Hati Bangai	16	209	225	6	33.3	66.7	50.0	50.0	-	-
30	Hati Pharsatikar	17	195	212	4	100.0	-	75.0	-	-	25.0
31	Jogada	3	52	55	1	100.0	-	100.0	=	-	-
32	Kamahariya	12	58	70	3	66.7	33.3	100.0	-	-	-
33	Karahiya				29				-	-	

		152	816	968		100.0	-	100.0			-
34	Karauta	23	129	152	6	50.0	50.0	66.7	-	-	33.3
35	Kerbani	20	914	934	11	100.0	-	-	100.0	-	-
36	Khadwa Bangai	20	212	232	7	71.4	28.6	100.0	-	-	-
37	Khudabagar	11	43	54	4	50.0	50.0	100.0	-	-	-
38	Lumbini	14	415	429	3	66.7	33.3	100.0	-	-	-
39	Madhbaliya	6	603	609	2	100.0	-	100.0	-	-	-
40	Madhubani	22	90	112	4	100.0	-	100.0	-	-	-
41	Mainahiya	33	127	160	7	28.6	57.1	100.0	-	ı	-
42	Majhagawa										
43	Makrahar	20	295	315	5	-	100.0				
44	Man Materiya	27	147	174	10	50.0	50.0	100.0	-	-	-
45	Man Pakadi	20	171	191	7	100.0	-	71.4	28.6	ı	-
46	Maryadpur	9	80	89	4	50.0	50.0	100.0	-	-	-
47	Masina	45	119	164	5	40.0	-	100.0	-	1	1
48	Motipur	14	205	219	6	50.0	-	66.7	-	33.3	ı

49	Padsari	104	241	345	9	66.7	11.1	100.0	-	-	-
50	Pajarkatti	10	90	100	2	50.0	50.0	-	-	_	100.0
51	Pakadi Sakron	10	75	85	3	-	100.0				
52	Parroha	93	2,065	2,158	29	72.4	27.6	95.2	4.8	_	-
53	Patekhouli	9	17	26	3	-	100.0				
54	Pokharvindi	19	46	65	5	60.0	40.0	100.0	-	-	-
55	Rayapur	97	592	689	10	70.0	30.0	71.4	-	-	28.6
56	Roinihawa	9	95	104	4	100.0	-	50.0	50.0	-	-
57	Rudrapur										
58	Sadi										
59	Saljhundi	38	261	299	10	100.0	-	100.0	-	-	-
60	Samera Marchwar	3	60	63	2	50.0	50.0	100.0	-	_	-
61	Semalar	20	70	90	5	80.0	20.0	100.0	-	_	-
62	Shankar Nagar	9	201	210	3	100.0	-	100.0	-	-	-
63	Siddharth Nagar N.P.										
64	Sikatahan	13	153	166	4	100.0	-	50.0	50.0	_	-
65	Silautiya				4				-	_	

		20	185	205		50.0	50.0	100.0			-
66	Sipawa	7	40	47	3	33.3	66.7	100.0	-	-	-
67	Souraha Pharsatikar	32	93	125	6	100.0	-	100.0	-	-	-
68	Suryapura	24	130	154	4	100.0	-	100.0	-	-	-
69	Tenuhawa	8	160	168	3	100.0	-	100.0	-	-	-
70	Thumhawa Piprahawa	17	80	97	5	60.0	40.0	100.0	-	-	1
71	Tikuligadh	8	125	133	3	100.0	ı	100.0	-	-	ı
	Total	1,732	14,371	16,103	367	72.8	23.7	89.5	7.5	0.7	2.2

Annex-1.4: Priority order of VDCs and Municipalities by Sanitation Situation at Household Level

			Latrine				
VDC Code	Name of VDC/Municipalities	Total Household in VDC	Household with improved latrine	Household with no latrine	Latrine coverage (%)	ODF status	Priority rank by less latrine coverage
490032	Kamahariya	1,845	25	1,820	1.36		1
490065	Silautiya	1,302	18	1,284	1.38		2
490031	Jogada	910	15	895			3

					1.65	
490051	PakadiSakron	731	13	718	1.78	4
490006	Bagauli	1,409	29	1,380	2.06	5
490055	Rayapur	1,222	33	1,189	2.70	6
490024	Farena	695	24	671	3.45	7
490013	Bogadi	1,049	37	1,012	3.53	8
490046	Maryadpur	811	30	781	3.70	9
490012	Bodabar	1,275	52	1,223	4.08	10
490060	SameraMarchwar	748	33	715	4.41	11
490066	Sipawa	1,054	47	1,007	4.46	12
490027	Gonaha	1,680	77	1,603	4.58	13
490034	Karauta	1,288	65	1,223	5.05	14
490007	Bairghat	782	40	742	5.12	15
490015	Chhipagada	872	47	825	5.39	16
490070	ThumhawaPiprahawa	505	29	476	5.74	17
490011	Bisunpura	2,566	164	2,402		18

					6.39	
490047	Masina	704	45	659	6.39	19
490058	Sadi	1,017	68	949	6.69	20
490016	ChhotakiRamnagar	853	59	794	6.92	21
490042	Majhagawa	734	55	679	7.49	22
490004	Ashuraina	994	75	919	7.55	23
490001	Ama	1,435	134	1,301	9.34	24
490009	Betakuiya	599	65	534	10.85	25
490037	Khudabagar	643	75	568	11.66	26
490054	Pokharvindi	932	109	823	11.70	27
490021	Dhamauli	743	91	652	12.25	28
490050	Pajarkatti	931	119	812	12.78	29
490053	Patekhouli	896	115	781	12.83	30
490068	Suryapura	2,976	388	2,588	13.04	31
490069	Tenuhawa	1,588	235	1,353	14.80	32
490005	Bagaha	776	146	630		33

					18.81	
490020	Dhakadhai	1,166	224	942	19.21	34
490028	Harnaiya	681	131	550	19.24	35
490041	Mainahiya	1,228	240	988	19.54	36
490044	ManMateriya	1,498	296	1,202	19.76	37
490064	Sikatahan	1,712	346	1,366	20.21	38
490038	Lumbini	1,318	297	1,021	22.53	39
490030	HatiPharsatikar	826	214	612	25.91	40
490023	Ekala	1,361	355	1,006	26.08	41
490045	Manpakadi	1,025	287	738	28.00	42
490029	HatiBangai	1,243	358	885	28.80	43
490040	Madhuwani	1,031	332	699	32.20	44
490008	Basantapur	1,222	406	816	33.22	45
490036	KhadawaBangai	1,140	445	695	39.04	46
490010	Bhaganpur	1,093	450	643	41.17	47
490026	Gangoliya	1,213	506	707		48

