

# Waterline Okhle

**Version 3**  
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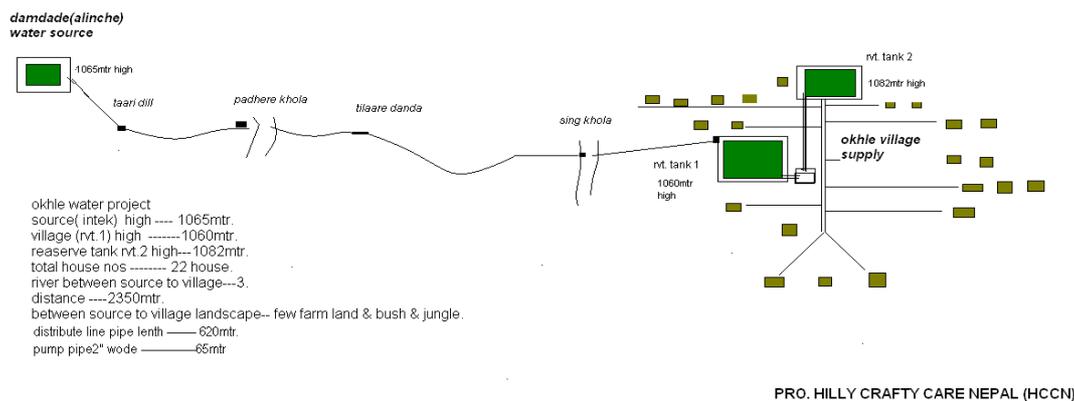
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# Waterline in Okhle

## Overview

The plan is to build a new drinking water pipeline in the village area of Okhle (Gairithock) in Nepal. The waterline will start on the waterfall „Damdare Khola“ about 3 kilometres away from the village area and will bring enough water the holy year for about 175 people and water for there own animals and fields.



## Cooperation

This project is cooperation between the “Hilly Crafty Care Nepal Social Club” (H.C.C.N.) in Okhle and the German social club „Hanseatische Nepalhilfe e. V.“

## Responsible persons / social clubs

### Social club Okhle

temporary post address in Kathmandu

Two brothers treks and expedition  
post box 2185  
Kathmandu Nepal

„Hilly Crafty Care Nepal Social Club“ social club are the follow persons are responsible for this project.

### Project manager in Okhle is Ramesh Bhatta

Devendra Amgain email „raj\_sn32002@yahoo.com”  
Ramesh Bhatta email “okhle7@gmail.com”  
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social club Germany

Hanseatische Nepalhilfe e. V.  
Seydeckreihe 3  
22043 Hamburg  
Germany

„Hanseatische Nepalhilfe e. V.“ are the follow persons are responsible for this project.

Dieter Otto dieter@hansaflug.de  
Claudia Otto claudi1@googlemail.com

## Waterline details

The waterline will start on a waterfall and will follow a distance of about 3 kilometres. In the end of the waterline is a water router box. From this point will leave the single water pipes to the single houses. The waterline will transport in average about 8640 litre water per day to the main water router box. The waterline is a plastic waterline and will **lay on the ground**. The estimate building time for the waterline is 65 days.

## Preparation

Mr. Hem Bahadur Basnet was the person who made the cost and building calculation for the waterline. He is a engineer with experience for buildings and waterlines. He **checked personally** the local area in Gairithock.

## General calculation / details

The waterline will support 25 house. In each house lives average 7 persons. In the sum 175 persons will receive drink water access. Each persons will receive about 60 litre drinking water per day. In each house stay about 3 animals, whose receive also water. Each animal have also access to 20 litre water each day. In case that there is more water we will support some small field in the near of the houses. In one day (24h) the waterfall will support about 8640 litre for all 25 houses.

## Time schedule

The plan is to build the waterline in one step. Thats mean from the beginning to the end there will no breaks in the building phase.

## particular worksheet

	duration
intake construction	5 days
pipe lining	30 days
collection tank	20 days
TAP FITTING	5 days
total	60 days

## Cost calculation construction

This cost calculation was made by Hem Bahadur Basnet in the year 2008 and updated 2011. The total amount for the construction will split. Each social club will pay a special part of the construction. After the construction the “nepal” social club will organise the supporting of the waterline.

