

Maternal & Child Health Initiatives through Drinking Water & Sanitation Program

Interim Progress Report

(Jan 2018 - Jun 2018)

General Background of the Project

This program has been implemented by Tamakoshi Sewa Samiti (TSS), a non-governmental organization based in Ramechhap district of Nepal. World Neighbours Canada Society and DFATD-Global Affairs Canada have jointly funded to implement this project.

Project Period & Funding Amount

The project period has covered a total of 49 months effective from 1st March 2016 to 31st March, 2020. The total approved budget is CAD 394,004 (Nepalese Rupees 28,762,252).

Purpose of the Program

This project will focus on improving the health of mothers, young children and infants in Nepal by providing year-round access to drinking water and sanitary toilets to targeted communities of Ramechhap District.

Immediate Outcome

The immediate outcome of the program is to increase equitable use of potable drinking water and healthy environments by women, men, girls & boys. For this, the program has aimed to achieve the following two major results.

1. It will provide 21 gravity-flow water systems that will deliver clean water year-round to approximately 525 families through public tap stands by the end of the project period.
2. It will focus on improving the health and sanitation of approximately 4,200 families by facilitating the provision of sealed, hygienic toilet systems next to their houses by the end of the project period.

Action Plan

Originally, the following target was planned to implement program, however it has revised according district situation and implementation time-frame. The revised figures are mentioned in the bracket.

	Description	2015/16	2016/17	2017/18	2018/19	2019/20	Total
1.	No. of Drinking Water Systems	2 (1)	5 (2)	5 (2)	5 (9)	4 (7)	21
	No. of families in Drinking Water	50	125	125	125	100	525
2.	No. of toilet construction/families	300 (X)	1,000 (2,100)	1,000 (2,100)	1,000 (X)	900 (X)	4,200

Progress & Achievement (Jan 2018 - Jun 2018)

1. Drinking Water Construction:

As per the revised action plan, it was expected to construct two new small gravity-fed drinking water systems for a total of 50 households during FY 2017/18. However, we have selected one bigger system with the total 80 households, which is equivalent to more than 3 small DW systems. This system also includes one government secondary school and four local government offices.

The first agreement was made between TSS and Sunapati Rural Municipality in Feb 2018, in the presence of Chairman of the Rural Municipality to jointly implement the DW system. It was delayed to start the work due to technical fund disbursement mechanism by Rural Municipality. The second agreement has been made between TSS and Sunapati Rural Municipality in April 2018 among the presence of Rural Municipality Chairman, Rural Municipality Executive Officer, Rural Municipality Accountant, Water User Group Chairman, Ward Office Chairman. During the second agreement, the name of the DW system was also changed to "Swara Khola Tallo Muhan Puchhar Tol Swasthya Chowki Danda Mathi Purano Tanki & Kama DW system", instead of previous Hiledevi DW system. In short, we have men Swara Khola Tallo Muhan to Kama DW system. The new name of the system has incorporated the name of all areas who are benefitted by the system.

The detail beneficiaries breakdown and the gender disaggregated data of the system is as follows:

Name of System : Swara Khola Tallo Muhan to Kama Drinking Water System
Location : Sunapati Rural Municipality, Ward # 3, Hiledevi, Ramechhap

	Beneficiaries	HH	Population		
			Female	Male	Total
1.	Individual Households	80	172	174	346
2.	Pashupati Secondary School	1	210	255	465
3.	Post Office	1	0	0	3
4.	Health Post	1	0	0	7
5.	Ward Office	1	0	0	5
6.	Rural Municipality Office	1	0	0	10
	Total	85	382	429	836

Gender Disaggregated Data

	Name of Scheme	All age group			Age		Age		Age		Age		Age	
		Total Population			00-04		05-09		10-14		15-19		19+	
		F	M	T	F	M	F	M	F	M	F	M	F	M
1.	Hiledevi DW Scheme	172	174	346	12	14	17	20	22	29	24	21	97	91

A detail feasibility study has been conducted by our technical persons. The final design, estimates & drawing report has been also prepared by a certified govt. Engineer in Jan 2018. Due to the big system and large number of beneficiaries, the total estimated cost has become Rs. 3,964,481 (equivalent to CAD 48,948). This cost includes the cash contribution from TSS/WN Canada and in-kind contribution from the beneficiary households. The breakdown of the estimated cost is below.

