Final Completion Report on

Thatanga Drinking Water Supply & Sanitation Scheme

Funded by Singla Nepal Association

Surkhet, July 2015

HELVETAS Swiss Intercooperation | NEPAL

जलश्रोत व्यवस्थापन कार्यक्रम

Water Resources Management Programme, WARM-P

1. Background:

Based on the MoU between HELEVTAS Nepal and Singla Nepal Association, the implementation of "Thatanga Tallo Ghogi Drinking Water and Sanitation Project" in Jajarkot district have been completed. The overall objective of the project is to improve health and sanitation conditions of rural people from Pajaru VDC ward no. 8 of Jajarkot district by promoting their access to safe drinking water.

This report covers the overall achievement of the project with physical & financial summary according to final commissioning of the project.

In the beginning, Water Resources Management Programme has started collaboration with Singla Nepal Association for the implementation of rural water supply and sanitation project in Eastern Nepal in the year 2012/2013.The association provided financial support and WARM-P provided technical support. Continuing this collaboration, after completing the one project in Eastern part, the another project; "Thatanga Tallo Ghogi Drinking water and Sanitation Project" has started in Western part in 2013/2014

2. Project Objectives:

The overall objective of the project is to improve health and sanitation condition rural people of project area by improving their access to potable drinking water & sanitation.

3. Project Location:

The proposed project site is located in Pajaru VDC – 8 in Jajarkot district. The site is situated 30 Km North-west from the district headquarters Khalanga. The nearest road head from the project site is Thala which is around 26 km far from project site and Thala is 106 km far from Surkhet

4. Socio Economic Condition:

The settlements of the project area are scattered. The project covered 632 population from 105 households; 16 household are from Dalit and remaining are from others (Brahmin and Chhetri). Population comprises 49.8 % female and 50.22% male. The livelihoods of the people depend on agriculture However, the agriculture product is not enough to round year. People used to migrate India for labor work for earning money. The project area also comprises a primary school (Shanti primary school) with 202 students.

5. Drinking water, sanitation and hygiene situations before scheme implementation:

The condition of Water Supply, Sanitation and Hygiene of the scheme area was very poorer than in the others parts of rural area of Nepal. The household of scheme area fetched water from traditional Kuwa , Dhunge dhara(unprotected seasonal springs).From those seasonal sources they were getting only 24 liter unsafe per person per day which is below than the national standard 45 liter per person per day. They need around 57 minute to fetch round trip water and had to spend around 4 hours per day to fetch water from each household. Regarding sanitation, out of 105 house covered by this scheme, only 14 household have toilet in their house yard. Rest of the houses was practicing open defecation. Communities were not aware on health and hygiene.

6. Achievement of the Project:

6.1 Establishment of Water & Sanitation User committee:

The inclusive Water supply and Sanitation User Committee (WUSC) has been formed with representation of the women and other discriminated groups in proportion to populations in the project areas. User committee consists of 9 members comprising 44% (4 members) female, 33% (3 members) from socially discriminated caste. The users committee already registered in District Water Resource Committee (DWRC). The user committee is well function and established. During the implementation of scheme, committee has been capacitated in institutional and technical aspect through different trainings, orientation and meetings.

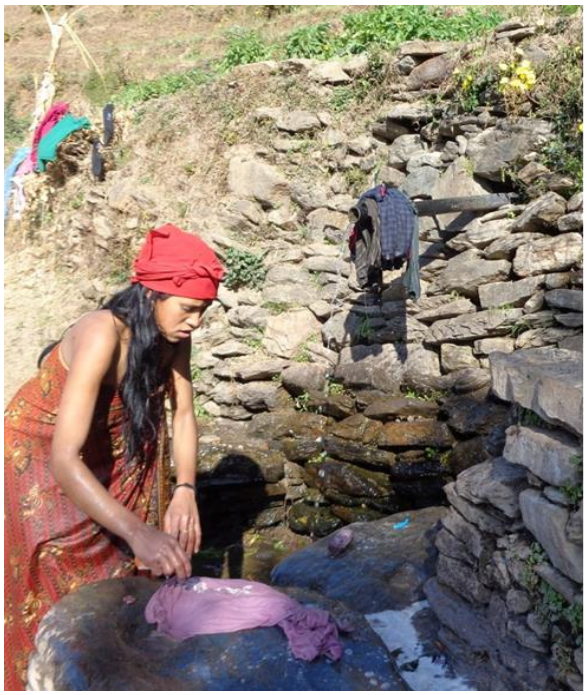


Figure: 1 Water situation before the Project

Figure: 2 Water situations after the project

Table 1 : Name List of user committee members

SN	Name	Position	Male/Female	Remarks
1	Prem Bahadur Budha	Chairperson	Male	
2	Naini Chanara	Vice-Chair	Female	
3	Sher Bahadur Budha	Secretary	Male	
4	Jana Rawal Budha	Treasure	Female	
5	Dip Bahadur Shahi	Member	Male	
6	Bir Bahadur Bautha	Member	Male	
7	Bhakta Bahadur Budha	Member	Male	
8	Kalisara Badi	Member	Female	
9	Pana Budha	Member	Female	