					41.71	
490025	Gajedi	2,321	1,225	1,096	52.78	4
490049	Padsari	1,632	928	704	56.86	5
490056	Roinihawa	747	433	314	57.97	5
490043	Makrahar	2,583	1,580	1,003	61.17	5
490018	Dayanagar	1,617	1,022	595	63.20	5
490057	Rudrapur	4,490	3,132	1,358	69.76	5
490022	Dudharakchhe	3,818	2,736	1,082	71.66	5
490035	Kerbani	2,964	2,148	816	72.47	5
490003	Amuwa	2,045	1,518	527	74.23	5
490067	SourahaPharsatikar	1,674	1,254	420	74.91	5
490071	Tikuligadh	1,987	1,508	479	75.89	5
490017	Chilhiya	794	625	169	78.72	6
490061	Semalar	1,884	1,522	362	80.79	6
490052	Parroha	4,775	3,930	845	82.30	6
490063	SiddharthNagarN.P.	9,521	7,933	1,588		6

					83.32		
490048	Motipur	3,626	3,099	527	85.47		64
490014	Butwal Municipality	19,888	17,407	2,481	87.50		65
490059	Saljhundi	2,344	2,129	215	90.83		66
490002	Anandaban	2,293	2,293	-	100.00	ODF	67
490019	Devadaha	5,499	5,499	-	100.00	ODF	68
490033	Karahiya	3,234	3,234	-	100.00	ODF	69
490039	Madhbaliya	1,723	1,723	-	100.00	ODF	70
490062	Shankarnagar	4,150	4,150	-	100.00	ODF	71
	Total	139,931	78,472	61,459	56.08		

Annex -1.5: Priority order of VDCs and Municipalities by Sanitation Facilities in Schools

		Number	Number of	Numb	Number	Number of school with Toilet facility			Numbe uri			
SN	Name of VDC	of students	teachers and officials	Total user	of school	Toilet for girls	Toilet for boys	No Toilet	Urinal for girls	Urinal for boys	No Urinal	Toilet for girls (%)
1	Aama	1,904	57	1,961	7	7	7	0	4	6	1	100.0

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2	Aanandaban	4,850	106	4,905	6	4	6	0	1	6	0	66.7
3	Amuwa	3,311	80	3,391	8	7	7	1	1	3	5	87.5
4	Asurena	956	26	982	3	2	3	0	0	2	1	66.7
5	Bagaha	1,001	8	1,009	1	0	1	0	0	0	1	-
6	Bagauli	2,127	29	2,156	3	2	3	0	2	3	0	66.7
7	Bairghat	667	15	682	2	2	2	0	0	0	2	100.0
8	Basantapur	934	15	949	1	1	1	0	0	0	1	100.0
9	Betakuiya	2,333	36	2,369	2	1	2	0	0	2	0	50.0
10	Bhagawanpur	3,626	86	3,712	7	6	6	0	5	5	2	85.7
11	Bisunpura	2,895	71	2,966	7	7	7	0	7	7	0	100.0
12	Bodawar	1,602	50	1,652	3	3	3	0	1	3	0	100.0
13	Bogadi	1,452	35	1,487	4	0	1	0	0	1	3	-
14	Butawal N.P.	32,323	475	32,798	20	20	20	16	17	0	3	100.0
15	Chhipagada	1,110	36	1,146	3	3	3	0	2	3	0	100.0
16	Chhotaki Ramnagar	791	32	823	3	3	3	0	1	1	2	100.0
17	Chilhiya	1,137	29	1,166	3	3	3	0	0	0	3	100.0
18	Daya Nagar	2,995	69	3,064	5	5	5	0	0	0	5	100.0
19	Devadaha	9,241	209	9,450	13	13	13	0	9	10	3	100.0
20	Dhakadhai	2,722	43	2,765	2	1	2	0	1	2	0	50.0
21	Dhamauli	1,279	32	1,311	3	3	3	0	0	0	3	100.0
22	Dudharakchhe	4,371	137	4,508	9	8	9	0	7	7	2	88.9
23	Ekala	2,003	50	2,053	4	4	4	0	2	2	2	100.0
24	Farena	763	14	777	2	1	2	0	0	2	0	50.0
25	Gajedi	3,753	97	3,850	5	5	5	0	5	5	0	100.0
26	Gangoliya	769	35	804	3	2	2	0	0	0	3	66.7
27	Gonaha	3,102	51	3,153	5	4	4	0	0	0	5	80.0
28	Harnaiya	552	18	570	2	2	2	0	0	0	2	100.0
29	Hati Bangai	1,883	32	1,915	3	0	0	0	0	0	3	-
30	Hati Pharsatikar	1,101	47	1,148	4	0	4	0	1	4	0	-
31	Jogada	1,564	35	1,599	3	1	3	0	1	3	0	33.3
32	Kamahariya	3,638	79	3,717	6	5	5	0	2	2	4	83.3

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33	Karahiya	3,293	119	3,412	8	6	7	0	4	5	3	75.0
34	Karauta	2,907	35	2,942	4	2	3	1	0	3	1	50.0
35	Kerbani	4,073	105	4,178	10	8	10	0	4	7	3	80.0
36	Khadwa Bangai	1,598	27	1,625	2	2	2	0	1	1	1	100.0
37	Khudabagar	1,768	21	1,789	1	1	1	0	1	1	0	100.0
38	Lumbini	1,283	29	1,312	4	2	2	0	1	1	3	50.0
39	Madhbaliya	2,403	62	2,465	4	4	4	0	1	3	1	100.0
40	Madhubani	1,346	42	1,388	5	5	5	0	2	2	3	100.0
41	Mainahiya	1,917	55	1,972	5	5	5	0	0	0	5	100.0
42	Majhagawa	1,694	34	1,728	1	1	1	0	1	1	0	100.0
43	Makrahar	3,234	136	3,370	8	8	8	0	4	7	1	100.0
44	Man Materiya	1,227	33	1,260	3	3	3	0	0	0	3	100.0
45	Man Pakadi	2,028	54	2,082	5	5	5	0	0	0	5	100.0
46	Maryadpur	1,589	32	1,621	3	3	3	0	1	1	2	100.0
47	Masina	1,411	26	1,437	2	2	2	0	2	2	0	100.0
48	Motipur	2,220	53	2,273	6	4	4	0	0	0	6	66.7
49	Padsari	1,652	20	1,672	4	1	1	3	0	0	4	25.0
50	Pajarkatti	905	20	925	2	2	2	0	2	2	0	100.0
51	Pakadi Sakron	860	24	912	3	0	0	3	0	0	3	-
52	Parroha	7,969	123	8,092	9	6	6	3	5	5	4	66.7
53	Patekhouli	605	20	625	2	1	2	0	1	2	0	50.0
54	Pokharvindi	1,191	31	1,222	3	1	2	1	1	1	2	33.3
55	Rayapur	2,404	51	2,455	5	3	5	0	3	5	0	60.0
56	Roinihawa	1,187	11	1,198	2	0	1	1	0	0	2	-
57	Rudrapur	7,587	210	7,797	12	12	12	0	9	10	12	100.0
58	Sadi	1,080	26	1,106	2	2	2	0	2	2	0	100.0
59	Saljhundi	3,248	87	3,335	6	3	6	0	1	5	1	50.0
60	Samera Marchwar	673	16	689	3	1	2	1	1	2	1	33.3
61	Semalar	1,937	89	1,906	5	5	5	0	4	4	1	100.0
62	Shankar Nagar	4,407	79	4,486	6	5	6	0	1	5	1	83.3
63	Siddharth Nagar N.P.	13,629	274	13,903	16	15	16	0	2	5	13	93.8