FINANCIAL INFORMATION	Construction Cost		Per Capita Cost	
	Total (Rs.)	Percent	Total (Rs.)	Percent
WN & Local Government Cash Contribution	2,611,375	66%	3,124	66%
Community In-Kind Contribution	1,353,107	34%	1,619	34%
Total Construction Cost	3,964,481	100%	4,742	100%

The detail of Scheme Summary Sheet and Hardware Cost Summary Sheet are attached in this report as annexes.

Our available budget for 2 systems is Rs. 1,200,000 for Fiscal Year 2017/18 (Rs. 600,000 for each system). As this system is bigger than equivalent to 3 small systems, we have proposed to contribute Rs. 1,500,000 and the rest money whatever comes in actual basis has to be covered by local government. As per the second agreement, it has been agreed that Sunapati Rural Municipality Office will bear the cost on purchase all polythene pipe and TSS will contribute for other all other construction materials, transportation, skill labour & sand transportation etc. out of the total estimated cash contribution of Rs. 2,611,375.

As per the commitment of the local government, we have made the purchase order of all required polythene pipe as per the design estimate. All the pipes have been supplied and transported in Hiledevi. The total cost of the pipe has been Rs. 1,044,062. It was estimated the total cost of pipe Rs. 10,34,511 when the cost estimation was done in Jan 2018. However, the price was increased at the time of actual purchase in April end despite the especial discount from the pipe company. This money has been paid by the local government through water user committee. The invoices of pipes and payment receipt are attached in this report. TSS has also purchased other construction materials and transported to the community.

The construction work in Hiledevi was started just before the monsoon. It was decided by the user group that the construction of intake at source and pipeline work from source to reservoir tank will be only completed before the monsoon. This work has been completed now. The remaining works such as construction of reservoir tank, pipeline work from reservoir to public tap and the construction of public tap will be completed by the end of October. The user groups did want to take the risk of any construction in rainy season. In addition, the users are also busy in farming activities during this season. The photos of completed works are attached in this report.

A nine-member Water User Committee (with 3 female) has been formed as follows:

1. Mr. Tej Tamang - Chairman
2. Ms. Sita Maya Moktan - Treasurer
3. Mr. Prati Kumar Khadka - Secretary
4. Ms. Nira Khatri Karki - Member
5. Mr. Tej Bahadur Moktan - Member
6. Ms. Jyomo Tamang - Member
7. Mr. Ramesh Pandey - Member
8. Mr. Sujun Ghising - Member
9. Mr. Ram Hari Karki - Member

A water quality test has been also done under of Swara Khola water source. The water analysis report is attached in this report.

2. Toilet Promotion Program :

The Government of Nepal has adopted a National Hygiene and Sanitation Master Plan in 2011. The goal of the Master Plan is to attain universal access to improved sanitation by 2017 for better hygiene, health and environment. To achieve the goal, the milestones are set as follow:

Milestone 1 : Toilet coverage of 60% of the total population by 2012/13

Milestone 2 : Toilet coverage of 80% of the total population by 2014/15

Milestone 3 : Universal toilet coverage by 2016/17

In Ramechhap district, Drinking Water & Sanitation Division Office, a government agency, is responsible to achieve above target through collaboration with various social organizations working in the district. There is also District Water, Sanitation and Hygiene Coordination Committee (DWASH-CC) headed by Local Development Officer. Being TSS is also involved on water and sanitation initiatives, it is also the member organization of the DWASH-CC. In order to avoid duplication work, more active NGOs and ODF target, the DWASH-CC has allocated the communities as per the available program by each NGO.