6.2 People have access to safe drinking water:

This scheme consists of 6 sub- systems which served 632 populations (49.8% female) of 105 households (16 household from Dalit). The water demand for the design population is about 44 thousand liter per day. To meet this demand, water has tapped from 7 small spring sources and collected in 4 different reservoirs. Water

from different reservoirs has distributed through 20 numbers of public tap stands located nearby community house that needed only 15 minute to fetch round trip water instead of 58 minute before this project.

Detail of source information & picture are presented in table 2 and figure 2

Source Name	Type	Tapped yield	Remarks
Thatanga 1	Spring	0.25	Sub scheme-1
Thatanga 2	Spring	0.12	
kaulapani	Spring	0.06	Sub-scheme-2
Dhauni Padhero	Spring	0.02	Sub scheme-3
Ghiu Kafal	Spring	0.03	Subscheme-4
Tusare Pani	Spring	0.04	Sub-scheme-5
Kaina Naula	Spring	.03	Sub-scheme-6

Table 2: Source detail

Figure 3: photo of a source intake

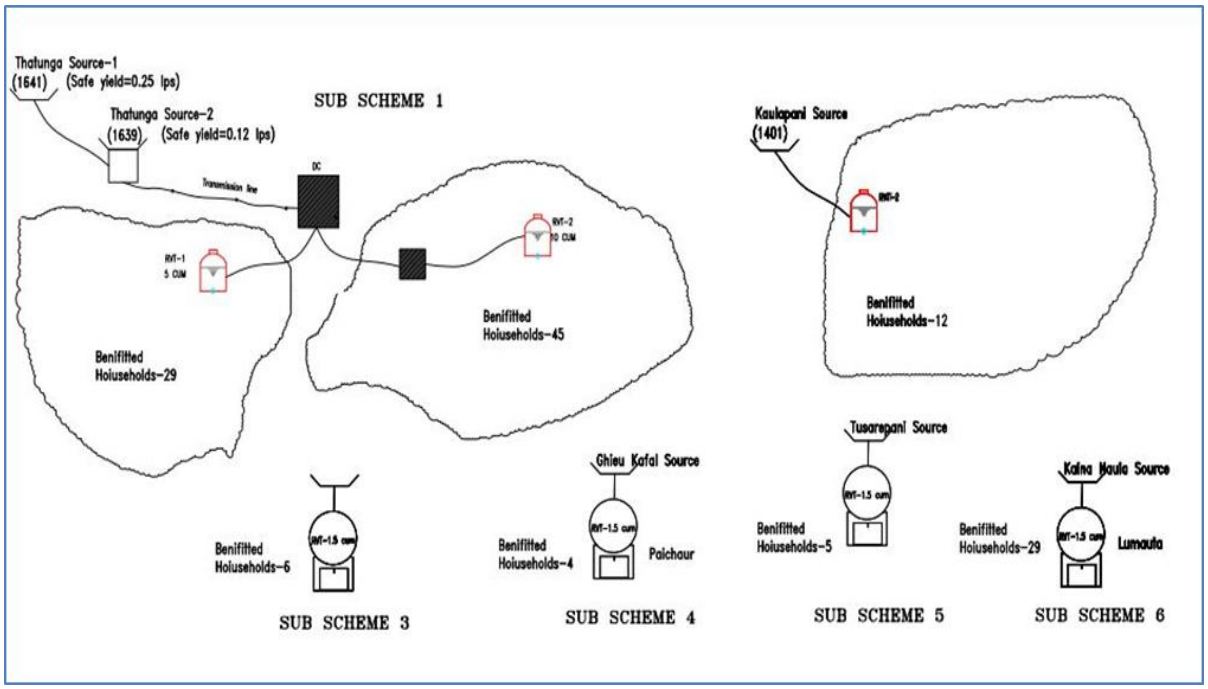


Figure 4: Layout plan of constructed DWS system

The scheme consists of different structures like intake at source, transmission & distribution pipelines, storage tanks (reservoir tanks) and public tap stands along with respective valve chamber as required based on hydraulic design. Some protection works such as barbed wire fencing, plantation, diversion of runoff water etc., were done to protect the sources. The details of constructed structures/ components are presented in following table 3.

