

**PPI Project: 3<sup>rd</sup> Year Progress (Aug'2017- Jul'2018)**

**cum**

**Final Completion Report**

---

**“Providing safe drinking water through development & demonstration of affordable water filters in selected villages of Sirmour ( HP)” .**

---

**Submitted to:**

**People for Progress in India (PPI)  
P. O. Box 51231, Seattle, WA 98115-1231.**

**Submitted By:**

**SATHI  
(Social Awareness Through Human Involvement)  
Thakurdwara, Via Sarahan, District Sirmour,  
Himachal Pradesh-173024 (INDIA)**

**PPI Project: 3<sup>rd</sup> Year Progress (Aug'2017- Jul'2018)**

**cum**

**Final Completion Report**

From Aug 2015, SATHI with financial support of PPI initiated to address drinking water quality issues in some remote village of Pachhad block, distt. Sirmour (HP). This would achieve through community sensitization on importance of safe drinking water and installation of 160 No. affordable bio-sand filters for needy families in 12 villages of project region. **Under PPI project, till end of Jul'18 SATHI has successfully accomplished all proposed activities of project through undertaking community sensitization, capacity building and development - distribution of 160 Nos. filters (50 nos - 1<sup>st</sup> year; 55 nos.- 2<sup>nd</sup> year & 55 during 3<sup>rd</sup> year ) to project beneficiaries.** In context of project progress during 3<sup>rd</sup> year (Aug' 2017 - Jul' 2018), SATHI proposed to install 55 filters & accomplished the same. The major activities which were accomplished by SATHI during 3<sup>rd</sup> year of PPI project are elaborated as under:

**i. Community Meetings & Awareness - Training camp**

At the outset, SATHI team organized village level meetings in 05 project villages *i.e. Bagrada- Batol, Dabar Ghera , Chamora ,Sai & Mangnyana* . During this, SATHI team sensitized the villagers about PPI project activities & innovative - affordable technology of water purification i.e. Bio-Sand Water filters. SATHI also conducted “**Awareness cum Training camp**” with beneficiary community in which people were practically trained about specification & working of bio-sand filter technology through a prototype.

**ii) Beneficiaries selection & collection of 20 % Cash contribution**

During 3<sup>rd</sup> year of project, SATHI proposed to develop & distribute 55 Bio Sand Water Filters), which will directly benefits 55 households in 05 villages. Till mid of Dec 2017 SATHI team with consultation of local SHG & PRI finalized 3<sup>rd</sup> year beneficiaries of PPI project. After final selection, respective PPI project beneficiaries started collection of 20

% cash contribution towards development & installation of filters. One foremost aim of collecting community contribution is to generate a sense of ownership among the respective beneficiary.

### iii) Development & Distribution of Filters:

To initiate the construction of Bio-sand Water Filter, SATHI procured the raw material & made other necessary arrangements at filter construction site. Organization assures quality work especially during molding, filling with concrete mixture & de-molding process. After construction, all filters were thoroughly tested for water leakage & other desired parameters; and later transported up to respective beneficiary's households. For household level filters installation, suitable location were identified. All 55 Nos. filters were installed (filled with filter media, fixing diffuser plate, lid, water testing etc) by SATHI team and finally handed over to respective beneficiaries. The list of 3<sup>rd</sup> year filter beneficiaries is tabulated below.

**Table: PPI project 3<sup>rd</sup> year filter beneficiaries**

SI	Name of Beneficiary	Name of Village	Name of Gram Panchayat	Block, District
1	Radhe Shyam	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
2	Ram Lal	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
3	Om Prakash	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
4	Suresh Kumar	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
5	Ramesh Kumar	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
6	Rajesh Kumar	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
7	Hari Dutt	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
8	Sanjay Kumar	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
9	Sada Nand	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
10	Karam Chand	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
11	Balbir	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
12	Rajender Kumar	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
13	Indira Devi	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
14	Puroshotam Kumar	Bagrada-Batol	Naina-Tiker	Pachhad, Sirmour
15	Ghanshyam	Dabar Ghera	Sarahan	Pachhad, Sirmour
16	Suresh Dutt	Dabar Ghera	Sarahan	Pachhad, Sirmour
17	Naresh Dutt	Dabar Ghera	Sarahan	Pachhad, Sirmour
18	Prabhat Gautam	Dabar Ghera	Sarahan	Pachhad, Sirmour
19	Sushil Sharma	Dabar Ghera	Sarahan	Pachhad, Sirmour