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64	Sikatahan	1,954	34	1,988	4	4	4	0	0	0	4	100.0
65	Silautiya	2,536	50	2,586	4	1	4	0	3	4	0	25.0
66	Sipawa	733	14	747	1	1	1	0	1	1	0	100.0
67	Souraha Pharsatikar	3,779	71	3,850	6	6	6	0	0	0	6	100.0
68	Suryapura	4,916	124	5,338	10	9	9	0	8	8	7	90.0
69	Tenuhawa	3,517	40	3,557	2	2	2	0	2	2	0	100.0
70	Thumhawa Piprahawa	1,545	7	1,552	1	1	1	0	0	1	0	100.0
71	Tikuligadh	2,265	85	2,334	8	4	6	2	0	2	6	50.0
	Total	207,325	4,503	211,967	339	271	307	32	137	179	160	79.9
	Percent				100.0%	79.9%	90.6%	9.4%	40.4%	52.8%	47.2%	

Annex-1.6: Priority order of VDCs and Municipalities by Sanitation Facilities in other Institutions

		Total	community ir	stitutions s	urveyed		r of instit Toilet fac			r of instit urinal fac		Toilet
SN	VDC Name	Number of officials	Number of visitors per day	Total user	Number of Instituions	Female Toilet	Male Toilet	No Toilet	Female Urinal	Male Urinal	No Urinal	facility (%)
1	Aama	4	35	39	3	0	0	3	0	0	3	0.0
2	Aanandaban	18	155	173	3	1	3	0	1	1	2	100.0
3	Amuwa	33	105	138	4	0	2	2	0	2	2	50.0
4	Asurena	13	110	123	3	0	2	1	0	0	3	66.7
5	Bagaha	10	77	87	3	0	2	1	0	2	1	66.7
6	Bagauli	21	175	196	5	0	4	1	0	1	4	80.0
7	Bairghat	21	62	83	5	1	2	3	0	0	5	40.0
8	Basantapur	17	130	147	3	1	3	0	0	0	3	100.0
9	Betakuiya	8	62	70	4	0	2	1	0	0	1	75.0
10	Bhagawanpur	10	55	65	2	0	0	2	0	0	2	0.0

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11	Bisunpura	28	135	163	5	2	2	3	0	0	5	40.0
12	Bodawar	21	201	222	5	1	3	2	0	2	3	60.0
13	Bogadi	8	94	102	6	1	1	5	0	0	6	16.7
14	Butawal N.P.					0	0	2	0	0	2	
15	Chhipagada	7	40	47	2	1	1	1	1	1	1	50.0
16	Chhotaki Ramnagar	6	53	59	2	0	2	0	0	2	0	100.0
17	Chilhiya	10	157	167	7	0	7	0	0	0	7	100.0
18	Daya Nagar	36	290	326	6	0	5	1	5	5	1	83.3
19	Devadaha	307	1,886	2,193	32	11	30	2	3	3	29	93.8
20	Dhakadhai	9	58	67	4	0	0	4	0	0	4	0.0
21	Dhamauli	4	40	44	1	0	0	1	0	0	1	0.0
22	Dudharakchhe	10	225	235	3	2	3	0	1	3	0	100.0
23	Ekala	4	55	59	1	0	1	0	0	1	0	100.0
24	Farena	12	180	192	3	1	2	1	0	0	3	66.7
25	Gajedi	11	66	77	5	0	5	0	0	0	5	100.0
26	Gangoliya	59	158	217	5	1	2	3	2	4	1	40.0
27	Gonaha	6	69	75	3	2	3	0	0	0	3	100.0
28	Harnaiya	5	39	44	1	0	0	1	0	0	1	0.0
29	Hati Bangai	16	209	225	6	2	2	4	1	2	4	33.3
30	Hati Pharsatikar	17	195	212	4	2	4	0	2	4	0	100.0
31	Jogada	3	52	55	1	0	1	0	0	0	1	100.0
32	Kamahariya	12	58	70	3	0	2	1	2	2	1	66.7
33	Karahiya	152	816	968	29	29	29	0	4	11	18	100.0
34	Karauta	23	129	152	6	0	4	2	0	0	6	66.7
35	Kerbani	20	914	934	11	6	6	5	0	0	11	54.5
36	Khadwa Bangai	20	212	232	7	2	2	5	1	2	5	28.6
37	Khudabagar	11	43	54	4	0	2	2	1	1	3	50.0

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38	Lumbini	14	415	429	3	0	2	1	2	2	1	66.7
39	Madhbaliya	6	603	609	2	0	0	2	0	0	2	0.0
40	Madhubani	22	90	112	4	3	3	1	0	0	4	75.0
41	Mainahiya	33	127	160	7	0	2	5	0	0	7	28.6
42	Majhagawa					0	0	0	0	0	0	
43	Makrahar	20	295	315	5	0	0	5	0	0	5	0.0
44	Man Materiya	27	147	174	10	5	5	5	5	5	5	50.0
45	Man Pakadi	20	171	191	7	6	6	1	1	7	0	85.7
46	Maryadpur	9	80	89	4	0	1	3	0	0	4	25.0
47	Masina	45	119	164	5	0	0	5	0	0	5	0.0
48	Motipur	14	205	219	6	0	6	0	0	6	0	100.0
49	Padsari	104	241	345	9	3	6	3	3	4	5	66.7
50	Pajarkatti	10	90	100	2	0	1	1	0	0	2	50.0
51	Pakadi Sakron	10	75	85	3	0	0	3	0	0	3	0.0
52	Parroha	93	2,065	2,158	29	0	20	9	0	0	29	69.0
53	Patekhouli	9	17	26	3	0	0	3	0	0	3	0.0
54	Pokharvindi	19	46	65	5	0	3	2	0	0	5	60.0
55	Rayapur	97	592	689	10	1	7	3	1	7	3	70.0
56	Roinihawa	9	95	104	4	0	0	0	0	0	4	100.0
57	Rudrapur					0	0	0	0	0	0	
58	Sadi					0	0	0	0	0	0	
59	Saljhundi	38	261	299	10	8	8	2	8	8	2	80.0
60	Samera Marchwar	3	60	63	2	1	1	1	1	1	1	50.0
61	Semalar	20	70	90	5	1	4	1	1	4	1	80.0
62	Shankar Nagar	9	201	210	3	2	2	1	3	3	0	66.7
63	Siddharth Nagar N.P.					0	0	3	0	0	3	
64	Sikatahan	13	153	166	4	3	3	1	0	0	4	75.0