Table 3: Information on completed structure & their quantity

Constructed Structure Name	Total No	Function
Intake	7	At source to tap and protect source
Distribution chamber	1	To distribute flow properly as per demand
1.5 cum FCT with Tap	4	Storage of water
2.5 cum FCT	1	"
5.0 cum FCT	1	"
10.0 cum FCT	1	"
PE IC	1	To break the hydraulic pressure trans.line
Masonry WVC	4	To flush or cleanout the pipe line
Tap stand (Type M)	20	Outlet at settlement including attached tap
GI/Cable crossing	5	Pipe laying in small stream
Cable crossing	1	
Transmission Line	2839	Length from intake to reservoir tank
Distribution Line	2497	Length from reservoir tank to tapsatnds
Total Pipeline	5336	

6.3 Improve sanitation and hygiene practices:

During the scheme implementation, project staff facilitated to the communities to construct improved sanitation facilities and to improve hygiene practices. The project conducted different awareness campaigns meetings, orientation, door to door visit and training, for improving hygiene practices of the people living in its scheme areas and people were able to acquired valuable information related to sanitation and hygiene. Out of 105 household in the scheme area, only 14 household have toilet in their house before scheme implementation. After scheme implementation, all household have toilet. Moreover, all household have constructed dry rack, 98 household have separate garbage pit to dispose their household waste. Project is continuously supporting and facilitating to the people for their behavior change on sanitation and hygiene. Some household has started use of waste/overflow water in their kitchen garden for productive use such as vegetable farming. People are able to improve their sanitation and hygiene practices:

Figure 4: Hand washing platform and Chang "utensil dry rack"

6.4 Increased Capacity for sustainable management of the scheme

Sustainability issues of schemes were carefully considered from the beginning of scheme implementation. Different kinds of capacity building training were provided to capacitate local people for quality construction and long term operation and maintenance of the scheme. Total 9 users committee member (4 female) were capacitated through management I and Management II training, One Village

Maintenance Worker was trained for operation and maintenance of schemes and total 20 women tap stand care taker were trained (all female) specially to take care their own tap and maintain sanitation and hygiene of their own cluster.

7. Operation & Maintenance approach adopted:

To address the issue of sustainability of the scheme operation and maintenance (O&M) fund has been The UCs developed Operation and Maintenance (O & M) fund collection system in the scheme area. Though UCs start to develop O & M plan starts right from the construction phase, majority UCs start to collect fund from the time of completion of schemes. As per WARM-P guideline, it is mandatory that each drinking water scheme (except RWH and SC) should have O& M fund at least NRs. 1,000 per tap stand at the time of construction completion and also should collect regular water tariff from the user household after scheme completion so that the O&M fund could be increased. In this regard, this scheme has collected up-front O&M, which amounted to NRs. 40000.00 as of July 2015. The O&M fund collected per tap stand was NRs. 2,000.0 which is higher than the standard.

Users committee made decision to collect Rs 10 per month from each household. The trained VMW has mobilized for daily operation and maintenance of scheme from July 2015.

8. Project Cost:

The overall project cost is under the ceiling of agreed amount. Mainly the cost head are cash payment to user committee for construction works, material cost and training & mobilization cost on ground to implement the system. The utilized budget heads are described in (Table 4).

Budget head	Estimated Project cost (NRs)	Actual cost Project (NRs)	Remarks
DWS Construction Cost (NRs) - A			
Community Contribution (In kind): Unskilled labour, local material from users	683488	683488.00	
Program External contribution for labor, material, transportation etc. (Cash & material)	2,579,957	2,580,695.83	
Sub Total (A)	**3,263,445**	**3,264,183.83**	
Other costs - B			
Training cost	55,000	53,564.00	
Local NGO cost for Social mobilization and technical input	270,000	269,435.40	
Survey, Design and travel cost for monitoring	100,000	100,000.00	
Sub Total (B)	**425,000**	**422,999.4**	
Grand Total (A+B)	**3,688,445**	**3,687,183**	
Summary of contribution			
Singla - Nepal Association (through Helvetas)	2,904,957	2,903,695	
Community Contribution (In kind)	683,488	683,488	
VDC (local Government contribution)	100,000	100,000	

In addition to this, HELVETAS Swiss Intercooperation provided technical backstopping support for planning, implementation of the drinking water system.

