

2020- 2021

Outcomes and Impacts Assessment Report WaSH



[MID TERM REVIEW ON OUTCOMES AND IMPACTS OF THE WATER PROJECTS]

“Water Schemes and Sanitation Units Leading to a Better and Hygienic Life for the Communities Located in the Hilly Terrains of Uttarakhand”

- **Executive Summary**

Uttarakhand, with presence of mighty glaciers and perennial rivers, is a water rich state. Also, due to its topography, the state receives decent rainfall¹. Ironically, while Uttarakhand serves the water demand of other states of northern India, the natives of Uttarakhand are facing a water crisis, especially pertaining to drinking water. Being a hilly state and possessing an uneven terrain, makes the situation more complicated in terms of water availability to the rural masses in remote areas. The non-availability of water directly has a bearing on the sanitation, leading to lack of hygienic practices being followed by the community.

Historically, in rural India drinking water supply has been outside the governments' sphere of influence. The Government of India's effective role in the rural drinking water supply sector started in 1972, with the launch of Accelerated Rural Water Supply Programme (ARWSP). Since then, in spite of collective efforts of the State and Central Governments, coupled with huge investments of about Rs. 726 billion in the rural water supply sector under both, State and Central Plans up-to 2009 in India², merely 57% of the country's rural population has access to adequate supply of safe drinking water. In 2009, the ARWSP was modified as the National Rural Drinking Water Programme (NRDWP) with major emphasis on ensuring sustainability of water availability adopting decentralized approach involving PRIs and community organizations. The 12th Five Year plan approach of focus on piped water supply, increasing household tap connections and raising drinking water supply norms from 40 lpcd to 55 lpcd will lead to the status of more than 90% habitations becoming Partially Covered (PC).

Himmatnagar, along with Tata trusts has been assisting Water Supply, Sanitation and Hygiene (WaSH) sector since 2002 and successfully implemented projects in 129 villages by constructing 200 plus gravity flow water schemes and above 5,000 rural sanitation units, thus benefiting more than 46,000 rural people of the states. Under the fresh on-going programme (2016-19) additional 500 villages would benefit through better sanitation and water security.

Titan has already supported 11 villages during its Phase -1 (2015 -18) of WaSH, an additional 15 water scarce villages, by providing clean drinking water and safe rural sanitation facility. The current phase is slightly different from the previous phase this is being developed adopting various innovation which included water supply through solar grid, helping rural community demonstrate safe water supply through Deep Infiltration Well, safe disposal of solid and liquid waste clubbing this with Bio-gas. Spring shed management will bring in water security to springs, whilst Gram Panchayat and water committees will be capacitated to operate and maintain the assets created under the project, once the project is ceased.

¹ "The annual rainfall of Uttarakhand has been assessed around 1,700 mm/year from active monsoon of 100 days. The annual average volume of water received from rainfall comes out to be 9.52 Billion Cubic Meters. Of this, 17.5% is lost through evaporation, 29.5% as absorption in soil, 15.5% infiltration as ground water and 37.5% flows into rivers. According to Uttarakhand's State Water Policy, only 3% of annual rainfall will suffice to meet the total water needs for all purpose". Uttarakhand State Report; 2006; Chapter -10.

²Department of Drinking Water Supply; Ministry of Rural Development, GoI; Report; 2009

The project will approximately benefit around 800 households, through 15 schemes, spread across Uttarakhand under integrated cluster. The selection process of villages will be purely on need based and demand driven, the priority will be given to water scarce villages, villages lost water schemes due to natural calamities, and be willing to follow the terms and conditions of Himmatan's Project Implantation Plan, such as **(i) Participatory Approach, following technical and social norms of project; (ii) community contribution towards project; (iii) ensuing 100% operation and Maintenance cost and; (iv) better management of structures created under the project for at least fifteen years.** Overall, the project will focus on **mixed approach** on selection of villages for **WaSH**. The number of schemes/Type of schemes and beneficiaries are being established because the technical prefeasibility study is underway for another village's selection. Technical Reports are also on process for rest of the new villages. Moreover, the outcomes of the project will be similar as has been obtained in previous phases of Himmatan Pariyojana. However, in addition this phase will be able to demonstrate innovation aspects on community managed WaSH programme. The Status of progress is given below:

