



BridgIT Water Foundation

India

2024 Borewell Restoration Program

(Restoring broken-down borewells back to new)

Partner: SPREAWS,
Andhra Pradesh, India

Brief Background & Context

In Andhra Pradesh India, about 80% of the population live in rural areas and about 40% live below the poverty line. Less than 40% of the impoverished rural population has access to protected water and the situation is most stark in the predominantly 'Dalit' tribal communities.

In the underdeveloped rural areas of the District, resources are limited and food and clean water are scarce. There is great need for safe drinking water and to help control preventable diseases such as diarrhea and cholera and take pressure off the overwhelmed rural health system. Impoverished farmers and wage-earners are less productive due to illness that is often caught from drinking or using contaminated water.

Women and girls in poor rural households often spend hours a day collecting water from remote sources instead of participating in income-generating work and many girls carry water instead of going to school.

Without clean, reliable water to drive improvements to health, sanitation and hygiene, sustainable development is almost impossible, making life extraordinarily difficult for Dalit families.

Bridgit Water partners with Sri K. Pitchi Reddy Educational and Welfare Society (SPREAWS). SPREAWS is a registered non-government social service organisation whose mission is "to help marginalized communities meet their basic human needs of food, water, shelter and clothing to improve their quality of life."

The SPREAWS team strives for the welfare of the socially and economically disadvantaged people in their region without discrimination of caste, creed, colour or religion.

SPREAWS have constructed more than 400 safe drinking water borewells in the remote rural water scarcity communities in 4 districts of Andhra Pradesh State and Bridgit has partnered with SPREAWS to address the water challenges in rural Andhra Pradesh since 2016.

Target Beneficiaries

The project beneficiaries belong to the marginalised scheduled caste 'untouchable' tribal Dalit communities of Kadapa and Kurnool Districts of Andhra Pradesh.

Due to insufficient water availability, contamination of water and access to water being denied, Dalit people are often forced to gather water from sources that are kilometres from their homes. This makes life exceptionally difficult for Dalit families.

The Borewell Restoration Program

Millions of people in rural India rely on water wells or 'borewells' fitted with hand-operated equipment to pump groundwater to the surface to meet their daily water needs.

Many of these borewells are in non-working order, most commonly due to broken hand pumps. This is because in the past, many government and non-government organizations have simply come in with a drill team, drilled a well, and left. Community members were not given any ownership or guidance on water management strategies or how to responsibly maintain the borewells. Therefore, when the hand pump eventually needs repair, the communities are unable to do so because they have no knowledge or resources on how to maintain the borewell.

In most cases, the repair only requires a basic overhaul of the hand pump system, but this cost is too high for the poverty-stricken communities to fund if they have not been contributing to a common maintenance fund.



When SPREAWS approached the local government, they were told by officials; "we welcome NGO intervention as the population is growing and the government budget doesn't have the capacity to meet the existing water scarcity needs of many rural Indian people".

Introduction to Proposal



The project seeks to restore 39 broken borewells to new condition in 2 districts of Andhra Pradesh by restoring the pumping equipment to working condition. When the restorations are completed, participatory workshops are carried out in the community that provide training on borehole management.

In addition, Water User Committees (WUCs) are established to ensure funding is raised to cover the cost of operating the water system and that servicing is completed on the equipment as per an agreed maintenance schedule.

The restoration borewell program establishes immediate access to clean water for the recipient communities and gives high value to the invested funds.

Project Sustainability

Community participation and ownership are vital to ensure a refurbished well's sustainability. Sustainability gives value to the invested funds and results in the intended impact on the communities.

The target communities could not afford to fund the repairs because there was no ownership or active Water User Committee (WUC). Therefore, an integral part of the project includes establishing community ownership, sustainability strategies, and refurbishing the borewell. SPREAWS provides training to guide community members to maintain their borewells by guiding them to create village WUCs and educating them on governance and financial management, including collecting equitable water user fees.

Each village WUC will consist of 5 local community members: 1 youth volunteer; 2 older adults and 2 women, preferably from the leadership of village women's Self-Help Group. Once the refurbishment is complete, the well is handed over to the community. The WUC will take ownership of and be responsible for monitoring, maintaining and sustaining the borewell asset and pumping equipment.

A team of energetic young persons are trained with the skills and knowledge required to carry out essential repairs on the hand pumps to enable the community to manage maintenance and repairs in the future.

Hygiene Education

You can't provide a water well without giving basic water, sanitation, and hygiene (WASH) education. As an integral part of the project, SPREAWS engages a health worker to provide WASH training to educate community members on preventing diseases such as cholera, diarrhea, dysentery and malaria.

Regular hand washing is a must. This project and basic WASH principles will also help control the spread of the Covid-19 virus.



SPREAWS staff continually monitor each community project once the wells are operational. This is done by regularly following up with the community to check the efficiency of the installations and WUC operation.

