

Annexure A

A.1 Survey of Santhi (Sansi) Community Women

S. No.	Category	Query/Question	Respondents (<i>Santhi</i> community women)		General comments
1	Personal Information [Eighmey and McCord, 1998]]	Name of the location	Arna Phanta, Jodhpur	Bardarli, Jodhpur	Village of western Rajasthan, India
2		Name of the surveyed from <i>Santhi</i> community	<i>Santhi</i> Woman-1	<i>Santhi</i> Woman-2	
3		The other family members who also gathered around to hear queries post by surveyor	Male and female folk of <i>Santhi</i> family	Male and female folk of <i>Santhi</i> family	
4		Education level	Illiterate	Illiterate	
5		Period of survey	January, 2014	January, 2014	
6	Traditional know-how	How did you learn this manufacturing process?	From ancestors (women folk)	From mother	The traditional knowledge passes on from one generation to next generation as a requirement for marriage
7		What materials do you use in manufacturing these structures?	<i>Meth Mitti</i> and horse dung in equal volumetric ratio	<i>Meth Mitti</i> and horse dung in equal volumetric ratio	
8		From where do you get <i>Meth Mitti</i> ?	Initially it was available in the village itself, but now can be procured from Barmer ponds	From the village pond (Badarli village in Jodhpur)	
9		From where do you get horse dung?	Available within the village	Available in nearby village and stables	
10		How do you use horse dung?	It is used in dry form, usually one month old	Dry form, should be old enough to get good fibrous properties	

11		Why do you use horse dung only?	It has good bonding properties and keep the place conditioned and insect free	We traditionally use cow dung for floor finishing and horse dung for making structure	Its use in households keeps residents away from seasonal cough cold and other health conditions
12	Feasibility to sustenance	Have you ever thought about use of equal weight of raw material instead of equal volume	Tried but not does not work well	No, as the horse dung availability is declining, we traditionally use equal volume as it serves the purpose.	
13		Do you still make your houses using the same material	Yes, but numbers are declining due to new construction materials like cements and decline of horse population	Yes, in villages it is still in continuation.	The girl from <i>Santhi</i> community requires to study this know how

A.2 Survey of Potters for G-filter Technology Introduction

S. No.	Category	Query/Question	Respondents						General Comments
			Banad	Jhalamand	Salawas	Sar	Tindivanum-1	Tindivanum-2	
1	Personal information [Eighmey and McCord, 1998]	Name of the village	Banad	Jhalamand	Salawas	Sar	Tindivanum-1	Tindivanum-2	Potter from Rajasthan and Tamilnadu, India
2		Period of survey	December-2015	March-2016	March-2016	March-2016	May-2017	May-2017	
3		Region/Potter group	Moila kumhar	Prajapat	Moila kumhar	Moila kumhar	Kumhar	Kumhar	
4		No. of members in the family	12	9	14	18	11	10	More than 7±2 (Office Kaizen)
5		Family type (Joint/Nuclear)	Joint	Joint	Joint	Joint	Joint	Joint	Extended family system should be preserved
6		Name of the surveyed potters	Rajak Khan	Ram Prajapat	Bhike Khan	Iqbal khan	G. Perumal	Karuppaiah	
7		The other family members who also gathered around to hear queries post by surveyor	Male and female folk of potter family	Male and female folk of potter family	Male and female folk of potter family	Male and female folk of potter family	Male and female folk of potter family	Male and female folk of potter family	
8		Education level of potter's family	Illiterate	Primary	Primary	Illiterate	Higher secondary	Illiterate	
9	Desire to learn (citing usefulness) [Venkatesh and Davis, 1996]	Do you like this technique of water filtration? (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	
10		Would you like to learn this? (Yes/No)	Yes	Yes, but later	Yes	Yes, but not now	Yes	Yes	
11		If provided with a machine will you be able to manufacture this? (Yes/No)	Yes	No	Yes	Yes	Yes	Yes	Some potters asked for a training to use the machine

