



FINAL REPORT

BridgIT Water Foundation U.S.A

5 Community Wells Andhra Pradesh Region India

February – April 2019

Sugalithanda Scheduled Tribal Colony

Chinna Nagireddypalle Village

Parvathareddygaripalle Village

Peddapalle Harijanawada Village

Pathapulluru Village

Introduction

Partner Name & Address: **SRI K.PITCHI REDDY EDUCATIONAL AND WELFARE SOCIETY (SPREAWS)**,
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“Sri K Pitchi Reddy Educational and Welfare Society” (SPREAWS) is a Secular, Non-profit and Non-Governmental Organization. SPREAWS registered into the Indian Societies Registration Act XXI of 1860, bearing the Registration Number: 544/1994. The organization is also registered into Foreign Contribution Regulation Act of 1976 with the Ministry of Home Affairs, Government of India, New Delhi bearing the F.C.R.A. Number: 010160408.

SPREAWS’s Mission is to help the marginalized communities to get their basic human needs of food, water, shelter, clothing and thus to improve the quality of their life. Since its inception in 1994, SPREAWS has been committed to the implementation of social justice and the development of marginalized sections of the Society. It operates in the most remote and inaccessible areas of Kadapa District, where more than 75% of the population lives below the poverty line. SPREAWS successfully implemented several programmes. In remote rural and tribal impoverished and backward communities it organized several income generating activities for their poverty alleviation, it implemented Safe Drinking Water Borewells programmes in the remote villages, provided formal and non-formal education to the illiterates, provided Skill Trainings like Tailoring training, computer training to the women and adolescent boys, and girls; SPREAWS supported people with disabilities and the people with HIV/AIDS, implemented Malaria prevention programmes, strived for local agricultural development, village infrastructure development and human rights promotion. SPREAWS also implemented several programmes related to the Conservation of Environment and Natural Resources. SPREAWS also implemented a number of child welfare programmes.

Purpose

Name of the Donor: **BridgIT Water Foundation USA sponsored 5 wells through BridgIT Water Foundation, Australia**

Name of the Program: **“Safe and Clean Drinking Water Borewells for Marginalized Communities”**

Project Description

Village Names and people impacted:

	Village Name	People Impacted
1	Sugalithanda Scheduled Tribal Colony	1,015
2	Chinna Nagireddypalle Village	972
3	Parvathareddygaripalle Village	965
4	Peddapalle Harijanawada Village	875
5	Pathapulluru Village	1,131
	Cost of US\$1.83 per person	<u>4,958</u>

The above villages are in Kadapa District of Andhra Pradesh State, India. Andhra Pradesh State is located in the Southern parts of the Indian subcontinent. The State has two main physiographic regions, namely Rayalaseema, and Coastal Andhra. The target villages are in Kadapa and Kurnool Districts of Rayalaseema

Region of Andhra Pradesh state. These 5 villages are located in a radius of 130 kilometers from SPREAWS District Headquarters office in Kadapa city.

Before implementing this Borewell Program, SPREAWS conducted a detailed survey in the rural communities of Kadapa and Kurnool districts and identified that water scarcity is a major issue in these interior rural areas. Through these surveys, it became apparent that 85% of illnesses are caused due to waterborne pathogens and it was identified that the number of children below the age of 5 were more than adults afflicted with diarrhea due to contaminated drinking water.

The lack of water for domestic use makes poverty extreme and many problems are caused due to lack of safe and protected drinking water and sanitation. The beneficiaries mostly do not realize that many of the health problems in their villages are occurring due to lack of safe and protected drinking water.

The solution to the water scarcity problem is through the installation of Tube Wells fitted with hand pumps located centrally in each rural village.

The Need

A majority of the people in these 5 villages are economically poor and suffer from extreme poverty. It was identified that lack of water was a major issue.

The beneficiaries are particularly impoverished backward class and depend mainly on rain-fed agriculture and subsistence farming to make a living and face many routine problems for their survival and existence. Our target groups cling to the secular concept of 'No Social Discrimination'.

