Project: ANTINOMOS

Report on Indigenous Technologies

Case No: 1

Step 1 – Description

- 1. Name of Technology to be evaluated: 'n' System (Known as Reverse U system)
- **2.** Location where technology is being evaluated: Varli village in Bhuj district (Gujarat) India.
- 3. Number of people approximately being served by the technology: 2500
- 4. Since when it is in operation? 2005
- 5. Who Designed / Planned and who implemented / constructed the technology?
 - : A 15 member committee (11men and 4 women) named as "Pani Samiti" was formed (Mr. Jaintibhai Ahir, Mr. Babubhai Makwana, Mr. Memabhai Ramjibhai Ahir (Present chairman), Mr. Kanabhai (Ex chairman), Mr. Welgibhai, Mr. Punjabhai Bichawada, Mr. Hematgarbhai Goswami, Mr. Govind Mema, Mr. Keshubhai Malawa, Mr. Sarjanrang Rebari, Mr. Babu Bawla, Mrs. Mogiben Lakhu, Mrs. Jaishreeben Jaishbhai, Mrs. Neeruben, and Mrs. Faridaben Sakoor). First four members were the founder and active members of the committee.
- **6.** Who is taking care of the technology now? Committee known as 'Pani Samiti'.
- 7. Are there any standards available which need to be fulfilled by the technology?

 If yes which? Equal distribution of good quality underground water.
- **8.** Are operations and maintenance data records available? Yes (Approximately 500 liters daily water supply per house. The quality of water has always been good in this area. This technology puts more emphasis on the quantity i.e. equal distribution to all which was a problem issue here earlier due to its uneven topography. The quality as such is good and has never been a problem issue.)
- 9. Please provide a brief summary of the history/evolution of this technology in the selected case study:

Due to the hilly and rugged terrain, Varli village has an uneven topography with some part of the village in low lying area while a part of it in upper reaches. As a result, the area suffered from the problem of water not reaching its upper part. There was no canal

in the area; therefore government started supplying under ground water around 30 years back by building a towering water tank so that water would flow with pressure. But even that system did not work properly because the topography is not on level and therefore the water did not reach the upper areas. Since the water supply was dependent upon the pressure system, therefore even if a single tap was open in the low lying area, the water would not reach the upper parts. As a result, many a times there were disputes too over the issue of water supply to upper parts.

Finally around six years back, fed up of the daily disputes, the villagers held a meeting in order to get some solution. A four member committee named as "*Pani Samiti*" was formed of the active members (namely Jayanti bhai Ahir, Babu bhai, Welgi bhai and Mema bhai) to resolve the problem amicably. The present chairman is Mr. Babu bhai. To solve the problem of finances (as it required a lot of money), they approached WASMO (Water and Sanitation Management Organisation, Gujarat) with their ideas put on paper. After a long discussion with minor changes WASMO agreed to finance the project with 90% of financial help from WASMO and the rest of the 10% as "Lok fala". Each household was supposed to contribute Rs. 100 though some people who could afford contributed more too for this project.

It is in operation since 2005 but this idea was conceived around a year and a half back. This idea was mainly derived from "kotha shugh" (ancient wisdom) that people used to solve the water problem i.e. they built the water tanks on the highest part of their fields so that water could be supplied with the help of pressure even if there was no electricity and secondly the concept of measuring heights of walls with the help of water tubes which is still used even in the present times. Thus these two concepts were practically applied in the form of 'n' system.

This system is not a revitalization of any old, existing system and has completely been newly built. It is totally based on new ideas that came up during certain meeting of villagers and was then discussed with WASMO who financed it. Only the bore well was already there. The water supply layout is newly installed i.e. in 2005. There is no other source of water supply. There have not been any modifications of the system as such but

certain other aspects have certainly been added like the sanitation works inspired by the success of water supply distribution.

10. Which were originally the intended direct benefits of this technology?: Equal distribution of drinking water to every household.