12		The machine will be provided at long term experimental sample and initial training will be provided. Is it ok?	Yes, when the machine will be provided	What is the cost, how will it be done?	Yes	Yes	Yes (ENACTUS, IIT Madras)	Yes (ENACTUS, IIT Madras)	
13		Do you feel that the laboratory sample of G-filter can be manufactured within the household open-hearth furnace? (Yes/No)	Yes	Yes	Yes	Yes	Can't say	Can't say	
14	Feasibility to manufacture [Ghani <i>et al.</i> , 1991/Koufaris, 2002]	How many labour will be required to manufacture G-filters?	Nil	Nil	Depends on volume to be manufactured	2-3 family members	1 extra labour (outside the family due to reason of old age)	Nil	The skill of pottery gets imparted within the family itself
15		How much extra material will be required if, equal volumetric ratio of clay and sawdust (similar to the practice of using horse dung and soil by <i>Santhi</i> women) is required?	No extra material will be required	No extra material will be required	No extra material will be required	No extra material will be required	No extra material will be required	No extra material will be required	
16		What is your source of procuring the clay?	Raithal, Mokalsar	Salawas	Salawas	Mokalsar	Tindivanum Pond	Tindivanum Pond	
17		The water is getting filtered here. Would you like to taste it? (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	
18	Water is being filtered for consumption at the survey site	Do you feel the change in quality of water you drank? (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	
19		If yes (The answer of previous question), please tell us the change of taste in water experienced.	Better in the tasted then we use on daily basis	Salinity reduced	Good quality	Its good in taste	Good	Good	
20	Potters know-how [Gupta <i>et al.</i> , 2018]	If the filter needs to be baked at high temperature, what methodology should be used after visually observing and physically examining filter sample? Please educate us.	Baking like we bake flower vases may work	Can't say	Baking individually may work	Can be baked with pots and other pottery products	Open firing	Open firing	Training on updraught klin construction is provided to the potters at Tamilnadu

A.3 Survey Form for G-Filter Utility

Interviewer: _____ Family Code: _____ Date: _____

“I am a researcher from IIT Jodhpur. I would like to ask some questions about your water consumption sources and habits from you. I would also like to know your concerns about the quality of the water and the effect of your primary water source on the health and wealth of your family.

Participation in this survey is voluntary. If we should come to any question you don't wish to answer, just let me know and I will go on to the next question, or you can stop the interview at any time. However, I hope that you will participate in this survey since your views are important.

All of your responses are confidential. I will not share your name with anyone, and your answers will not be used for any purpose other than research. At the conclusion of this interview, I will provide a free G-filter which is good for a year. At which point, I would like to perform follow-up interviews throughout this time, to chart the effect of the portable water (filtered using G-filter) on your family.

At this time, do you have any questions? Are you willing to participate? Yes/No

- If Yes, do you have any questions about the survey or may we begin?
- If No, thank you for your time and we will end here.

“Thank you!”

Interviewer: _____ Family Code: _____ Date: _____

Section A: Identifying household members (Preferred interviewee: Head male/female)

S.No.	Write down name of individuals that eat, sleep, or consume water together within this household	Focal mother	Focal child (anyone FM considers to be her child)	Focal father	Other members	Water collector	1. Male 2. Female 3. Transgender
1							
2							
3							
4							
5							
6							
7							

S.No.	Relationship	First Name	Focal Children Only)
	Reference: Head of Family	Highest Level	
1			
2			
3			
4			
5			
6			
7			

S.No.	Age		Age Categories (Years) (Tick only)			First Name (Focal Children only)
	Year	Month	0-5	6-11	+12	
1						
2						
3						
4						
5						

Section B: Water use and hygiene practice (Preferred interviewee: Head female/ Primary water collector)