## Total price

The Hanseatische Nepalhilfe e. V. Will pay 75 % = 924,750.00 Rs about **8,620.00 €**

The HCCN will pay 25 % = 308,250.00 Rs about **2,870.00 €**

INTAKE purchase	R s.66,116.20	about	620,00 €
pipe lining	R s.445,371.68	about	4.150,00 €
RVT 1	R s.360,756.15	about	3.360,00 €
RVT 2	R s.360,756.15	about	3.360,00 €
<b>Total sum</b>	<b>R s.1,233,000.18</b>	about	<b>11.490,00 €</b>

# Intake construction

S.N	particulars	No	Length	Breath	Height	Quantity
	Earth work excavation in foundation					
1	intake	1	7.5	0.45	0.1	3.37cm
2	stone soling	2	7.5	0.45	0.15	0.50cm
3	R.C.C. work	1	7.5	0.3	0.5	2.50cm
4	Bolder stone filling	1	2.5	2.5	0.4	2.50 cm

## A) Material

S.N	particulars	No	price	Total price
1	cement	15 bags	Rs. 750	Rs. 11,700.00
2	Aggregate	1,5 cm <sup>3</sup>	Rs. 4,000.00	Rs. 6,000.00
3	Sand	1,5 cm <sup>3</sup>	Rs. 3,500.00	Rs. 5,250.00
4	Rod	50 kg	Rs. 82.85	Rs. 4,142.50
5	tax	13 % VAT	Rs. 3,522.00	Rs. 3,522.00
6	total			Rs. 27,092.50

## B) Manpower

S.N	particulars	No	price	Total price
1	Skilled labor	10	Rs. 700	Rs. 7,000.00
2	Unskilled labor	35	Rs. 350.00	Rs. 8,750.00
3	Total labor cost			Rs. 15,750.00

## C) Feeting- getralb, nipple

S.N	particulars	No	price	Total price
1	Socket-stciner		Rs. 7,000.00	Rs. 7,000.00

## D) Transportation

S.N	particulars	No	price	Total price
1	Transportation		Rs. 7,000.00	Rs. 7,000.00

## E) Engineer charge

S.N	particulars	Total price
1	Subtotal	Rs. 56,842.50
2	Engineer charge 4 %	Rs. 2,273.70
3	Sum	Rs. 66,116.20

Grand total price for intake Rs 66,116.20

## *pipe lining*

S.N	particulars	No	Length	Breath	Height	Quantity
1	Earth work excavation in pipe line	1	2,350 m	0.45	0.6	634.5
2	pipe lining one job	1	2,350 m			
3	Earth filling	1	250 m	0.45	0.6	634.5

## A) Material

S.N	particulars	Total price
1	HDP pipe 10kg cm sq 25mm*1800*75=	Rs. 135,000.00
2	HDP pipe 10 kg cm sq 20mm*550*65 =	Rs. 35,750.00
3	HDP pie 10 cm sq 16mm *500*45=	Rs. 22,500.00
4	G.I. pipe= 120*200=	Rs. 24,000.00
5	Subtotal	Rs. 217,250.00
6	13 % vat (tax)	Rs. 28,242.00
7	Materials total	Rs. 245,492.00

## B) Manpower

S.N	particulars	Total price
1	Skill labor =30 nos*900=	Rs. 27,000.00
2	Unskilled labor=445 nos *350=	Rs. 155,750.00
3	Total	Rs. 182,750.00

## C) Engineer charge

S.N	particulars	Total price
1	Subtotal	Rs. 428,242.00
2	Engineer charge 4 %	Rs. 17,129.68

**Total pipe lining  
Rs. 445,371.68**

## RVT 1

S.N.	Particulars	No	length	Breath	height	Quantity
1	Earth excavation work	1	4	4	2	32cm
	Work in R.V.T.		1.5	1.5	2	4.5 cm
2	Stone soling in foundation	1	4	4	0.15	2.40 cm
3	R.C.C. work in foundation	1	4	4	0.15	2.40 cm
4	Reinforcement 1% Stone masonry work in	1	2.40*1%7850/100			188.4 kg
5	Wall -long wall	-2	4	0.45	2.5	9
	Short – wall	2	3.1	0.45	2.5	6.97
6	R.C.C. work for slab	1	4.2	4.2	0.13	2.29cm 179.76k
7	Reinforcement		2.29*7850/100			g
8	plaster work in bed	1	3	3		9
	plaster work in wall	2*2	3		2.2	26.4
	outer side punning 1:1cement and sand as same as item 10.7	2*2	4		0.5	8
9						43.40m^