SN	Village	Gram Sabha	Block	District	Type	HHs	UWSSC Formed	Work	Meetings	Current Status
Villages (Round - 01) -										
1.	Dubdi Khumchu	Dang Sera	Bhilangana	Tehri	Gravity	32	Yes	Done	IEC/BCC	Handed over
2.	Khaseti	Khaseti	Bhilangana	Tehri	Gravity	88	Yes	Done	IEC/BCC	Handed over
3.	Kulogi	Kot Kulogi	Chamba	Tehri	Gravity	48	Yes	Done	IEC/BCC	Handed over
4.	Doni Palli	Doni Palli	Bhilangana	Tehri	Solar	43	Yes	Done	IEC/BCC	Handed over
5.	Mehla	Mehla	Hawalbagh	Almora	Solar	55	Yes	Done	IEC/BCC	Handed over
6.	Maini	Maini Panchgaon	Hawalbagh	Almora	Solar	32	Yes	Done	IEC/BCC	Handed over
7.	Pyuda Talla	Pyuda	Ramgarh	Nainital	Gravity	33	Yes	Done	IEC/BCC	Handed over
8.	Bairoli	Chapad	Ramgarh	Nainital	Gravity	69	Yes	Done	IEC/BCC	Handed over
					Total	400				
Villages (Round - 02)										
9.	Ghanaat Gaon	Bhaud Gaon	Bhilangana	Tehri	Solar	25	Yes	Done	IEC/BCC	Handed over
10.	Dhung	Dhung	Bhilangana	Tehri	Gravity	61	Yes	Done	IEC/BCC	Handed over
11.	Bhainswadsari	Goran	Jaunpur	Tehri	Gravity	22	Yes	Done	IEC/BCC	Handed over
					Total	108				
12.	Swada (Naulikan)	Satoli	Ramgarh	Nainital	Gravity	24	Yes	Done	IEC/BCC	Handed over
13.	Sarpoli	Sarpoli Khurvan Gaon	Bhilangana	Tehri	Gravity	96	Yes	On Progress	Meetings & IEC/BCC	On Progress
14.	Chatoli	Badiyar gaon	Bhilangana	Tehri	Gravity	76	Yes	On Progress	Meetings & IEC/BCC	On Progress
15.	Chadyali	Khadi	Narendra Nagar	Tehri	Gravity	22	-	-	-	Under PFR
					Total	218				

IEC= Information, Education & Communication	Grand Total HHs	726	BCC= Behavioural Change Communication
UWSSC= User Water and Sanitation Sub-Committee, PFR= Pre-feasibility, BLS= Baseline Survey			

Key activities undertake are:

• **Implementation Phase –**

Key activities undertaken during 2020-21 are enlisted below:

- Training of UWSSC on construction Technology & construction methodology.
- Market survey and selection of suppliers for nonlocal materials for lot—1
- Material procurement for lot -1
- Construction of source works.
- Construction of filtration and solar works.
- Completion of Solar schemes.
- Laying of supply main.
- Construction of Sanitation works.
- Execution of catchment area protection works.
- Cross visit of UWSC members on Implementation Phase activities.
- Hygiene education at schools.
- Healthy Home Survey.
- Source Measurement.
- Collection of balance community contribution.



• **O&M- (Operation and Maintenance Phase) –**

Operation and Maintenance (O&M) phase has been started in 08 completed villages and will start in the new 04 villages where the water supply scheme work is completed, and implementation phase is over. The other capacity building activities on WaSH is on progress in all 12 villages. O&M training is also proposed in all the villages while its initial orientation is already given to the UWSSC and beneficiary members.