20	Bhagat Ram	Dabar Ghera	Sarahan	Pachhad, Sirmour
21	Sunil Kumar	Dabar Ghera	Sarahan	Pachhad, Sirmour
22	Suresh Gautam	Chamora	Sarahan	Pachhad, Sirmour
23	Jai Dutt	Chamora	Sarahan	Pachhad, Sirmour
24	Som Dutt	Chamora	Sarahan	Pachhad, Sirmour
25	Krishan Dutt	Chamora	Sarahan	Pachhad, Sirmour
26	Ashish Gautam	Chamora	Sarahan	Pachhad, Sirmour
27	Adarsh Gautam	Chamora	Sarahan	Pachhad, Sirmour
28	Mohan Dutt	Chamora	Sarahan	Pachhad, Sirmour
29	Dev Swaroop	Chamora	Sarahan	Pachhad, Sirmour
30	Kamal Dutt	Chamora	Sarahan	Pachhad, Sirmour
31	Dayal Dutt	Chamora	Sarahan	Pachhad, Sirmour
32	Ajay Sharma	Mangnyana	Chakli	Pachhad, Sirmour
33	Ram Nath	Mangnyana	Chakli	Pachhad, Sirmour
34	Om Dutt	Mangnyana	Chakli	Pachhad, Sirmour
35	Jai Prakash	Mangnyana	Chakli	Pachhad, Sirmour
36	Rajesh Sharma	Mangnyana	Chakli	Pachhad, Sirmour
37	Rajender Singh	Banad	Gagal Shakor	Pachhad, Sirmour
38	Upender Singh	Banad	Gagal Shakor	Pachhad, Sirmour
39	Ajay Singh	Banad	Gagal Shakor	Pachhad, Sirmour
40	Krishan Singh	Banad	Gagal Shakor	Pachhad, Sirmour
41	Rajesh Singh	Banad	Gagal Shakor	Pachhad, Sirmour
42	Dev Raj	Banad	Gagal Shakor	Pachhad, Sirmour
43	Babloo Singh	Banad	Gagal Shakor	Pachhad, Sirmour
44	Balbir Singh	Banad	Gagal Shakor	Pachhad, Sirmour
45	Om Prakash	Banad	Gagal Shakor	Pachhad, Sirmour
46	Naresh Kumar	Sai	Chakli	Pachhad, Sirmour
47	Mata Ram	Sai	Chakli	Pachhad, Sirmour
48	Som Dutt	Sai	Chakli	Pachhad, Sirmour
49	Ramesh Kumar	Sai	Chakli	Pachhad, Sirmour
50	Surinder	Sai	Chakli	Pachhad, Sirmour
51	Madan Swaroop	Sai	Chakli	Pachhad, Sirmour
52	Kundan Singh	Sai	Chakli	Pachhad, Sirmour
53	Sachidanand	Sai	Chakli	Pachhad, Sirmour
54	Yashpal	Saloh	Katli	Pachhad, Sirmour
55	Ranjeet Singh	Banad	Gagal Shakor	Pachhad, Sirmour

#### iv) Regular Follow Up with users:-

During 1<sup>st</sup> & 2<sup>nd</sup> & 3<sup>rd</sup> year , SATHI distributed total 160 Nos. filters to beneficiaries. To analyses the impact of filter programme, SATHI field team also conducting regular follow up-visit with all filter beneficiaries. SATHI conduct door-to-door visit of each household and ask the filter families about regular use of filters, quality /taste of water,

issues related to operation & maintenance of filters, impact of filter water on personal health improvement & reduction of water borne illness etc. During follow-up visit, SATHI team also rectifies the technical problems pertaining to proper functioning of filters. The responses of PPI filter beneficiaries are documented in a monitoring cum feedback form.

- **Follow-Up Data Interpretation & Impact Analysis ( 160 No. users )**

During *February- June 2018*, SATHI carried out a detailed follow-up visit with each PPI beneficiary, collected the information about filter use and interpreted the impact of the PPI project. Detail of the data collected during follow-up visits is tabulated as under:-