65	Silautiya	20	185	205	4	0	2	2	0	2	2	50.0
66	Sipawa	7	40	47	3	0	2	1	0	0	3	66.7
67	Souraha Pharsatikar	32	93	125	6	6	6	0	1	2	2	100.0
68	Suryapura	24	130	154	4	0	2	2	0	2	2	50.0
69	Tenuhawa	8	160	168	3	3	3	0	0	0	3	100.0
70	Thumhawa Piprahawa	17	80	97	5	0	4	1	1	4	1	80.0
71	Tikuligadh	8	125	133	3	2	3	0	0	0	3	100.0
	Total	1,732	14,371	16,103	367	110	241	126	51	106	261	65.7
	Percent				100.0%	30.0%	65.7%	34.3%	13.9%	28.9%	71.1%	

Annex – 1.7: Priority order of VDCs and Municipalities by Concentration of Deprived Social Groups

						Hou	sehold				Percent of
VDC code	SN	VDC name	Dalit	Janajati	Adibasi	Dalit Terai Group	Religous minority	Brahmin Chhetri	Other	Total	deprived groups
490001	1	Aama	63	20	-	1,135	241	36	27	1,522	95.9
490002	2	Aanandaban	97	380	180		2	1,061	72	1,792	36.8
490003	3	Amuwa	153	183	405	470	50	825	25	2,111	59.7
490004	4	Asurena	71	781	-	_	45	24	-	921	97.4
490005	5	Bagaha	178	5	-	362	268	19	9	841	96.7
490006	6	Bagauli	200	-	-	400	150	19	638	1,407	53.3

400007	_	Political and	200				27	20	500	757	24.2
490007	7	Bairghat	200	-	-	-	37	20	500	757	31.3
490008	8	Basantapur	246	30	320	1	535	101	407	1,640	69.0
490009	9	Betakuiya	167	-	-	409	188	47	27	838	91.2
490010	10	Bhaganpur	175	150	-	1,000	200	30	35	1,590	95.9
490011	11	Bisunpura	490	20	95	1,253	183	142	-	2,183	93.5
490012	12	Bodabar	617	529	1	246	267	105	_	1,764	94.0
490013	13	Bogadi	240	1,100	1	-	150	175	-	1,665	89.5
490015	15	Chhipagada	-	-	196	89	47	23	451	806	41.2
490016	16	Chho. Ramnagar	168	395	154	-	45	13	-	775	98.3
490017	17	Chilhiya	131	207	41	300	5	225	70	979	69.9
490018	18	Dayanagar	110	300	400	50	75	800	65	1,800	51.9
490019	19	Devadaha	735	2,654	-	3	-	2,320	_	5,712	59.4
490020	20	Dhakadhai	12	43	787	-	128	20	-	990	98.0
490021	21	Dhamauli	128	441	1	-	108	13	112	802	84.4
490022	22	Dudharakchhe	742	551	894	-	-	1,588	-	3,775	57.9

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400022	22	Flore	200	225	7	75	400	25	24.4	1 246	02.2
490023	23	Ekala	300	325	7	75	400	25	214	1,346	82.2
490024	24	Farena	200			100	50	30	220	600	58.3
490025	25	Gajedi	430	376	471	402	12	871	-	2,562	66.0
490026	26	Gangoliya	55	116	800	310	20	200	15	1,516	85.8
490027	27	Gonaha	200	130	10	900	160	115	480	1,995	70.2
490028	28	Harnaiya	44	7	180	146	41	19	224	661	63.2
490029	29	HatiBangai	100	30	58	625	12	115	62	1,002	82.3
490030	30	HatiPharsatikar	162	47	257	2	36	21	249	774	65.1
490031	31	Jogada	210	-	50	322	274	48	13	917	93.3
490032	32	Kamahariya	813	590	598	5	380	185	1	2,571	92.8
490033	33	Karahiya	214	404	300	105	12	2,222	103	3,360	30.8
490034	34	Karauta	680	195	-	40	150	40	185	1,290	82.6
490035	35	Kerbani	295	363	341	201	109	351	1,517	3,177	41.2
490036	36	KhadawaBangai	221	240	225	461	80	481	-	1,708	71.8
490037	37	Khudabagar	66	353	93	-	215	14	-	741	98.1

490039	39	Madhbaliya	77	-	819	-	24	539	308	1,767	52.1
490040	40	Madhuwani	199	10	102	411	139	104	74	1,039	82.9
490041	41	Mainahiya	-	-	ı	-	-	42	1,189	1,231	-
490043	43	Makrahar	338	914	1,057	-	30	1,101	10	3,450	67.8
490044	44	ManMateriya	140	326	245	300	25	410	-	1,446	71.6
490045	45	Manpakadi	100	440	-	200	10	100	250	1,100	68.2
490046	46	Maryadpur	250	-	-	-	85	25	344	704	47.6
490047	47	Masina	30	274	-	164	195	32	-	695	95.4
490048	48	Motipur	116	210	548	-	3	929	46	1,852	47.4
490049	49	Padsari	158	-	710	-	34	305	205	1,412	63.9
490050	50	Pajarkatti	155	50	50	10	125	15	-	405	96.3
490052	52	Parroha	585	1,261	1,071	47	5	2,321	8	5,298	56.0
490053	53	Patekhouli	200	40	42	210	165	21	258	936	70.2
490054	54	Pokharvindi	85	160	58	29	195	36	195	758	69.5
490055	55	Rayapur	350	52	-	_ =	29	10	600	1,041	41.4

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490056	56	Roinihawa	116	196	-	-	255	59	101	727	78.0
490059	59	Saljhundi	176	603	366	-	-	683	256	2,084	54.9
490060	60	SameraMarchwar	316	522	-	-	40	16	-	894	98.2
490061	61	Semalar	49	100	575	22	-	1,138	-	1,884	39.6
490062	62	Shankarnagar	197	977	-	17	7	5,030	142	6,370	18.8
490064	64	Sikatahan	596	306	328	647	65	109	267	2,318	83.8
490065	65	Silautiya	325	-	-	-	50	25	925	1,325	28.3
490066	66	Sipawa	150	-	28	-	52	30	745	1,005	22.9
490067	67	Sou. Pharsatikar	160	150	716	60	10	894	-	1,990	55.1
490068	68	Suryapura	309	503	2,009	-	69	202	-	3,092	93.5
490069	69	Tenuhawa	100	20	10	100	1,000	20	-	1,250	98.4
490070	70	Thu. Piprahawa	120	-	-	210	80	50	115	575	71.3
490071	71	Tikuligadh	167	616	731	484	25	670	20	2,713	74.6
		Total	14,477	18,695	16,327	12,323	7,392	27,259	11,778	108,251	63.9
		Percent	13.4%	17.3%	15.1%	11.4%	6.8%	25.2%	10.9%	100.0%	