Scope of Work

The hand pump restoration is carried out by SPREAWS professional installation contractor. The broken borewell is completely restored to new with the following work:

- Replace the pump cylinder, rods, pipes and pump head.
- Completely restore the concrete pad and run-off channel.
- Replace all galvanized iron (G.I) pipes with new pipes.
- Replace the handle assemblies. Handle assemblies consist of T-bar, bush & pin assembly, chains, couplings and main axle.
- Replace the water tank/box assemblies. Water tank/box assemblies consist of small tank, head flange, spout and nuts & bolts.
- Replace the damaged platforms and water run-off channels with cement, bricks or concrete.
- Establish WUCs and provide training on borehole management.

Activities & Budget

Item	Activity Description	Cost US\$	Cost AUD\$
1	Hand Pump Assembly replacement incl. - cylinder, GI pipes, tank assy, head assy and pedestal (complete)	\$390.00	\$590.00
2	Transportation costs to remote sites	\$105.00	\$160.00
3	Labour - qualified borewell technician	\$105.00	\$160.00
4	Removal of damaged platform & construction of new platform and run-off channel	\$260.00	\$400.00
5	SPREAWS project support costs including mobilisation, WUC & WASH training, sustainability monitoring and plaque signage	\$300.00	\$460.00
6	BridgIT project management, monitoring and evaluation & reporting	\$290.00	\$450.00
Total Cost Per Well		\$1,450.00	\$2,220.00

*Currency unit based on AUD\$1 = US\$0.65. Budget may be recalculated at time of donation



Village Waiting List Summary

The following remote rural villages in Kadapa and Kurnool Districts urgently require support to refurbish existing borewells to fulfil the water needs in their community. All bore-wells were installed within 10 years and have not been functioning for 12 months or more.

	Community Name	Population Impacted	Households	District	Cost AUD\$ \$2,200
1	Baayyannapalle	862	175	Kadapa	
2	Ambavaramu	640	124	Kadapa	
3	Chenchugoodem Tribals	860	182	Kurnool	
4	Bramhanapalle S.C Colony	855	168	Kadapa	
5	Ammayyagaripalli	825	165	Kadapa	
6	Shashannagari Palli	876	195	Kadapa	
7	Bachayyagaripalli	675	167	Kadapa	
8	Duggannagari Palli	785	178	Kadapa	
9	Thuyyapalli	705	145	Kadapa	
10	Ayyavaripalli	756	155	Kadapa	
11	Payasampalli Harijanawada	875	162	Kadapa	
12	I Kothapalli S.C Colony	525	115	Kadapa	
13	Ammavaripalli S.C Colony	720	148	Kadapa	
14	Nelathimmayapalli	785	178	Kadapa	
15	Malawada-N. Palagiri	860	182	Kadapa	
16	Sangalapalli B.C Colony	795	158	Kadapa	
17	Gangireddypalli	750	147	Kadapa	
18	Pochamreddypalli Harijanawada	695	145	Kadapa	
19	T. Soudaravaripalle	880	175	Kadapa	
20	Animela SC Colony	850	175	Kadapa	
21	Kommaddi Harijanawada	760	180	Kadapa	
22	Ankireddygaripalli	820	147	Kadapa	
23	Veldurthi Harijanawada	910	175	Kadapa	
24	Uruturu Harijanawada	870	160	Kadapa	
25	Peddannapadu	810	155	Kadapa	
26	S.T. Colony, Palagiri	950	180	Kadapa	
27	Adavichrlopalli	850	155	Kadapa	
28	Sarvarkhanpet	875	190	Kadapa	
29	Katamguravayapalli	750	155	Kadapa	
30	Agraharam	800	180	Kadapa	
31	Narrawada	850	194	Kadapa	
32	Siddareddypalli Harijanawada	750	190	Kadapa	
33	Kothacheruvu	650	175	Kadapa	
34	Ananda Nagar	740	140	Kadapa	
35	Ramanjaneyanagar S.T Colony	645	130	Kadapa	
36	Venkatadrinagar S.T Colony	780	140	Kadapa	
37	Siddugaripalli Dalit Colony	1,050	230	Kadapa	
38	Siddugaripalli B.C Colony	780	165	Kadapa	
39	Koonavaripalli B.C Colony	775	175	Kadapa	
	Totals	30,989	6,455		\$85,800.00

Approximately 30,989 people (6,455 households), will directly benefit with clean, safe water through this borewell restoration program at a cost of only \$2.77 per person.

Expected Outcomes

- Access to clean water will improve the quality of life for 39 rural Dalit communities.
- 30,989 impoverished Dalit people will have an improved water supply.
- Reduced distance to access clean water from 3-4km to 300-500mtrs.
- Reduced incidence of water-related illnesses leading to improved family health and well-being.
- The poorest families can afford to have access to safe drinking water.
- Reduced time spent collecting water, allowing women and children more time for economic pursuits and education.
- Strengthen communities to manage and maintain their water supply.
- Improved WASH awareness regarding personal hygiene, domestic sanitation, living premises and surroundings.
- Improved school attendance.
- Hand washing will contribute to the decline of the spread of the Covid-19 virus.

On behalf of all the beneficiary communities, we are very grateful to any donors who wish to sponsor a water supply for an entire community. We look forward to your support so that thousands of rural people in this proposal can receive clean water.

There is no better investment than to give clean water to those who urgently need it



BridgIT
Water Foundation





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Gifts and deductible contributions are tax deductible in Australia

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