**Total No. of families visited: 160 Nos.**

**Tools of verification: Physical review & personal interaction**

**Time/ Duration of follow-up: February to June 2018**

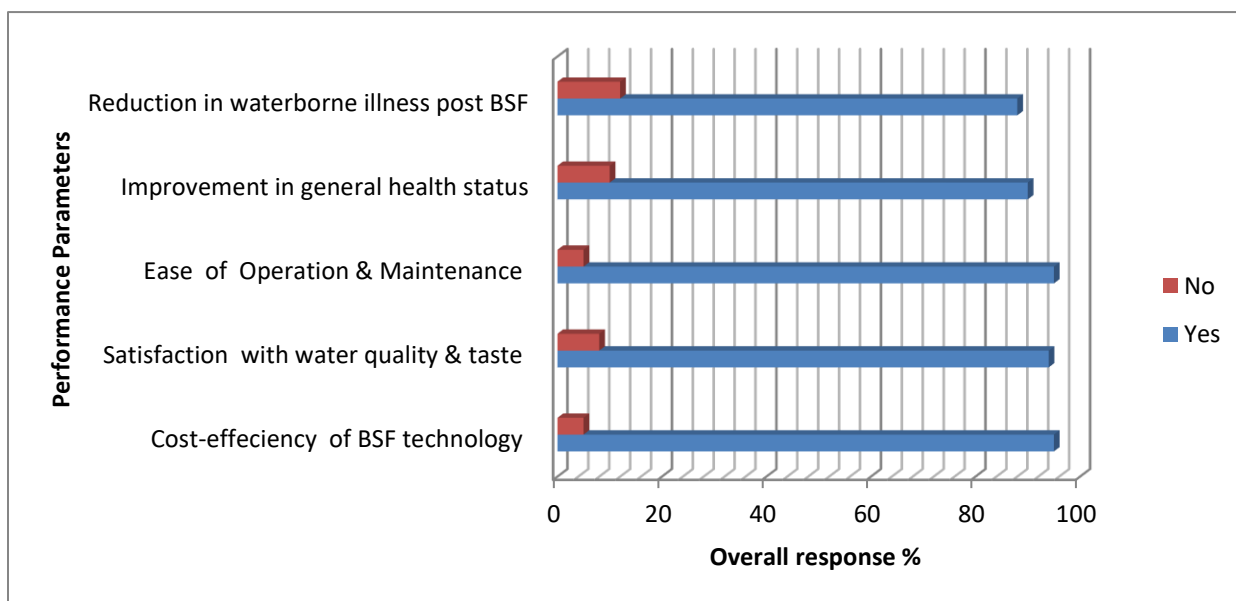
**Tab: : Filter use data tabulation**

Parameters of monitoring / Follow-up with user	Overall Response %	
	Yes	No
<b>A. The Filter</b>		
1. There are no leaks in the Filter container	100 %	-
2. The lid has no damage and covers the entire top of the filter	98 %	2 %
3. The diffuser has no damage and fits correctly with no gaps around the edges.	95 %	5 %
4. Filter is installed in a good location, away from weather and animals	96 %	4%
5. The surface of the sand is flat and level.	88 %	12%
6. The depth of the water above the sand is between 4 and 6 cm	91 %	9 %
7. The flow rate of filter is less than 0.4 litres/minute	89 %	11%
8. The water does not have a bad taste or smell	97%	3 %
<b>B . How the filter is used</b>		

9. There is no tap and no hose attached to the outlet spout.	100%	-
10. The outlet spout is clean.	96%	4%
11. The filter is used every day.	93%	7%
12. The water poured into the filter is clean.	95%	5%
<b>C. Safe water storage</b>		
13. The treated water storage container has a lid.	92%	8%
14. The storage container has a narrow opening or a tap to get water out.	89%	11%
15. The storage container is clean.	96%	4%
16. The user has separate container for collecting and storing water.	97%	3%
<b>D. Problems with the Filter</b>		
17. Any other problems?.....Please specify .....		
<b>Response:</b> 12 % users revealed that due to heavy weight of concrete filter, it is difficult to transport/move them from one location to other. No other problem is specified in context of filter efficiency.		

### Impact Analysis

After the tabulation & interpretation of filter use follow –up data, it is concluded that out of 160 families, 153 families are using filter regularly. Beneficiaries are very satisfied with quality & taste of water filtered through bio-sand filter. Majority of them are using



filtered water for drinking as well as for cooking purposes. 08 families have also reported reduction in rate of water borne diseases i.e. Diarrhea among family persons (especially during rainy season 2016-17) by regular use of filtered water. Only 4-5 % families which are not using the filter are instructed & motivated to use it regularly. In addition, 04 beneficiaries were instructed to change location of filter & to ensure its regular use. **Over all, about 93-95 % families are using filter regularly. On the bases of user data, it is analysis by SATHI that the key aim of the completed PPI project has been achieved.**

#### **v) Concluding Remark**

Through the implementation of Bio-sand filter programme, PPI has made immense contribution in addressing drinking water quality issues in remote pocket of Pachhad block, district Sirmour (HP). Till end of July 2018, SATHI (under PPI programme) developed & distributed total 160 Nos. filters to beneficiaries. These concrete filters are developed by STAHI at its Thakurdwara campus & after testing - final finishing; filters were installed by SATHI team at project villages. To ensure regular use of filter among beneficiaries, SATHI team conducts monthly/quarterly follow –up visit in project region. All beneficiaries & their family members have been trained by SATHI in filter use, operation & maintenance. Organization has also distributed the educational material on filter use & maintenance to beneficiary community. If some technical problems regarding filter use persist, it is rectified by SATHI team.

Through community sensitization & capacity building, SATHI ensured long term sustainability of PPI programme. Although the PPI project is officially completed on July 2018 & all activities of project are self sustained; though in upcoming months SATHI will make all possible efforts for conduct regular follow-up with users to analyses long term impact of project. After PPI intervention, 160 HH (Population : 890-900 ) are now able to get safe drinking water at their doorstep, which consequently reduced the rate of water bone illness & medical bill expenses up to 65-70%.