The selected villages have no or limited common community facilities such as power and water supplies. Though Government piped water is available in some villages, it is not functioning properly due to daily Government imposed power cuts for long hours. During the Summer season, the local Government bodies send mobile water tankers to the rural areas with acute water scarcity, but it is insufficient, irregular, unpunctual and a temporary solution.

During our site visits to the target villages, the SPREAWS team came across many scenes of women, men and children travelling long distances on foot of 3-4 kms to collect water from agricultural bore wells and canals.



The above photo shows women and men filling their pots with water from a canal after walking 4kms by foot.

There were no drinking water bore-wells existing in any of these 5 villages and the people were suffering water scarcity before this project. But now with the support of BridgIT Water Foundation USA to install borewells, these villages are accessing safe water easily near-by their homes.

Action & Methodology

Underground Water Surveys

A geologist from the Ground Water Department of Kadapa district Headquarters conducted the underground water surveys as Water Resistivity tests. Underground water deposit points were specified as suitable for drilling the wells in these villages. The water points were selected where there were no harmful chemical deposits of arsenics and fluoride present.

The most convenient sites were selected where a majority of the people are living. While selecting the site for the installation of drinking water bores WASH guidelines were followed such that the drinking water bore well should be placed on raised ground at least 30 to 50 meters away from latrines, cattle kraals and refuse pits or other hollows in the ground so that contaminated water will not drain through the ground into the well.

Drilling of Bore Wells

Installation of new drinking water Borewells starts.



Drilling the bore in Sugalthanda Scheduled Tribal Colony



Drilling the bore in Chinna Nagireddypalle



Drilling work nearing completion at
Parvathareddygaripalle



Plenty of water is coming from the borehole at
Peddapalle harijanawada



Inserting casing pipes into the bore hole at Chinna Nagireddypalle

The video links show the drill rig vehicle drilling the drinking water bores in some of the target villages. The bores were drilled to 400 feet. The standing water level is at 50 feet in the bores. The drillers also inserted casing pipe into the bore hole.

Please "Click" on the following video links to see the drilling work.

<https://www.youtube.com/watch?v=G-f5zuroCOc>

<https://www.youtube.com/watch?v=slyEGAHArAQ>

<https://www.youtube.com/watch?v=G-f5zuroCOc&feature=youtu.be>

<https://www.youtube.com/watch?v=UNUnuL3CHCw&feature=youtu.be>

Construction of Bore Platform

After the drilling work is finished and initial first water, the pedestal is fitted over the drilled hole and a platform is built around the hole with bricks or gravel, cement, concrete, rods etc. After the completion of the platform, the water run-off channel is constructed using bricks and concrete. The apron is reinforced well around the casing to add additional support. The water run-off channel is constructed with bricks and reinforced concrete and shaped and sloped to ensure that all water drains away into a seepage area.



Masons are constructing the platform at village 1



Platform construction continues in the village 2



Platform construction work nearing completion in village 3



Platform construction completed in village 4



Platform work completed in village 5

Please "Click" on the following video links to see the videos of Platform construction work.

https://www.youtube.com/watch?v=AD_vzvljRBg&feature=youtu.be
<https://www.youtube.com/watch?v=qow00bJOkO4&feature=youtu.be>
<https://www.youtube.com/watch?v=FiJQrL0vQT4&feature=youtu.be>

G.I Pipes and Hand Pump Installation

After completion of the platform and water run off channel, we have fixed the Hand pump as follows:

- To start, a cylinder pipe is fitted with G.I pipe around it.
- Connecting rods are fitted into the G.I. pipe.
- The cylinder assembly is inserted into the borehole along with the G.I. Pipes.
- The length of one G.I. Pipe is 10 feet. Connecting rod length is also the same i.e 10 feet. The technician inserts the G.I Pipes one by one into the drilled bore hole as deep as required by connecting one G.I pipe to another G.I pipe up to 11 pipes.
- Next, the third plate is fitted.
- Next, the head assembly is fitted.
- Next, the handle assembly is fitted. The hand assembly contains 12 mm connecting rod.
- This completed the bore-well parts fitting process.