S. No.	Questionnaire	Response
1.	What is the main source of drinking water for your household?	
	1. Piped water/ Tube well/Borehole	2. Dug well (Protected/Unprotected)
	3. Spring water (Protected/Unprotected)	4. Rainwater/Surface water
	5. Bottled water/Sachet water	6. Other
2.	What is the main source of cooking water for your household?	
	1. Piped water/ Tube well/Borehole	2. Dug well (Protected/Unprotected)
	3. Spring water (Protected/Unprotected)	4. Rainwater/Surface water
	5. Bottled water/Sachet water	6. Other
3.	What is the handwashing method at your household?	
	1. Liquid handwash	2. Soap
	3. Detergent powder	4. Other
4	Where is that water source located?	
	1. at own dwelling	2. in own yard
	3. at the village	4. Other
5	How long does it take to go there (get water) and come back?	
	1. 0 KM	2. 1-2 KM
	2. 3-5 KM	4. More than 5 KM
6	Do you do anything to make the water safer for consumption?	
	1. Yes	2. No
	3. I wish to know	4. Not required
7	If multiple treatment sought:	
	1. Boiling	2. Bleach/chlorine/alum
	3. Straining	4. Other
8	Do you usually do to make the water safer to drink? (Ask individually how do you take water from the containers?)	
	1. Pour directly	2. Spigot
	3. Using a cup with handle	4. Other

Section C: Member currently in school (Preferred interviewee: Self)

S. No.	Questionnaire	Response
1	In your last Two weeks of school, how many days did you attend school?	
2	In your last Two weeks of school, did you miss school due to illness? (else stop)	
3	If so, what do you think caused your illness? (else stop)	
4	Do you feel that you would be able to avoid the illness if you had access to cleaner water?	
5	At school, what is your main source of drinking water?	
6	Where is that water source located?	
7	How long does it take to go there (get water) and come back?	
8	Do you know what does the school do to make the water safer to drink?	

Section D: (Preferred interviewee: starting with the head female, then all nuclear family members listed in the list above) [Plappally, 2011]

S. No.	Questionnaire	Response
1	Who within the nuclear family contributes to the household monetarily or laboriously (e.g. on family farm/enterprise)? (Ask this question only to the head female)	
2	Who is the main individual that determines how money is spent in this family for common household expenses? [ask this question ONLY to the head female]	
3	How many days in the last 15-days did you work?	
4	Did you miss work in the last 15-days due to illness?	
5	What do you think caused your illness?	
6	Do you feel that you would be able to avoid the illness if you had access to cleaner water?	
7	At work, what is your main source of drinking water?	
8	Where is that water source located?	
9	How long does it take to go there (get water) and come back?	
	1. 0 KM	2. 1-2 KM
	2. 3-5 KM	4. More than 5 KM
10	Do you know, what does your place of work do to make the water safer to drink?	

Section E: G-Filter Use (Preferred interviewee: Primary water collector or Focal mother [Plappally, 2011])

S. No.	Questionnaire	Response
1	How many G-filters do you have at your home?	
2	How often do you use/refill the G-filter?	
3	Do the G-filters you have provide enough water for drinking purpose?	
4	Have you observed the change in flow rate of the G-filter with time?	
5	What do you do to filter the water for (drinking, cooking or bathing)?	
6	When was the last time you clean the G-filter?	
7	What was the last time you clean the water collector tank in your G-filter?	
8	Do you boil the water filtered from G-filter before use? (Yes/No)	
9	If you are not using the filter, why (1. Filter/Storage container/Spigot broke 2. Did not like using it 3. Felt it was not improving the quality of your water 4. Too time consuming 5. No longer here in this household 6. Found a better or more trusted source of water 7. Felt it was not necessary)	

Section F: Family Health (Preferred interviewee: Primary water collector / Focal mother [Roberts, 2003])

S. No.	Questionnaire	Response
1	How many times has this person had diarrhea in the past 2 weeks?	
2	How many times has this person had diarrhea in the past month?	
3	Has anyone (else) in the household had nausea or vomited in the last two days?	
4	How was the diarrhea treated? (0=Not treated 1=Re-hydration fluid from a packet (e.g., ORS) 2=Other "western" medicine 3=Traditional medicine 4=Homemade re-hydration fluid (water, salt and sugar) 5=Rice water 6=Other 7=Don't know)	
5	What was the cost of treatment for these cases of diarrhea? (riel) How many days of school or work did this person miss due to this case of diarrhea?	