TSS aims to support 4,200 families to construct household toilet under the WNCS/DFATD-GAC project. In April 2016, on the basis of this target and vacant villages in the district, TSS had proposed to work in 5 places (Manthali Municipality, Dimipokhari VDC, Pinkhuri VDC, Hiledevi VDC and Deurali VDC) and the DWASH-CC had adopted our proposal. Since then, we had focused in these five places to promote households toilet construction and fulfill the national goal of ODF zones.

In March 2017, the government had announced the new local level structure. According to which, there are a total of 744 local bodies in the country (replacing the older structure of local level). In Ramechhap, the announcement has replaced former 2 municipalities and 45 VDCs into a total 8 local bodies - 2 Municipalities & 8 Rural Municipalities (village councils). It has merged all former VDCs into the new structure. Previously, all former VDCs used to have 9 wards in each VDC. After merging into municipality and rural municipality, they have now become one individual ward. However, the population coverage is same as before.

TSS toilet promotion & Open Defecation Free (ODF) zone declaration program

The fundamental aim of the Hygiene & Sanitation Master Plan is to streamline and synchronize the scattered and uneven efforts of the stakeholders for a common national goal. Total sanitation approach shall be the basic norm to promote hygiene and sanitation in a given area with access to the improved and sustainable toilet for every household and institution. ODF must be the basic minimum and first criteria of total sanitation. Therefore, DWASH-CC body is more active in the district to fulfill the national goal of sanitation for all. After the devastating earthquake, a number of NGOs are active in the district and working on WASH sector as well.

During the implementation of the current project, we had to select the communities where other NGOs were not working for same kind of activity (toilet pan-pipe distribution). Therefore, we proposed the above five communities and also approved by the DWASH-CC. The communities are divided into various NGOs to avoid duplication of work, benefit more families and timely achieve the national goal of universal access to sanitation.

ODF Achievement in Ramechhap in Ramechhap

In June 10, 2018 Ramechhap has been officially declared ODF free district. Before this event, our toilet coverage places such as Manthali Municipality, Hiledevi, Dimipokhari, Pinkhuri and Deurali were separately declared as ODF free zones. In 2017, four places Hiledevi, Dimipokhari, Pinkhuri and Deurali were declared as ODF free zones. Manthali Municipality was declared in March 2018.

Originally, it was planned to support 4,200 families to construct household toilets by the end of March 2020. However, we have achieved 4,012 by March 2018, slightly less than the target. It was because we were only worked in selected 5 places as approved by DWASH-CC.

As the district is declared as ODF and we have almost achieved the target, we will not work further in the toilet program. Our focus will be entirely on drinking water, as the target number is increased for upcoming two fiscal years, due to the reduced target of DW in previous two years.

Toilet Construction Update by March 2018

Originally, it was proposed to support 4,200 individual households for the construction of water-sealed toilets in between the project period from March 2016-March 2020. However, this plan was revised and target was set to achieve by Dec 2017. In order to facilitate national master plan of universal sanitation by 2017, we required to shift toilet target within two year and reduced the DW target in the first two years of project period. With the consultation with WN Canada, the yearly budget was also utilized accordingly without any reflecting the total budget for four years.

The breakdown of total completed toilet under TSS coverage is as follows:

Community	Manthali	Deurali	Dimipokhari	Hiledevi	Pinkhuri	Total
Toilet Constructed HHs	2,231	486	470	448	377	4,012
Both Sex Population	8,368	2,254	1,989	1,920	1,830	16,361
-Male	4,248	1,004	902	887	795	7,836
-Female	4,120	1,250	1,087	1,033	1,035	8,525
Age 00-04	611	197	133	143	151	1,235
-Male	308	100	71	71	63	613
-Female	303	97	62	72	88	622
Age 05-09	888	273	185	201	202	1,749
-Male	486	135	89	100	104	914
-Female	402	138	96	101	98	835
Age 10-14	1,078	351	303	278	286	2,296
-Male	565	164	146	146	119	1,140
-Female	513	187	157	132	167	1,156
Age 15-19	1,006	277	256	252	218	2,009
-Male	486	130	125	106	109	956
-Female	520	147	131	146	109	1,053

3. Financial Situation (March 2016 - June 2018)

The following is the financial situation (budget vs. expenditure) by the end of June 2018.

