

Proposal on Dumja Water Supply Rehabilitation Project



Submitted By
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Project Summary

1. Project Identification

Name of the Project	: Dumja Water Supply Rehabilitation Project
Location/ Community	: Dumja, Malanga
Sunkoshi Rural Council	: Sunkoshi
Ward Covered	: 1 & 2
District	: Sindhuli

2. Source Information

Name of Sources	: Ghatte Khola (Wodrekot)
Type Sources	: Stream
Present Discharge of Sources	: 12.00 lps
Safe Yield Assumed	: 4.00 lps
Type of the Project	: Gravity Flow System
Location of Source	: Sunkoshi - 2, Sindhuli

3. Cost of the Project

Total Cost of the Project (In NRs.)	: 6430867.00
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4. Population Served

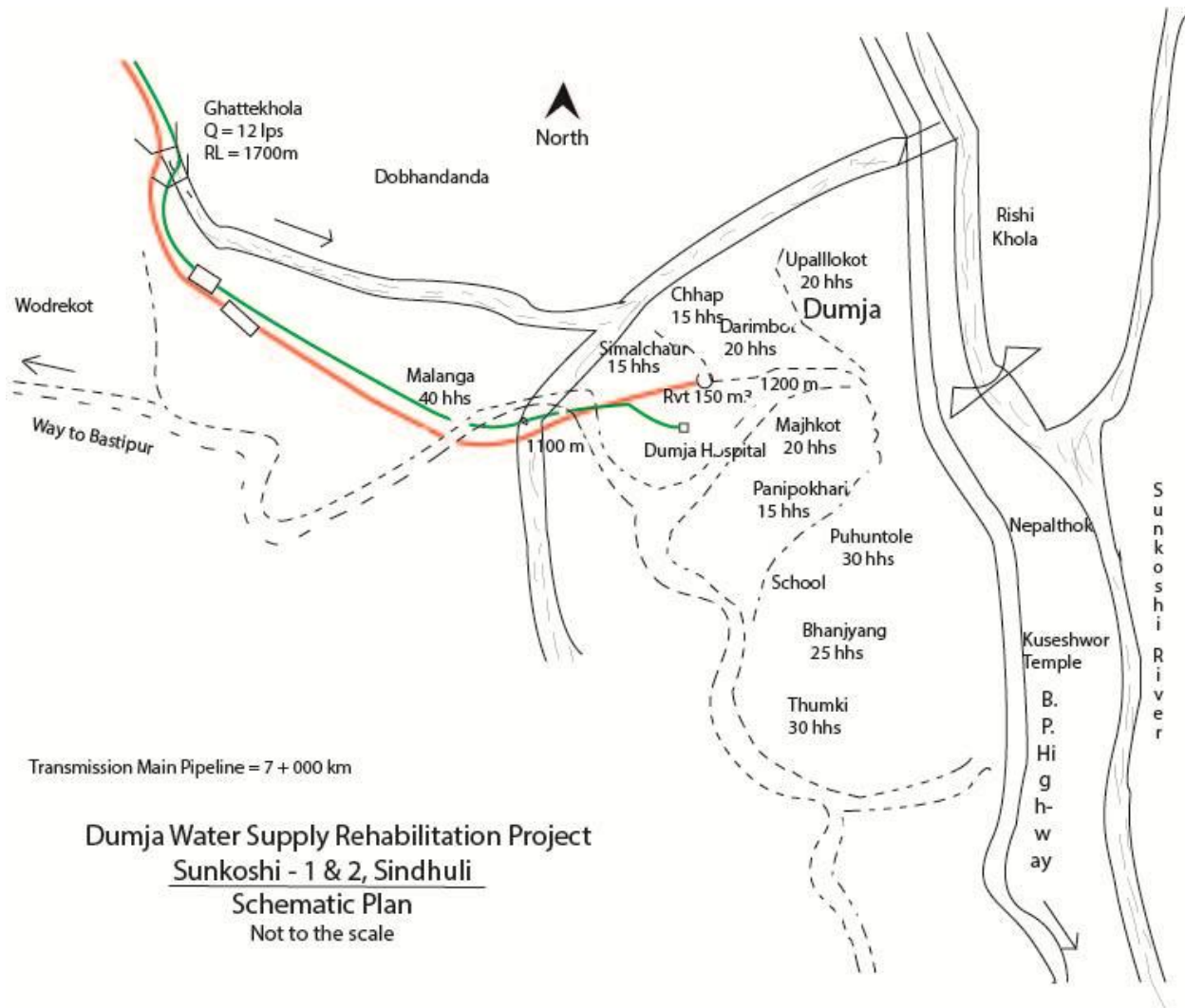
Number of Households	: 230	
Present Population	: 1200	
Present Population served/day (Hospital)	: 150	
Present Population (Households & Hospital)	: 1350	
Design Population (Households & Hospital)	: 1680	:
Design Period (20 year)	: 20	

5. Structures

Intake Protection Work	: 1
Flood Diversion Escape Drain Upstream	: 1
Stream Intake	: 1
Sedimentation Tank	: 1
Foot Trail (Approach Path - Intake)	: 0+300 KM
Interruption Chamber	: 5
Washout Chamber	: 1
Ferro Cement Reservoir Tank (10M3)	: 1
Air Valve Chamber	: 3
Anchor Blocks	: 34
Public Tap Stands (Hospital Complex)	: 10

6. Pipe Lengths

Main Transmission Line	: 7 + 000 KM.
Distribution Line (Gravity)	: 0+000 KM.



