Final progress report

Measuring the health impact of Bio Sand Filters and dissemination of technology

Duration – July 2016 to January 2018-02-03

Organized by – GRAVIS

Supported by – PPI, USA

Background

GRAVIS is a well recognized dev elopement organization working in the Thar Desert of India. The Desert region of Thar in India is one of the most challenging area and communities here have to live with chronic droughts, food and water shortages and persistent poverty. GRAVIS focuses its work in the areas of food security, water security and healthcare. Over the last 35 years, GRAVIS has worked with over 1.2 million people living in the Thar Desert.

GRAVIS and PPI have worked together on a number of projects over last many years. With the support of People for Progress in India (PPI), GRAVIS has been working on assembling Bio Sand water Filters (BSFs) in the Thar Desert over the last three years. The overall goal of this project was to enable Thar desert communities have safe drinking water within their households leading to a better health and a better life. In the first phase of our collaboration, we did set up 60 such filters. In the second phase, GRAVIS set up another 200 filters.

During a conversation with PPI, GRAVIS felt that there is a need of measuring the impact the filters are making on people's health as well as disseminating the technology more widely to be used by other organizations and communities. Keeping above in view, GRAVIS conducted the above study with PPI support.

The **overall goal** of this study project was to:

Research the impact of water filters on people's health with evidences and disseminate the technology for wider replication

Specifically, the project aimed at:

- Measuring the health impact through a research study in the context of prevalence and reduction of waterborne diseases
- Train/educate other organizations within the Thar Desert region wiling to work with the filters
- Disseminate the research findings widely for replication across the Thar Desert and in other parts of India possible

Progress made

The overall duration of the study was 19 months between July 2016 and January 2018. A total of 10 villages and 200 HHs were covered by the study.

Following interventions took place:

1. <u>Research study</u>

The study was conducted in 10 villages and covered a sample size of 200 households (HH) or about 1400 to 1600 individuals. A survey questionnaire was developed in consultation with PPI group members that covered socio-economic profiles of users, their understanding and

perceptions about the filters and the impact the filters are making on their lives. Above information was collected in two rounds – at the time of installing the filters and then after about one year of filter's use.

In addition, a brief health assessment questionnaire was also used to gather information on health status on a monthly basis for a period of 12 months.

Gathered data was analyzed and the findings of the study have now been published. PPI group members played a very active role in reviewing the contents and support the analysis. AS a next step, the published documents will now be disseminated widely among concerned stakeholders nationally and internationally. In due course of time, GRAVIS will write blog posts for various journals and publications to disseminate study summary more widely.

It is expected that the study report helps GRAVIS in expanding the BSF use further in the Thar Desert as well as it helps other organizations replicating the technology in different parts of India and in other regions.

2. NGOs trainings

Under the project, two NGO trainings were organized on BSFs. These training covered following aspects:

- Water quality and waterborne diseases
- BSFs – an introduction. Role of BSFs in improving health.
- Assembling and maintenance of BSFs with demonstration
- Need of training and educating communities on BSFs and methods
- Future strategies

These training were organised in the months of October and December, 2017. A total of 53 participants representing 22 NGOs participated in the trainings. Overall, the trainings were received very well.

3. Dissemination event

The study findings were disseminated through a half day event on 25th January, 2018. A total of 68 participants presenting rural communities, local NGOs, Govt representatives, local media and students joined the vents. GRAVIS team presented the findings and there was an open discussion with questions and answers. The event was well received with participants showing good interest in BSFs.

Impact

- Study findings suggest that BSFs are well received and accepted in the community. About 1,500 copies (soft and hard) of the study report will be disseminated to various stakeholders. At least two blog posts will be written to share the findings.
- 53 NGO participants understood the BSFs and showed keen interest in further replication of technology
- Dissemination event was received very well.

Overall, BSFs present a promising opportunity. It seems that they make a positive impact on health and overall well-being. The study report presents interesting and encouraging facts that would promote the technology. GRAVIS will strategize with the study findings on scaling it up in future.