Annex – 1.8: Priority Order of VDCs and Municipalities by Poverty Status

SN	VDC	HHs with food sufficiency less than 3 months	Marginalized HHs	Condition of primary schools	Condition of health posts	Participation of Deprived Group in Decision Making	Prevalence of GESI	Vulnerable HHs	Safe drinking water	Basic sanitation & hygiene	Score	Rank
	PASCHHIM											
1	AMAWA	2	2	2	2	2	2	1	4	1	18	2
2	AMA	3	3	3	3	3	2	1	4	4	26	3B
3	ANANDABAN	2	1	2	2	2	1	1	2	1	14	2
4	ASURAINA	1	4	3	3	4	4	1	4	4	28	4
5	BAGAHA	3	2	3	3	3	3	1	4	4	26	3B
6	BAGAULI	3	4	3	3	4	4	1	4	4	30	4
7	BAIRGHAT	3	3	3	3	3	3	2	4	4	28	4
8	BASANTAPUR	4	4	3	3	4	3	1	3	4	29	4
9	BETKUIYA	3	2	3	2	2	3	3	4	4	26	3B
10	BHAGAWANPUR	1	3	2	3	3	3	1	3	3	22	3A
11	BISHNUPURA	3	3	3	3	4	4	1	3	4	28	4
12	BODABAR	3	3	3	3	2	3	3	4	4	28	4
13	BOGADI	3	1	3	3	4	3	1	4	4	26	3B
14	CHHIPAGADH	3	3	2	3	3	3	2	4	4	27	3B
	СННОТКІ											
15	RAMNAGAR	3	3	3	3	3	3	3	3	4	28	4
16	CHILHIYA	3	2	3	2	2	3	1	4	1	21	2
17	DAYANAGAR	3	3	3	4	3	2	1	4	4	27	3B
18	DEWDAHA	3	1	3	2	1	2	2	2	1	17	2
19	DHAKADHAI	4	4	3	2	4	4	1	3	4	29	4
20	DHAMAULI	3	1	3	3	2	3	1	4	4	24	3A
21	EKALA	3	4	3	3	4	4	3	4	4	32	4

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22	GAJEDI	4	4	3	3	2	3	3	3	4	29	4
23	GANGOBALIYA	2	4	2	3	3	3	1	3	4	25	3B
24	GONAHA	3	3	3	3	3	3	3	3	4	28	4
25	HARNAIYA	2	4	2	3	3	3	1	4	4	26	3B
	HATIPHARSATIKA											
26	R	3	3	3	2	3	3	1	4	4	26	3B
27	HATTI BANAGAI	4	2	2	3	2	3	4	3	4	27	3B
28	JOGADA	2	3	3	3	1	3	2	3	4	24	3A
29	KAMHARIYA	3	3	3	3	4	3	3	4	4	30	4
30	KARAHIYA	3	1	2	3	3	3	2	3	1	21	2
31	KARAUTA	4	3	3	2	3	2	1	4	4	26	3B
32	KERWANI	3	2	3	3	4	3	2	4	3	27	3B
	KHADWA											
33	BANAGAI	3	3	3	3	3	3	3	4	4	29	4
34	KHUDABAGAR	1	1	2	2	3	3	1	3	4	20	2
35	LUMBINI	2	2	3	2	4	4	1	3	4	25	3B
36	MADHAWALIYA	2	3	3	2	2	3	1	4	1	21	2
37	MADHUBANI	3	3	3	2	4	3	3	4	4	29	4
38	MAINAHIYA	3	3	2	2	3	3	3	3	4	26	3B
39	MAJHAGAWA	3	2	3	3	4	2	2	4	4	27	3B
40	MAKRAHAR	3	3	3	2	3	2	2	4	3	25	3B
41	MANMATERIA	3	2	3	2	2	3	1	4	4	24	3A
42	MANPAKADI	3	3	3	3	2	3	3	4	4	28	4
43	MARYADPUR	3	3	3	4	3	2	1	4	4	27	3B
44	MASINA	3	3	3	3	4	3	4	4	4	31	4
45	MOTIPUR	4	1	3	3	1	3	1	2	2	20	2
46	PADASARI	3	2	3	3	2	2	1	4	3	23	3A
47	PAJARKATTI	4	4	3	2	4	3	3	4	4	31	4
48	PAKADI	3	4	3	3	4	3	1	4	4	29	4

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	SAKRAUN											
49	PARROHA	3	3	2	2	3	3	2	2	1	21	2
50	PATKHAULI	3	3	3	3	3	3	3	3	4	28	4
51	PHARENA	3	3	3	2	4	4	3	4	4	30	4
52	POKHARBHINDI	4	4	3	4	4	4	1	4	4	32	4
53	RAYAPUR	4	3	3	3	4	3	1	4	4	29	4
54	ROHINIHAWA	4	3	3	3	4	3	1	4	3	28	4
55	DUDHARAKSHA	2	1	2	2	3	3	2	3	1	19	2
56	RUDRAPUR	4	3	4	3	3	3	4	4	3	31	4
57	SADI	1	4	2	2	4	4	1	3	4	25	3B
58	SALJHANDI	3	2	3	2	1	2	3	3	1	20	2
	SAURAHA											
59	PHARSATIKAR	3	3	3	2	2	3	1	4	3	24	3A
60	SEMARA	2	4	3	4	4	4	2	4	4	31	4
61	SEMALAR	3	3	3	2	3	3	3	3	3	26	3B
62	SHANKARNAGAR	3	3	2	1	3	3	2	1	1	19	2
63	SIKTAHAN	4	4	3	4	1	3	4	4	4	31	4
64	SILAUTIYA	3	4	3	3	4	4	1	4	4	30	4
65	SIPAWA	4	1	3	3	4	3	2	4	4	28	4
66	SURYAPURA	1	3	2	2	4	3	1	3	4	23	3A
67	TENUHAWA	3	3	3	3	4	3	3	3	4	29	4
	THUMHA											
68	PIPRAHAWA	4	2	3	3	3	1	1	4	4	25	3B
69	TIKULIGADH	2	1	2	2	1	3	1	3	1	16	2