	Budget Headings	A/C Code	Exp. upto previous Reporting	Expense current Reporting	Expense upto June 2018	Total Budget (NRS.)	Balance Budget (NRS.)
1	Personnel						
1.1	Program Coordinator/Supervisor	A 1.1	662,640	179,468	842,108	1,607,376	765,268
1.2	Technical Assistants	A 1.2	1,106,691	327,540	1,434,231	2,933,461	1,499,230
1.3	Logistic Organizer	A 1.3	276,100	74,780	350,880	669,740	318,860
1.4	Field Account	A 1.4	331,320	89,732	421,052	803,688	382,636
	Sub Total		2,376,751	671,520	3,048,271	6,014,265	2,965,994
	Local Subcontractors						
1.5	Independent Final Evaluation	A 1.5	0	0	0	150,000	150,000
	Sub Total		0	0	0	150,000	150,000
2	Materials & Construction						
2.1	Drinking water program	A 2.1	1,374,753	334,150	1,708,903	10,424,560	8,715,657
2.2	Latrine program	A 2.2	4,639,272	1,978,900	6,618,172	7,362,166	743,994
	Sub Total		6,014,025	2,313,050	8,327,075	17,786,726	9,459,651
3	Travel & Monitoring						
3.1	Field Travel by Staff	A 3.1	275,550	69,175	344,725	1,039,399	694,674
3.2	Supervision, Monitoring & Transportation	A 3.2	241,203	106,270	347,473	753,531	406,058
	Sub Total		516,753	175,445	692,198	1,792,930	1,100,732
4	Trainings						
4.1	O & M Training /Post-Construction Training	A 4.1	20,855	0	20,855	244,977	224,122
4.2	Hygiene & Sanitation Training	A 4.2	93,920	73,800	167,720	452,590	284,870
4.3	Gender Equality & Development Training	A 4.3	94,385	0	94,385	87,000	-7,385
	Sub Total		209,160	73,800	282,960	784,567	501,607
5	Other Direct Costs						
5.1	Baseline Data & Follow-up Data Collection	A 5.1	265,240	0	265,240	1,062,840	797,600
5.2	Project Audio-video Documentary	A 5.2	0	0	0	175,000	175,000
5.3	Sharing & Review Meeting with Line Agencies	A 5.3	28,295	16,540	44,835	173,996	129,161
	Sub Total		293,535	16,540	310,075	1,411,836	1,101,761
6	Administration						
6.1	Office Equipments (Laptop, Camera, Printer)	A 6.1	241,442	16,000	257,442	258,000	558
6.2	Local Administration (2% of total cost)	A 6.2	193,033	65,327	258,360	563,966	305,606
	Sub Total		434,475	81,327	515,802	821,966	306,164
	Grand Total		9,844,699	3,331,682	13,176,381	28,762,290	15,585,909

Annex-1: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Summary Sheet

Annex-2: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Hardware Cost Summary Sheet

Annex-3: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Structure Drawing Sheet

Annex-4: Swara Khola Tallo Muhan to Kama DW System, Hiledevi Drinking Water Scheme Water Analysis Test Report

Govt. Reg. 108/047/048, SWC Reg. 283/047/048



ENPHO/QF/5.10.2.1/04/01

Naya Baneshwor, P.O. Box 3456
Kathmandu, Nepal
Phone: +977-1-4482301
Email: info@ecoconcern.com.np
Website: ecoconcern.com.np

ENVIRONMENT AND PUBLIC HEALTH ORGANIZATION ENPHO LABORATORY

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WATER ANALYSIS REPORT



Sample ID: 4031(074-075)