Introduction:

Dumja is located in Sunkoshi Rural Council, Ward No. 1 & 2 (Kusheshwor Dumja - 4 & 7), Sindhuli District located at the distance of 60 KM from Dhulikhel, the District Head Quarter and 90 Km from Kathmandu, the Capital City of Nepal. The altitude of the location of Dumja village is around 900 m.

This mixed ethnic community comprised of Brahmin, Chhetri, Tamang, Newar, Magar and Dalit (popularly known as lower caste). Besides, there are Brahmins, Chhetri, Newars and Dalit people live in the locality. In addition, there is a Health Center under construction phase in Financial Assistance of Dhulikhel hospital, the renowned community hospital in Nepal.

There is a Fair Weather Road Connectivity, Telephone and National Electric Grid Line Facilities in the community. And, there is a Secondary School nearby the Health Center.



Profession of the Local people:

The main occupation of the local peoples is Agriculture and Livestock Rearing. The economic condition of the local people is not satisfactory as there is very limited way of income especially subsistence agriculture for most of the people. Majority of youth force have a tendency to go for foreign jobs in Arabian countries, Malaysia and other countries.

Present Water Supply Situation:

There is an Existing Drinking Water Supply System built by the government of Nepal sometimes in 1990. The water source located at the distance of 7+000 KM from the community. The local people have access to safe drinking water through more than 32 Public Tap stands from 150 cubic meter capacity Stone Masonry Reservoir Tank. And, this water system has repaired by the District water Supply and Sanitation Division, Sindhuli 5 years back. And most of the system hardly works. The situation became bad to worse when flood damaged most of the old water system which seems to be irreparable according to the recent study by expert. Currently, people

are using temporary system but still have to face acute water shortage problem despite having good water source.



Proposed Water Sources:

The water source is located in the shrub land/forest area. The water source of this project is very encouraging. The discharge of water is quite high and reliable that is sufficient for drinking purpose. As per the local residents, water is very neat and clean and drinkable. There are no any complaints on quality of water so far. There are no any human settlements, farmland and pastures. Thus, there are no any chances of contamination of water source all except possibility of flood damages. The Details of the proposed source is as follows.

Source Name:	Ghatte Khola (Wodrekot)
Source Type:	Stream
Altitude	1400.00 m
Discharge Measured:	12.00 Liter/sec
Safe Yield:	4.00 Lps

Slope Distance:	7+000 KM
Vertical Height Difference	500 m (Approximately)
Date of Measured:	November 10, 2017

The discharge capacity of the water is found to be plenty to fulfill the water demand of the community and Health Center.



Potential Technical, Financial and Social Difficulties:

There is no any dispute on water rights on water source. As this scheme is built by the government of Nepal it will be better to have consent from District Water Supply Division Office, Sindhuli before implementation of proposed Rehabilitation of the scheme. Working in coordination with Government Agency help make conducive environment for advance further implementation of proposed Water Supply Project in the community. The project is technically, economically, socially and environmentally feasible. The local Community person in collaboration with the Health Center is responsible for successful Implementation, operation and maintenance of the proposed project.

Project Goal:

Uplift the socio- economic condition of the people of the local rural community through provision of safe and reliable water system in the community.

Project Objectives:

- To repair and rehabilitate the existing water supply scheme.
- To provide safe and reliable water supply in the community.
- To create supportive environment to run the reliable health service regularly.
- To improve health, hygiene and environmental sanitation in the community.

Specific Activities:

- Repair and Rehabilitation of the Existing Water System
- Access to safe and reliable water supply in community and Health Center.
- Capacity Building and Awareness Raising Activities in the community.

Methods/ Approaches:

Rotary Club of Dhulikhel will manage the Implementation of Repair and Rehabilitation Work in cooperation and close coordination with local government and line agencies.

Duration of the Project:

The Project Period will be Twelve Month for Repair and Rehabilitation of Water Supply Project.

Budget

Sn	Particular	Rate	Quantity	Amount (NRs)	Remarks
1	New Water System Installation	7481061	1	7481061	As per engineering estimation
2	Monitoring Cost	25000	5	125000	
3	Rotary Signage	50000	1	50000	
4	Training on water & sanitation	50000	3	150000	

5	Contingency Due to Dollar Fluctuation	20000	1	20000	
	Total Project Cost			7826061	
	Total Project Cost (USD)			72464	1 USD:NRs.108