## A) Material

S.N	particulars	No	price	Total price
1	cement	92 bags	Rs. 780	Rs. 71,760.00
2	Aggregate	5 cm <sup>3</sup>	Rs. 4,000.00	Rs. 20,000.00
3	Sand	13 m <sup>3</sup>	Rs. 3,500.00	Rs. 45,500.00
4	Rod	368.16 kg	Rs. 82.85	Rs. 30,502.00
5	Stone	17.56 m <sup>3</sup>	Rs. 2,800.00	Rs. 49,168.00
6	tax	13 % VAT		Rs. 28,200.00
7	total			Rs. 216,930.00

## B) Manpower

S.N	particulars	No	price	Total price
1	Skilled labor	30	Rs. 700	Rs. 21,000.00
2	Unskilled labor	45	Rs. 350.00	Rs. 15,750.00
3	Total labor cost			Rs. 36,750.00

## C) Feeting- getralb, nipple

S.N	particulars	price	Total price
1	Socket-stciner	Rs. 15,000.00	Rs. 15,000.00

## D) Transportation

S.N	particulars	Total price
1	Transportation	Rs. 50,000.00

## E) Engineer charge

S.N	particulars	Total price
1	Subtotal	Rs. 346,880.00

**Total RVT 1**  
**Rs. 360,756.00**

## RVT 2

S.N.	Particulars	No	length	Breath	height	Quantity
1	Earth excavation work	1	4	4	2	32cm
	Work in R.V.T.		1.5	1.5	2	4.5 cm
2	Stone soling in foundation	1	4	4	0.15	2.40 cm
3	R.C.C. work in foundation	1	4	4	0.15	2.40 cm
4	Reinforcement 1% Stone masonry work	1	2.40*1%7850/100			188.4 kg
5	in					
	Wall -long wall	-2	4	0.45	2.5	9
	Short – wall	2	3.1	0.45	2.5	6.97
6	R.C.C. work for slab	1	4.2	4.2	0.13	2.29cm 179.76k
7	Reinforcement		2.29*7850/100			g
8	plaster work in bed	1	3	3		9

plaster work in wall	2*2	3	2.2	26.4
outer side	2*2	4	0.5	8
punning 1:1cement and sand as same as 9 item 10.7				43.40m^

### A) Material

S.N	particulars	No	price	Total price
1	cement	92 bags	Rs. 780	Rs. 71,760.00
2	Aggregate	5 cm <sup>3</sup>	Rs. 4,000.00	Rs. 20,000.00
3	Sand	13 m <sup>3</sup>	Rs. 3,500.00	Rs. 45,500.00
4	Rod	368.16 kg	Rs. 82.85	Rs. 30,502.00
5	Stone	17.56 m <sup>3</sup>	Rs. 2,800.00	Rs. 49,168.00
6	tax	13 % VAT		Rs. 28,200.00
7	total			Rs. 216,930.00

### B) Manpower

S.N	particulars	No	price	Total price
1	Skilled labor	30	Rs. 700	Rs. 21,000.00
2	Unskilled labor	45	Rs. 350.00	Rs. 15,750.00
3	Total labor cost			Rs. 36,750.00

### C) Feeting- getralb, nipple

S.N	particulars	price	Total price
1	Socket-stciner	Rs. 15,000.00	Rs. 15,000.00

### D) Transportation

S.N	particulars	Total price
1	Transportation	Rs. 50,000.00

### E) Engineer charge

S.N	particulars	Total price
1	Subtotal	Rs. 346,880.00
2	Engineer charge 4 %	Rs. 13,875.00

**Total RVT 2**  
**Rs. 360,756.00**

## **Waterline support after construction from the waterline**

The HCCN social club will support the waterline after construction. The idea is that the drinking water from the waterline is for free. This waterline will not to be a commercial waterline.