Technicians inserting the G.I pipes at Sugalthanda Scheduled Tribal Colony



Technicians and village volunteers attaching G.I pipes in Chinna Nagireddypalle village



Technicians inserting the G.I pipes at Parvathareddygaripalle village



Technicians and village volunteers are inserting the G.I pipes in Peddapalle Harijanawada village



Technician fixing the water tank at Pathapulluru village

Please "Click" on the following links to see the videos of inserting GI pipes.

https://www.youtube.com/watch?v=yp8Y_x0U_OI

<https://www.youtube.com/watch?v=U1Lt3AYVYZg&feature=youtu.be>

<https://www.youtube.com/watch?v=Zgn8-uYRENQ&feature=youtu.be>

<https://www.youtube.com/watch?v=Fw0LoX7Ebvs&feature=youtu.be>

When we test the handle rod with an up and down motion, the underground water from the depth of the drilled well comes up through the cylinder assembly, G.I. pipes and pump head. Finally, first water appears.

Plaques are fixed on each bore-well containing the name of the village and name of the donor.

Sugalithanda Scheduled Tribal Colony



Chinna Nagireddypalle



Parvathareddygaripalle



Peddapalle Harijanawada



Pathapulluru



All 5 bore wells are completed and functioning very well and fulfilling the domestic water needs of the target village people.

Photos of completed wells and the excited, happy villagers around their new village wells.

Sugalithanda Scheduled Tribal Colony Celebrations



Chinna Nagireddypalle Village Celebrations



Parvathareddygaripalle Village Celebrations



Peddapalle Harijanawada Village Celebrations



Pathapulluru Village Celebrations

Please "Click" below to see the videos of the completed wells pumping water.

<https://www.youtube.com/watch?v=REpXyb04tvM>

<https://www.youtube.com/watch?v=Y37stt7wE48>

<https://www.youtube.com/watch?v=RcAravJNjMw>

<https://www.youtube.com/watch?v=M3QlyJplnwE>

<https://www.youtube.com/watch?v=RetKGWptFlw&feature=youtu.be>

https://www.youtube.com/watch?v=0EEoP8M_IdA&feature=youtu.be

https://www.youtube.com/watch?v=0EEoP8M_IdA&feature=youtu.be

<https://www.youtube.com/watch?v=qJly0F4xhso&feature=youtu.be>

https://www.youtube.com/watch?v=ckg_7O0-XuM&feature=youtu.be



Big smiles of women at Parvathareddygaripalle



Big smiles of children at Chinna Nagireddypalle

Formation of the Village Water User Committees (WUC)

SPREAWS organisation formed Village Water Committees (WUC's) in each of the 5 villages. The WUC's consist of 5 people, a mix of men and women who volunteer their services toward the sustainability of the well in their village.

The village WUC members shall collect small contributions from each village water user which contributes toward the sustainability of the well. The sum is voluntary as Rs.10/- per person per annum. If there are 5 members in a family, there will be Rs.10/- X 5 = Rs.50/-. If there are more in the family, the amount will increase. The collected amount will be utilised as required for future repairs and maintenance; thus the bore well shall be maintained by the village people themselves for future sustainability of each well.



Impacts

- 4,958 men, women and children from 5 villages, who were facing challenges in accessing safe water before the installation of these wells are now free from their previous hardships through receiving safe water from these borewells.
- About 2,975 men, women and children who were walking long distances to fetch water before the installation of these wells are now spared valuable time each day to pursue other activities because they now have access to water near their homes. Now they are very happy to be able to dedicate more time for their own work to improve their incomes as a result of this project. Thus, poverty shall be reduced due to increased time to spend on income generating activities.
- About 1,238 school going children and teenage boys and girls from the 5 target villages who previously arrived late at their schools, who become frequently absent from their schools, who often missed classes before the installation of the well are now able to have regular and punctual schooling. These students are now finding enough free time to do their studies and homework given by their teachers.
- About 1,945 men and women are now able to go to their work/business on time improving their household incomes.
- 4,958 people who are accessing safe drinking water from these borewells now have improved health from water borne diseases.