Annex: 1

Completion & letter of thanks from user committee

ठट्ङ्गा तल्लो घोगी खानेपानी तथा सरसफाई योजना

पजारु-८, जाजरकोट

स्था. २०६९

पत्र संख्या :- ०६९/७०

चलानी नम्बर :- ९२

मिति :- २०६९/१२/२४

विषय :- योजना सम्पन्न भएबारे सम्बन्धमा।

श्री :- हिमालय टिम,

प्रो० को० डा० वार्म-फो-हेल्भेटास

स्वीइसइन्टरकोअपरेसन नेपाल

विरेन्द्रनगर सुर्खेत

प्रस्तुत विषय सम्बन्धमा वार्म-फो हेल्भेटास नेपालको आर्थिक सहयोग, हिमालय समाज विकास केन्द्र जाजरकोटको सामाजिक तथा प्राविधिक सहजीकरणद्वारा सञ्चालित यस योजनामा मिति २०६९ साल जेष्ठ १६ गतेका दिन सम्झौता भई २०६९ साल जेष्ठ २० गतेदेखि निर्माण कार्य सुरु भई योजनामा बनाइएका सम्पूर्ण संरचनाहरू (डिजाइन स्टिमेट अनुसारको) निर्माण सम्पन्न भई २० वटै धाराहरूमा पानी सञ्चालन भई मिति २०६९ साल चैत्र १८ गते सम्मको सम्झौता अवधिभित्रै सम्पूर्ण काम सम्पन्न भइसकेको छ। यस समुदायमा खानेपानीका साथै सरसफाइ कार्यक्रम समेत संस्थाले सञ्चालन गरेदेखि यस समुदायमा खानेपानीको सुविधा भई यस समुदायमा घरघर र बाटोघाटोमा सरसफाई भई सरसफाईको अभावले लाग्ने रोगहरूमा निकै कमी भएको छ। जसले हाम्रो समुदायमा जिवनस्तर नै नयाँ खालको अनुभूति भएको छ। त्यसैले यस्तो कार्य गरी सहयोग गर्नुहुने वार्म-फो हेल्भेटास प्रति हामी सम्पूर्ण उपभोक्ताहरू हृदयदेखि नै धन्यवाद दिन चाहान्छौं।

प्रेमबहादुर

अध्यक्ष :- प्रेम बहादुर बुढा

ठट्ङ्गा तल्लो घोगी खा.पा.तथा सरसफाई योजना

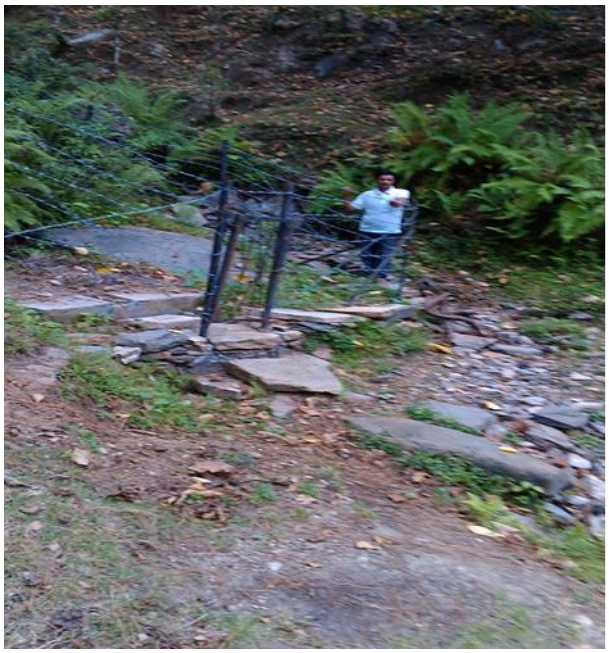
पजारु-८

जाजरकोट

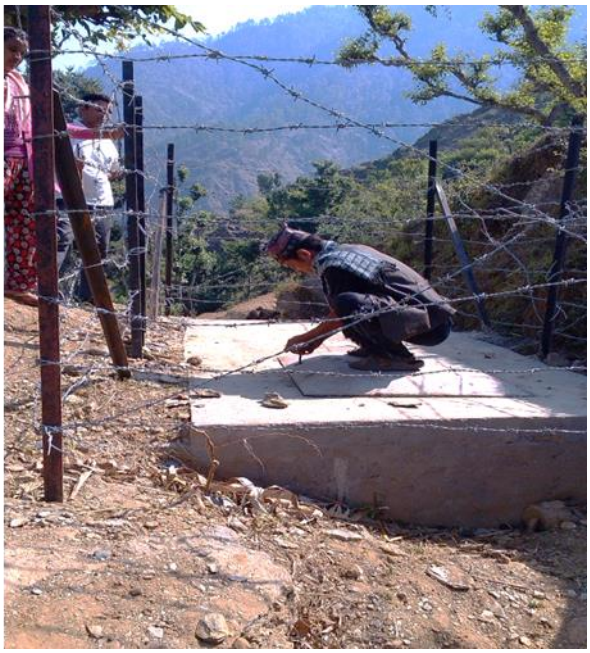
Technical Section → Project file

Annex: 2

Some glimpses of project implementation



Intake structure at source



Distribution chamber before storage tank 1

Storage tank with attached Tap

Women are fetching water from their tap post