Outcomes and Impacts of the projects so far:

WaSH is long term project and overall outcomes and impacts will be monitored during the end of the projects against the baseline which has been obtained during the inception of the projects. However a few key outcomes and impacts variables were mapped periodically to review the field progress. The key outcomes are enlisted below and pictorial details are at **Annexure - 1** and Impact monitoring framework is given at **Annexure -2**.



S. No	Touch	Deep	Transformation	Remark
			530 Household, comprises of 2600 peoples	<ol style="list-style-type: none"> <li data-bbox="979 275 1406 911">1. The biggest impact of the project has been in terms of reduction of drudgery of women. There has been a significant reduction in the distance to be covered in fetching water. Easier access to water closer home has resulted in considerable time saved mainly for women, who have been the primary water collectors in all the project villages and has led to a substantial reduction in their drudgery. Time saved ranges 20 minutes against above 5 hours earlier based on averaging the data sets. <li data-bbox="979 911 1406 1451">2. There has been a marked increase from 17 lpcd to 55 lpcd in the availability and use of water in all 12 project villages. The increased availability of water has resulted in increased per-capita consumption at the household level. There is a high level of user satisfaction with the water services being provided by the schemes constructed and commissioned under the project. <li data-bbox="979 1451 1406 1892">3. Increased retention of children in school: Children shared the burden of fetching water from the source with their mothers earlier, which often led to their dropping out of school, mainly for girl children, in most of the cases. But with the improved access and availability of water, their retention in school is

				reported to have gone up. This is true more in the case of girl children as they were the main support to their mothers in fetching the water for the household.
		530 Household, comprises of 2600 peoples		<ol style="list-style-type: none"> 1. Keeping drinking water utensil covered (pre 29% post 98%), cooked food covered (pre 51% post 96%) 2. Women not have only more time to engage in productive and income generating activities such as cultivation of vegetables, but have also more leisure time, which they use to watch TV or in socializing. 3. Women are now more aware about balanced diets and immunization and other health issues due to the information, education and communication (IEC) activities undertaken during the project.

Perceived Benefits for Children and Women

Children: Children have benefited from the project activities in the following ways:

- Increased retention of children in school: Children shared the burden of fetching water from the source with their mothers earlier, which often led to their dropping out of school, mainly for girl children, in most of the cases. But with the improved access and availability of water, their retention in school is reported to have gone up. This is true more in the case of girl children as they were the main support to their mothers in fetching the water for the household.

- Improved personal hygiene: Due to increased availability of water the children are bathing regularly and are seen wearing clean clothes to school and are using toilets more often than before.
- Better results in examination: Children are finding more time to study as they save the time they earlier spent on fetching water. Therefore their results in the examinations have also reportedly improved.

Women: Women were visibly the worst affected due to scarcity of water and lack of sanitation in project villages. The project activities have improved their lives in many significant ways.

- Reduction in physical strain and mental stress: Women's physical strain of carrying loads of water over long difficult distances, several times a day, is now considerably reduced. They have also reported to be largely free from the mental stress of planning and arranging water for all the members of the household on a daily basis.
- Cattle care has now emerged more as an income generating opportunity than additional work burden. Cattle care was an additional work pressure on women earlier, as they had to carry additional water for them and had to take many more trips to water points, which were usually at long distances. They are now more than welcome and are supplementing the family income by keeping goats/ buffaloes.
- Women not have only more time to engage in productive and income generating activities such as cultivation of vegetables, but have also more leisure time, which they use to watch TV or in socializing.
- Improved health: Availability of safe water and sanitation services along with improved nutritional intake as a result of increased vegetable consumption is believed to have led to the improvements in the general health profile of the family members, particularly women.
- Women are now more aware about balanced diets and immunization and other health issues due to the information, education and communication (IEC) activities undertaken during the project.
- Reduction in outmigration. Basic facilities such as water, latrines etc. are now available at doorsteps, change in attitude is perceived and younger generation is now on move to utilize the natural resources for their economic improvement such as vegetable production, herbal cultivation, cattle farming etc. Ultimately, there has been marked Improvement in quality of life through sustainable water and sanitation interventions.