Testimonials



Mrs. Narasamma
Age 34

Sugalithanda Scheduled Tribal Colony

“Now I am happy with the water source of Hand Pump Well provided by ‘BridgIT Water Foundation USA’. It is great of this generous sponsor to have cared about our community while none cared to give us drinking water though we were in extreme need. Now I am able to send my children to school in right time and my husband going to work in right time. We are very happy. The health education conducting by Health worker is very useful for us for our better health. Once again our gratitude to the sponsor of this well.” Said Mrs. Narasamma from Sugalithanda Tribal village.



Manemma
Age 47

Chinna Nagireddypalle Village

“We are grateful to the ‘BridgIT Water Foundation Australia & USA’ who generously donated for this drinking water bore-well. Prior to install this borewell, our community people approached many times to the local Government officials and expressed the need for a new borewell in our community. But they turned a deaf ear towards our repeated appeals saying helpless due to deficit budget. Now after installation of this borewell our community people are happy as our drinking water problem is now solved. We will improve our social, educational, economical and health conditions through this project” said Manemma.



Mrs. Gopamma
Age 37

Parvathareddygaripalle Village

"I have to devote most of my time for babysitting. In addition to this, I also have to allot at least 3 to 4 hours in a day for bringing water for our domestic need, because my husband and father-in-law are most of time out on their work. So I faced lot of problems before construction of this hand pump bore well. Now I don't feel any trouble after this well is established recently. It takes just 30 minuetes for me to bring entire water for our domestic needs. The water is sweet. It is clean. I am also participating in health education programme and listening the preventive healthy habits. Now the adults will allot of most of their time in their jobs to earn money. Many many thanks to 'BridgIT Water Foundation Australia & USA' helping us with clean water." Said Mrs. Gopamma.



Mrs. Venkatamma
Age 28

Peddapalle Harijanawada Village

"Before installation of this well, I was very stressful, because, sometimes I would have to prioritize my work so would not get enough water, or prioritize water and not attend work on time. I am very happy now, because since installation of this well, I can attend my work on right time without the pressure and bring more money home for my family and not worry about the water I need for my domestic purpose. This hand pump well is giving our entire community plenty of water at all times. Now my children also attending their studies properly and studying well. We are participating in the health education programme conducting by the health worker. It is very useful for us for our better health. Many thanks for the kind help extended by to BridgIT Water Foundation Australia & USA" said Mrs. Venkatamma.



Mrs. Ramalakshmi
Age 33

Pathapulluru Village

“Now all the people in our village are using the water from this newly installed borewell, there is no scarcity like before. For us it does not take long time, it is just 5 minutes walk to this hand pump well in our village. The route is easy going. It is safe to all. We are taking care of this well in good manner. And we also received health training by the health worker, the health worker taught us that, time to time soap hand washing is equal to life saving attitude. The people in our village picked motivation and following habit of soap hand wash daily. Our children are going to school. Our gratitude to the sponsors BridgIT Water Foundation Australia & USA.” Said Mrs. Ramalakshmi.

Before & After

Before the installation of the borewells in these 5 villages, women walked long distances between 3-4km to collect dirty water from a canal.



After the installation of the borewell located nearer their homes the women are now easily accessing clean water from the newly installed hand pump to meet their domestic needs.

Training

Training to Care-Takers (Village Youth Volunteers) on Minor Repairs for Long-Term Successful Maintenance of the Borewell

10 youth volunteers from the 5 villages were selected and trained in minor repairs of the borewells for a period of 5 days at Kadapa, the District Head Quarters, by a reputed district Borewell Agency.