Client : Swara Khola Drinking water system

Sample Location/Area : Hiledevi-3, Sunapati Rural Municipality- 3, Ramechhap

Client Address : Minbhawan, Kathmandu

Received On : 2018-06-26

Completed On : 2018-06-28

Sample Category : Drinking water

Source of Sample : River water

Type of Sample : Raw

Sampled By : Client

PHYSICO-CHEMICAL AND MICROBIOLOGICAL ANALYSIS

Parameters	Unit	Sample ID	NDWQS	Test Methods
		4031(074-075)		
Temperature	°C	26.75	-	Thermometer
pH	-	7.91	6.5-8.5	APHA, AWWA, WEF (2012), 4500-H B
Turbidity	NTU	ND(<1.0)	5(10)	APHA, AWWA, WEF (2012), 2130 B
Total Hardness	mg/L	27.0	500	APHA, AWWA, WEF (2012), 2340 C
Chloride	mg/L	ND(<1.00)	250	APHA, AWWA, WEF (2012), 4500-Cl B
Ammonia	mg/L	0.08	1.5	APHA, AWWA, WPCF (1985), 417 B
Nitrate	mg/L	6.9	50	APHA, AWWA, WEF (2012), 4500-NO3 B
Iron (Fe)	mg/L	ND(<0.05)	0.3(3)	APHA, AWWA, WEF (2012), 3111 B
Manganese (Mn)	mg/L	ND(<0.05)	0.2	APHA, AWWA, WEF (2012), 3111 B
Arsenic (As)	mg/L	ND(<0.005)	0.05	APHA, AWWA, WEF (2012), 3114 B
Coliform Bacteria (H ₂ S) Test	Present/Absent	Absent	Absent	APHA, AWWA, WEF (2012), 9240 D

NDWQS = National Drinking Water Quality Standard (2062).

Accredited by NEPAL BUREAU OF STANDARDS AND METROLOGY.

References: Standard Methods for the examination of Water and Wastewater (APHA, AWWA & WEF) 22nd Edition (2012)

() : Maximum Concentration Limit TNTC-Too Numerous To Count (>8000)

Result with '<' indicates that the concentration was below the detection limit. The limit is indicated by the number following '<' sign.

ND: Not Detected

ID: 4031-Raw

Remarks: All the tested physico-chemical parameters were within the NDWQS value at the time of analysis.

Bacteriologically, the provided water sample was found to be free from H₂S producing Coliform bacteria at the time of analysis.

Kay
ANALYZED BY

Bhab
CHECKED BY

Ank
AUTHORIZED SIGNATURE

- Note:
- (1) The results refer only to the parameters tested of the samples provided/collected for analysis. Endorsement of products is neither inferred nor implied.
 - (2) In order to ensure the confidentiality the report will be released to the person who produces the registration slip
 - (3) All the samples are disposed of 7 days after the report date unless the laboratory has received special request
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P.O.Box: 4102, New Baneshwor, Kathmandu, Nepal

Tel: 977-1-4468641, 4467151, 4461709 Fax: 977-1-4491376, E-mail: enpho@enpho.org, <https://www.enpho.org>

**Annex-5: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Polythene Pipe Invoice 1**

**Annex-6: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Polythene Pipe Invoice 2**

**Annex-7: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Polythene Pipe Invoice 3**

Annex-8: Swara Kholo Tallo Muhan to Kama DW System, Hiledevi
Drinking Water Scheme Payment of Pipe to the Supplier

Annex-9: Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Photographs : Construction Materials Transportation



Annex-10 : Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Photographs : Intake Construction at Source



Annex-11 : Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Photographs : Pipeline Trench



Annex-12 : Swara Khola Tallo Muhan to Kama DW System, Hiledevi
Photographs : Water Supply to Reservoir Tank Construction Site



Annex-13 : Toilet Program
Photographs : ODF Declaration Event of Manthali Municipality, Ward # 4, Salu



Annex-14 : Toilet Program
Photographs : ODF Declaration Event of Manthali Municipality



Annex-15: Toilet Program
Photographs : ODF Declaration Event of Ramechhap District



Annex-16 : Toilet Program
Photographs : Pan-Pipe Transportation, Distribution & Toilet Construction