Annex – 1.9: Priority order of VDCs and Municipalities by Remoteness

			Distance of	VDC from services (kr	m)		
VDC code	SN	Name of VDC	District headquarters	Major markets	Major road	Remoteness index	VDC rank by remoteness
		weightage	0.1	0.6	0.3		
		Largest distance	46	37	22		
490063	1	SiddharthNagarN.P.	0	0	0	0.0	1
490014	2	ButawalN.P.	22	0	0	4.8	2
490008	3	Basantapur	3	3	0	5.5	3
490062	4	Shankarnagar	17	3	0	8.6	4
490029	5	HatiBangai	5	5	0	9.2	5
490049	6	Padsari	5	5	0	9.2	6
490005	7	Bagaha	5	5	2	11.9	7
490048	8	Motipur	26	4	1	13.5	8
490002	9	Aanandaban	15	7	0	14.6	9
490039	10	Madhbaliya	8	8	0	14.7	10
490017	11	Chilhiya	8	8	3	18.8	11
490020	12	Dhakadhai	11	11	0	20.2	12
490027	13	Gonaha	11	11	0	20.2	13
490033	14	Karahiya	11	11	0	20.2	14
490030	15	HatiPharsatikar	9	9	4	22.0	15
490032	16	Kamahariya	13	13	0	23.9	16
490054	17	Pokharvindi	10	11	3	24.1	17
490053	18	Patekhouli	11	11	3	24.3	18
490046	19	Maryadpur	10	10	5	25.2	19

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490037	20	Khudabagar	15	15	0	27.6	20
490050	21	Pajarkatti	13	13	3	28.0	21
490019	22	Devadaha	35	13	0	28.7	22
490061	23	Semalar	33	11	3	29.1	23
490071	24	Tikuligadh	13	13	4	29.4	24
490026	25	Gangoliya	12	12	6	30.2	25
490041	26	Mainahiya	12	12	6	30.2	26
490015	27	Chhipagada	17	17	0	31.3	27
490012	28	Bodabar	16	16	2	32.2	28
490052	29	Parroha	37	15	0	32.4	29
490064	30	Sikatahan	14	14	6	33.9	30
490036	31	KhadawaBangai	35	13	5	35.5	31
490042	32	Majhagawa	20	20	0	36.8	32
490069	33	Tenuhawa	20	20	0	36.8	33
490021	34	Dhamauli	18	18	3	37.2	34
490035	35	Kerbani	23	17	4	38.0	35
490016	36	ChhotakiRamnagar	17	17	5	38.1	36
490066	37	Sipawa	19	19	3	39.0	37
490038	38	Lumbini	21	21	1	40.0	38
490043	39	Makrahar	19	19	4	40.4	39
490022	40	Dudharakchhe	42	20	0	41.6	40
490023	41	Ekala	21	21	3	42.7	41
490028	42	Harnaiya	16	16	11	44.4	42
490007	43	Bairghat	20	20	6	45.0	43
490047	44	Masina	25	25	0	46.0	44
490018	45	Dayanagar	17	17	11	46.3	45
490040	46	Madhuwani	22	22	5	47.3	46

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490045	47	Manpakadi	20	20	8	47.7	47
490067	48	SourahaPharsatikar	20	20	8	47.7	48
490059	49	Saljhundi	46	24	0	48.9	49
490051	50	Sakron Pakadi	18	18	13	50.8	50
490010	51	Bhaganpur	24	24	5	51.0	51
490011	52	Bisunpura	24	24	6	52.3	52
490003	53	Amuwa	20	20	14	55.9	53
490044	54	ManMateriya	20	20	14	55.9	54
490068	55	Suryapura	26	26	8	58.7	55
490025	56	Gajedi	26	28	6	59.2	56
490004	57	Asurena	21	21	16	60.4	57
490065	58	Silautiya	21	21	16	60.4	58
490009	59	Betakuiya	22	22	17	63.6	59
490013	60	Bogadi	22	22	17	63.6	60
490031	61	Jogada	30	30	7	64.7	61
490006	62	Bagauli	22	22	18	65.0	62
490001	63	Aama	30	30	8	66.1	63
490024	64	Farena	23	23	18	66.8	64
490055	65	Rayapur	23	23	18	66.8	65
490056	66	Roinihawa	24	24	19	70.0	66
490057	67	Rudrapur	30	30	12	71.5	67
490034	68	Karauta	27	27	22	79.7	68
490060	69	SameraMarchwar	27	27	22	79.7	69
490070	70	ThumhawaPiprahawa	27	27	22	79.7	70
490058	71	Sadi	37	37	12	84.4	71

Annex – 1.10: Priority order of VDCs and Municipalities by Incidence of WBDs

VDC_code	SN	VDC/Municipality	Incidence of diarrhoea (2066-67)	Incidence of diarrhoea ( 2067-68)	Incidence of diarrhoea (2068-69)	Incidence of diarrhoea (annual average-past three years)	Health service Institutions	Total household in VDC	Incidence of diarrhoea (%)
490001	1	Aama	864	1,170	2,008	4,042	1	1,435	0.47
490002	2	Anandaban	415	443	1,448	2,306	2	2,293	0.17
490003	3	Amuwa	520	434	485	1,439	1	2,045	0.12
490004	4	Asurena	1,542	1,292	1,707	4,541	1	994	0.76
490005	5	Bagaha	327	1,208	1,266	2,801	1	776	0.60
490006	6	Bagauli	659	572	1,181	2,412	1	1,409	0.29
490007	7	Bairghat	954	1,086	1,374	3,414	1	782	0.73
490008	8	Basantapur	911	1,409	1,379	3,699	1	1,222	0.50
490009	9	Betakuiya	1,681	2,021	3,201	6,903	1	599	1.92
490010	10	Bhaganpur	436	538	482	1,456	1	1,093	0.22
490011	11	Bisunpura	1,480	1,417	1,965	4,862	1	2,566	0.32
490012	12	Bodabar	1,152	1,103	1,775	4,030	1	1,275	0.53

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490013	13	Bogadi	1,138	1,813	2,679	5,630	1	1,049	0.89
490014	14	Butwal	1,661	2,746	5,143	9,550	8	19,888	0.08
490015	15	Chhipagada	784	1,017	1,008	2,809	1	872	0.54
490016	16	ChhotakiRamnagar	1,035	1,411	1,330	3,776	1	853	0.74
490017	17	Chilhiya	238	462	673	1,373	1	794	0.29
490018	18	Dayanagar	1,219	1,513	1,707	4,439	1	1,617	0.46
490019	19	Devdaha	596	2,859	3,770	7,225	2	5,499	0.22
490020	20	Dhakadhai	389	718	646	1,753	1	1,166	0.25
490021	21	Dhamauli	1,181	977	1,085	3,243	1	743	0.73
490022	22	Dudharakchhe	402	641	411	1,454	1	3,818	0.06
490023	23	Ekala	1,257	1,318	1,312	3,887	1	1,361	0.48
490024	24	Farena	769	738	1,008	2,515	1	695	0.60
490025	25	Gajedi	291	229	198	718	1	2,321	0.05
490026	26	Gangoliya	427	444	487	1,358	1	1,213	0.19
490027	27	Gonaha	643	917	1,256	2,816	1	1,680	0.28