Annexure -1

Following are the pictorial evidence of field progress and community participation

1. – Village Mehla, Hawalbag, Almora - Solar



हिमोत्थान परियोजना			
अभोक्ता पेयजल एवं स्वच्छता अभियंता			
ग्राम-मेहला, ब्लाक-हवालबाग, जिला-अल्मोड़ा			
क्र.सं.	सदस्य का नाम	पिता/पति का नाम	पद
1-	श्रीमती प्रेमा जोशी	श्री मनोज जोशी	अध्यक्ष
2-	श्री हयात राम	श्री जैत राम	कोषाध्यक्ष
3-	श्रीमती कमला जोशी	श्री हरीश चन्द्र जोशी	सदस्य
4-	श्रीमती तुलसी देवी	श्री रमेश राम	"
5-	श्रीमती पुष्पा जोशी	श्री प्रमोद चन्द्र जोशी	"
6-	श्रीमती रेखा देवी	श्री राजेन्द्र राम	"
7-	श्रीमती प्रभा देवी	श्री देवेन्द्र राम	"
8-	श्री हेम चन्द्र जोशी	श्री नन्दावल्लभ जोशी	"

वित्तीय सहयोग: टाईटन कं. लि.
 सहयोगी संस्था: हिमोत्थान सोसायटी
 HIMOTTAN PROJECT 2021 TITAN COMPANY



2. Pictorial View – Village Maini Panchgaon, Hawalbag, Almora – DIW-Solar



3.- Pictorial View – Village Bairoli, Ramgarh, Nainital - Gravity



5.- Pictorial View – Village Doni Palli, Bhilangana, Tehri - Solar



हिमोपग्राम परियोजना
स्वच्छ जलाशय टैंक (CWS)
क्षमता- 12500 लीटर, निर्माण वर्ष 2008-09

ग्राम- डोनी पल्ली, जमशेदपुर जिला
राज्य- झारखण्ड
वित्तिय सहायता टाईमिंग के लिए
सहयोगी संस्था- दिल्ली सरकार

6.- Pictorial View – Village Dubdi, Bhilangana, Tehri - Gravity



7.- Pictorial View – Village Khaseti, Bhilangana, Tehri - Gravity



8.- Pictorial View – Village Kulogi (Kot), Chamba, Tehri - Gravity



9. Work on Progress – Pictorial View – Village Swada (Naulikan), Ramgarh, Nainital



10. Community meeting and participation



Annexure -2 Impact Monitoring frame work

Sl.	Item	Base Data as on starting of planning phase	Target as fixed in the starting of planning phase	Achievement in previous quarter	Achievement in present quarter	Cumulative Achievement
				(%)	(%)	(%)
				1	2	1+2
A.	Personal Hygiene					
1	Daily bathing					
2	Regular cleaning of teeth					
3	Regular cutting of nails					
4	Washing hands with soap / ash					
	a. Before taking meals					
	b. After ablution					
B.	Household Hygiene					
1	Regular sweeping of house					
2	Cleaning and proper up keep of utensils					
3	Keeping drinking water covered and use of safe water					
4	Using long handle saddle to draw water					
5	Keeping cooked food properly covered					
C.	Environmental Hygiene					
1	Proper disposal of solid waste (cow dung & other)					
2	Use of sanitary latrines for defecation					
3	Proper disposal of infant faeces					
4	Proper cleaning of public places					
D.	Overall Impact					
1	No. of diarrhoea cases					
2	No. of people suffering with other diseases					
3	Community empowerment and capacity enhancement					
E.	Other Impacts					
1	Distance Covered					
2	Water Availability (In lpcd)					
3	Time spend on Fetching water -Hours					