SPREAWS organisation supplied some tools such as various spanner sizes etc., to the village for minor repairs. The youth Care takers who were trained at the beginning of the project, will carry out minor repairs when required. They will play an important role in the maintenance of the pump by ensuring that all nuts, bolts and other parts on the pump head are tight.

Major repairs will be carried out by employing an expert pump technician, who will be approached by the Village Water User Committee with the assistance of the SPREAWS organisation.

Awareness Generation about Water Conservation, Sanitation & Hygiene (WASH)

The SPREAWS health worker conducted hygiene education awareness meetings at a central place in each village. Water conservation and various health & hygiene related issues was covered by the SPREAWS team during these awareness programs.

The health awareness covered by our team covered prevention from viral, fatal and infectious acrimonious diseases. Our team also concentrated on creating awareness among the village people on how the different diseases occur and spread due to poor hygiene and sanitation practices.

To prevent these contagious diseases, the following 10 hygiene education messages are highlighted in disseminating knowledge about ways of preventive care:

1. To keep the water storage containers covered and place them on a platform, above the ground and preferably out of reach of children.
2. To cover all dishes containing food materials with lids.
3. To wash fruit and vegetables before eating or cooking them.
4. How to wash household utensils as well as street dustbins used to dispose of waste.
5. To divert the waste water to the plants in the vegetable garden.
6. To wash clothes and animals away from the clean water bore-wells.
7. To bathe every day.
8. To wash hands well with water before eating and serving food to others.
9. Not to allow the children to defecate around the households and on the sides of the pathways.
10. Following defecation, to wash hands well using soap with adequate water.



SPREAWS Health Worker conducts health awareness in Sugalthanda STC.



SPREAWS Health worker conducting health awareness during WASH training.



Health Worker is educating women in Pathapulluru on hygiene.



SPREAWS Health worker is providing step by step training on handwashing with soap in Chinna Nagireddypalle



WASH training children in Sugalthanda STC



WASH Training to children in Peddapalle Harijanawada

Please “click” on the following video links to see health education training conducted.

<https://www.youtube.com/watch?v=FHpmsZI-XZM>

<https://www.youtube.com/watch?v=C70ac8uLYjg>

https://www.youtube.com/watch?v=jb1qaLQ_24Q

<https://www.youtube.com/watch?v=GIYqXWfLBTg>

<https://www.youtube.com/watch?v=bjGyBUv-A3s>

<https://www.youtube.com/watch?v=1mLwBRG14KY>

<https://www.youtube.com/watch?v=-lTyFc6Kyls>

SPREAWS Health worker conducted house visits, providing face to face counselling among community people. She advised that people need to maintain hygiene at the hand pump and around the well, the need for the use of soap for hand washing, the need of personal hygiene and the need of environment sanitation.

Sustainability & Community Ownership

Community ownership is crucial for the sustainability of the well. This is achieved by implementing and monitoring Village Water User Committees (WUC's). WUC members shall collect small contributions from each village water user for the sustainability of the well. The sum is voluntary as Rs.10/- per person per annum. If there are 5 members in a family, there will be Rs.10/- X 5 = Rs.50/-. If there are more in the family, the sums will be more. The collected amount will be utilised for future repairs and maintenance as required. The bore well shall be maintained by the village people to remain in good working order.

Challenges & Lessons Learned

During the implementation of this project no difficulties were encountered. The program ran smoothly and successfully.

Conclusion & Acknowledgements

The beneficiaries of our Safe Drinking Water project in the 5 villages are very happy as their drinking water problem is now solved. These village people express their gratitude to the Donor **BRIDGIT WATER FOUNDATION U.S.A** and to all the members of **BRIDGIT WATER FOUNDATION, AUSTRALIA** for helping them with drinking water. They are saying that they and their children are praying for the prosperity of the family members of the donor and also the members of the Bridgit Water Foundation.

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