400020	20	l	075	4 000	1.000	2.054		604	0.70
490028	28	Harnaiya	875	1,029	1,060	2,964	1	681	0.73
490029	29	HatiBangai	610	923	750	2,283	1	1,243	0.31
490030	30	HatiPharsatikar	633	485	597	1,715	1	826	0.35
490031	31	Jogada	519	793	1,132	2,444	1	910	0.45
490032	32	Kamahariya	752	1,135	984	2,871	1	1,845	0.26
490033	33	Karahiya	271	357	503	1,131	1	3,234	0.06
490034	34	Karauta	410	821	867	2,098	1	1,288	0.27
490035	35	Kerbani	395	548	771	1,714	1	2,964	0.10
490036	36	KhadawaBangai	546	603	667	1,816	1	1,140	0.27
490037	37	Khudabagar	405	475	702	1,582	1	643	0.41
490038	38	Lumbini	3,532	3,929	4,131	11,592	2	1,318	1.47
490039	39	Madhbaliya	303	308	427	1,038	1	1,723	0.10
490040	40	Madhuwani	276	814	808	1,898	1	1,031	0.31
490041	41	Mainahiya	1,143	1,757	1,464	4,364	1	1,228	0.59
490042	42	Majhagawa	1,369	1,006	1,237	3,612	1	734	0.82

490043	43	Makrahar	1,110	1,128	960	3,198	1	2,583	0.21
490044	44	ManMateriya	1,351	2,037	1,648	5,036	1	1,498	0.56
490045	45	Manpakadi	565	853	904	2,322	1	1,025	0.38
490046	46	Maryadpur	654	737	1,560	2,951	1	811	0.61
490047	47	Masina	1,651	2,015	2,057	5,723	1	704	1.35
490048	48	Motipur	909	746	822	2,477	1	3,626	0.11
490049	49	Padsari	522	635	753	1,910	1	1,632	0.20
490050	50	Pajarkatti	446	630	876	1,952	1	931	0.35
490051	51	PakadiSakron	1,782	2,288	1,873	5,943	1	731	1.35
490052	52	Parroha	455	630	948	2,033	1	4,775	0.07
490053	53	Patekhouli	472	702	810	1,984	1	896	0.37
490054	54	Pokharvindi	162	168	171	501	1	932	0.09
490055	55	Rayapur	1,231	1,770	1,798	4,799	1	1,222	0.65
490056	56	Roinihawa	589	1,726	1,870	4,185	1	747	0.93
490057	57	Rudrapur	992	722	1,004	2,718	1	4,490	0.10

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490067 490068 490069	68	Suryapura Tenuhawa	1,113 1,661	2,192	2,565 1,787	5,870 5,449	1	2,976 1,588	0.33
490066	66 67	Sipawa SourahaPharsatikar	330	605 404	605 375	1,877 1,109	1	1,054 1,674	0.30
490064 490065	65	Sikatahan Silautiya	720	2,020	988 2,194	2,369 4,934	1	1,712	0.23
490063	63	Bhairahawa	1,679	2,081	4,062	7,822	7	9,521	0.14
490062	62	Shankarnagar	561	649	604	1,814	1	4,150	0.07
490061	61	Semalar	294	291	289	874	1	1,884	0.08
490059 490060	59 60	Saljhundi SameraMarchwar	170	755 323	710 522	2,126 1,015	1	2,344 748	0.15
490058	58	Sadi	791	865	497	2,153	1	1,017	0.35

**Annex 2: Prioritizing VDCs and Municipalities by Composite Indicators** 

SN	VDC/MUNICIPALITY	I	II	III	IV	٧	VI	VII	VIII	IX	Score	Rank
1	PASCHHIM AMAWA	2	2	2	2	2	2	1	4	1	18	2
2	AMA	3	3	3	3	3	2	1	4	4	26	3B
3	ANANDABAN	2	1	2	2	2	1	1	2	1	14	2
4	ASURAINA	1	4	3	3	4	4	1	4	4	28	4
5	BAGAHA	3	2	3	3	3	3	1	4	4	26	3B
6	BAGAULI	3	4	3	3	4	4	1	4	4	30	4
7	BAIRGHAT	3	3	3	3	3	3	2	4	4	28	4
8	BASANTAPUR	4	4	3	3	4	3	1	3	4	29	4
9	BETKUIYA	3	2	3	2	2	3	3	4	4	26	3B
10	BHAGAWANPUR	1	3	2	3	3	3	1	3	3	22	3A
11	BISHNUPURA	3	3	3	3	4	4	1	3	4	28	4
12	BODABAR	3	3	3	3	2	3	3	4	4	28	4
13	BOGADI	3	1	3	3	4	3	1	4	4	26	3B
14	CHHIPAGADH	3	3	2	3	3	3	2	4	4	27	3B
15	CHHOTKI RAMNAGAR	3	3	3	3	3	3	3	3	4	28	4
16	CHILHIYA	3	2	3	2	2	3	1	4	1	21	2
17	DAYANAGAR	3	3	3	4	3	2	1	4	4	27	3B
18	DEWDAHA	3	1	3	2	1	2	2	2	1	17	2
19	DHAKADHAI	4	4	3	2	4	4	1	3	4	29	4
20	DHAMAULI	3	1	3	3	2	3	1	4	4	24	3A
21	EKALA	3	4	3	3	4	4	3	4	4	32	4
22	GAJEDI	4	4	3	3	2	3	3	3	4	29	4
23	GANGOBALIYA	2	4	2	3	3	3	1	3	4	25	3B
24	GONAHA	3	3	3	3	3	3	3	3	4	28	4
25	HARNAIYA	2	4	2	3	3	3	1	4	4	26	3B
26	HATIPHARSATIKAR	3	3	3	2	3	3	1	4	4	26	3B

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27	HATTI BANAGAI	4	2	2	3	2	3	4	3	4	27	3B
28	JOGADA	2	3	3	3	1	3	2	3	4	24	3A
29	KAMHARIYA	3	3	3	3	4	3	3	4	4	30	4
30	KARAHIYA	3	1	2	3	3	3	2	3	1	21	2
31	KARAUTA	4	3	3	2	3	2	1	4	4	26	3B
32	KERWANI	3	2	3	3	4	3	2	4	3	27	3B
33	KHADWA BANAGAI	3	3	3	3	3	3	3	4	4	29	4
34	KHUDABAGAR	1	1	2	2	3	3	1	3	4	20	2
35	LUMBINI	2	2	3	2	4	4	1	3	4	25	3B
36	MADHAWALIYA	2	3	3	2	2	3	1	4	1	21	2
37	MADHUBANI	3	3	3	2	4	3	3	4	4	29	4
38	MAINAHIYA	3	3	2	2	3	3	3	3	4	26	3B
39	MAJHAGAWA	3	2	3	3	4	2	2	4	4	27	3B
40	MAKRAHAR	3	3	3	2	3	2	2	4	3	25	3B
41	MANMATERIA	3	2	3	2	2	3	1	4	4	24	3A
42	MANPAKADI	3	3	3	3	2	3	3	4	4	28	4
43	MARYADPUR	3	3	3	4	3	2	1	4	4	27	3B
44	MASINA	3	3	3	3	4	3	4	4	4	31	4
45	MOTIPUR	4	1	3	3	1	3	1	2	2	20	2
46	PADASARI	3	2	3	3	2	2	1	4	3	23	3A
47	PAJARKATTI	4	4	3	2	4	3	3	4	4	31	4
48	PAKADI SAKRAUN	3	4	3	3	4	3	1	4	4	29	4
49	PARROHA	3	3	2	2	3	3	2	2	1	21	2
50	PATKHAULI	3	3	3	3	3	3	3	3	4	28	4
51	PHARENA	3	3	3	2	4	4	3	4	4	30	4
52	POKHARBHINDI	4	4	3	4	4	4	1	4	4	32	4
53	RAYAPUR	4	3	3	3	4	3	1	4	4	29	4
54	ROHINIHAWA	4	3	3	3	4	3	1	4	3	28	4

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55	DUDHARAKSHA	2	1	2	2	3	3	2	3	1	19	2
56	RUDRAPUR	4	3	4	3	3	3	4	4	3	31	4
57	SADI	1	4	2	2	4	4	1	3	4	25	3B
58	SALJHANDI	3	2	3	2	1	2	3	3	1	20	2
59	SAURAHA PHARSATIKAR	3	3	3	2	2	3	1	4	3	24	3A
60	SEMARA	2	4	3	4	4	4	2	4	4	31	4
61	SEMALAR	3	3	3	2	3	3	3	3	3	26	3B
62	SHANKARNAGAR	3	3	2	1	3	3	2	1	1	19	2
63	SIKTAHAN	4	4	3	4	1	3	4	4	4	31	4
64	SILAUTIYA	3	4	3	3	4	4	1	4	4	30	4
65	SIPAWA	4	1	3	3	4	3	2	4	4	28	4
66	SURYAPURA	1	3	2	2	4	3	1	3	4	23	3A
67	TENUHAWA	3	3	3	3	4	3	3	3	4	29	4
68	THUMHA PIPRAHAWA	4	2	3	3	3	1	1	4	4	25	3B
69	TIKULIGADH	2	1	2	2	1	3	1	3	1	16	2

## Indicators:

- I. HHs with food sufficiency less than 3 months
- II. Concentration of marginalized HHs
- III. Condition of primary schools
- IV. Condition of health posts
- V. Participation of women, Dalit & Janjati in planning, execution & decision-making
- VI. Prevalence of gender discrimination
- VII. Prevalence of vulnerable HHs
- VIII. Condition of pure drinking water
- IX. Condition of basic sanitation & hygiene

## **Annex 3: Detailed Programme of Action**

## DSWASHP, Rupandehi

## **Detailed Programme of Action**

SN	Sector/Programme/Activities	Unit	Quantity	Rate per Unit ('000NPR)	Estimated Budget Amount ('000NPR)
	Water Supply				
<u>1</u>	Planning	_			27,600
1.1	V/MWASH Plan Preparation	VDC/M	66	400	26,400
1.2	V/MWASH Plan Updating	VDC/M	5	150	750
1.3	Training on V/MWASH Plan Preparation and Updating	Event	2	225	450
<u>2</u>	Water Facility Improvement				305,460
2.1	Establishment of New Schemes (Gravity and Small/Medium Overhead Schemes)	нн	4,166	30	124,980
2.2	Establishment of New Schemes (Shallow Tubewells/Handpump Schemes)	НН	5,000	7	33,000
2.3	Establishment of New Schemes at schools (Shallow Tubewells/Handpump Schemes)	School	82	150	12,300
2.4	Establishment of New Schemes at Institutions (Shallow Tubewells/Handpump Schemes)	Institution	161	50	8,050
2.5	Improvement of Piped System WS Schemes	НН	10,240	12	122,880

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2.6	Improvement of WS Schemes at Schools (Handpumps)	School	85	50	4,250
	Hygiene and Sanitation				
<u>3</u>	ODF Declaration				359,692
3.1	Household Toilet Construction	НН	71,964	3	215,892
3.2	School Toilet Construction	School	86	400	34,400
3.3	Institutional Toilet Construction	Institution	156	250	39,000
3.4	Public Toilet Construction	Number	176	400	70,400
<u>4</u>	Post ODF Activities				21,300
4.1	Post ODF Sensitization Activities (on Complete Permanent Toilets, Proper use of Toilets, Hand Washing, HH Cleanliness, Water Purification Behavior etc.)	VDC/M	71	300	21,300
<u>5</u>	Arsenic Risk Mitigation				8,264
5.1	Sensitization Activities (on Water Testing, Alternate Water Source in Emergency-upto 50 PPB etc.)	НН	8,264	1	8,264
<u>6</u>	Solid and Liquid Waste Management				10,800
6.1	Waste Management Plan Preparation at District Level	District	1	800	800
6.2	Implementation of Waste Management Plan (Piloting)	Number	2	5,000	10,000
	Water Safety Plan (WSP)				
<u>7</u>	Implementation of Water Safety Plan				21,300
7.1	Post Construction Activities of WS Schemes (Gravity, Overhead, Shallo Tubewells/Handpumps etc)	VDC/M	71	150	10,650

7.2	Implementation of WSP (Piped System, Shallow Tubewells/Handpumps, Dugwells etc.)	VDC/M	71	50	3,550				
7.3	Establishment of Basket Funds in VDC/Municipalities for the Monitoring of WSP)	VDC/M	71	50	3,550				
7.4	Water Testing Facility at VDCs/Municipalities	VDC/M	71	50	3,550				
Climate Change and Disaster									
<u>8</u>	Climate Change Adaptability								
8.1	LAPA Preparation at District Level	District	1	300	300				
8.2	CAPA Preparation at VDC/Municipality Level	VDC/M	71	100	7,100				
8.3	Study on Underground Water Depletion, Water Quality and Problem etc.	District	1	500	500				
8.4	Water Source Protection (Point Source Improvement)	Number	10	50	500				
8.5	Pit/Fertilizer Toilet Construction (Piloting)	Number	200	5	1,000				
	Capacity Enhancing Activities								
<u>9</u>	Human Resource Development				1,167				
9.1	Training at District Level	Number	250	2	500				
9.2	Training at VDC Level	Number	142	2	284				
9.3	Training at Community Level	Number	1,278	0.3	383				
<u>10</u>	<u>Institutional Development</u>								

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					7,600	
10.1	DWASHCC Strengthening	Year	5	100	500	
10.2	V/MWASHCC Strengthening	VDC/M	71	100	7,100	
<u>11</u>	11 DSWASHP Monitoring and Updating					
11.1	DSWASHP Monitoring	Number	20	10	200	
11.2	DSWASHP Updating	Year	4	100	400	
Total Estimated Budget for 5 Years ('000 NPR)						