11. Brief technical description of the technology:

Water Source: Ground Water
Technical Process: Direct Supply

The committee members decided upon the implementation of reverse U system in the whole village. They built water tank near the bore in the village (located at around 150 meters on the outskirts of the village) so that water could be supplied with the help of pressure even if there was no electricity and secondly the concept of measuring heights of walls with the help of water tubes which is still used even in the present times. Thus,

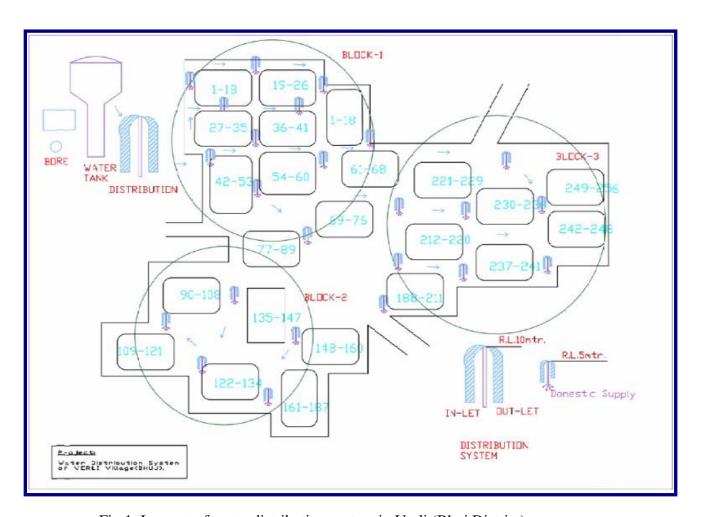


Fig.1: Lay-out of water distribution system in Varli (Bhuj District).

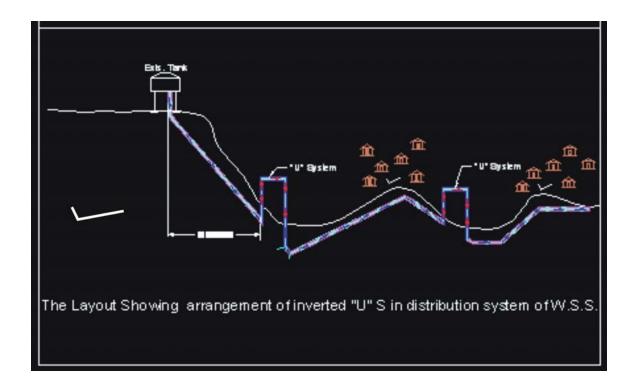


Fig.2: Lay-out of water distribution system in Varli (Bhuj District).

these two concepts were practically applied in the form of reverse U system. Water from this water tank was supplied to the village through pipes. One major ' Ω ' tube was installed near the village which was then connected with the sub-' Ω ' tube of the three blocks. The ' Ω ' tubes in the blocks were located on the corner of the street according to the height of the location of the blocks. Direction in which the water has to be supplied is controlled by the distribution control knob installed in major and sub ' Ω ' -tubes to control the water supply. Thus, these ' Ω ' tubes are installed on topographical basis.

In every street, first the level of the highest house was measured and then height of the water supply tube was increased more than that level so that water could be easily supplied to each house. This way around 25 'n' tubes in total have been laid down in the village and now water is easily supplied to each and every house in the village.

Comments on technology by the villagers:-

User Group	Question	Results/ Comments
1. Mr. Punjabhai	As	There is no problem in village. 'Atyare to
Bichawada (50 years)	mention	pani ni suvida che pad jyare committee nathi
	above	tyare piwana to dur kapda dovano aur snan
		karva vaste pani ni problem na sahan kare
		rahya hata'. (Before the existence of water
1/6 3/1		committee we were having problems of water
		even not for drinking but also for bathing and
		cleaning of clothes)
2. Mr. Haren Kumahar		Varli Water committee is very good for us. It
(40 years), 'n' tube		has solved water problem in our village.
assault on 12		
number 13. 3. Mr. Memabhai		The best word is that some the place will be a
		The best part is that even the places which are
Ramjibhai Ahir (45		situated on higher height are also getting
Years) Chairman 'Pani Samiti'		sufficient water. Thus, it has lead to equality besides providing people confidence in their
Chairman Funt Sumut		own cooperation thus leading to other
		schemes related to sanitation, etc.
4. Mrs. Jasuben Surubhai		We are getting sufficient and pure water now.
_		we are getting sufficient and pure water now.
Rebari (55 Years), 'n'		
tube		
no. 17.		
5 M D 11 (11) (42		X7 1' / '// 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
5. Mr. Prabhat bhai (48		Varli water committee has solved the problem
Years), 'n' tube no. 3		of water. Everyone is getting pure and
		sufficient water.

6. Mr. Hematgar	We were having lots of water problems but
Goswami (40 Years), 'n'	now everything is OK. We are getting good
Cos walk (10 Tours), TT	water due to water committee.
tube no. 23	
7. Mrs. Kuwerben bhura	(Initially she told us that she is not fully
(60 Years), 'n' tube no.	satisfied with the system, due to the low
	pressure. When we pointed that matter with
18	the 'Pani Samiti' then they found the reason
	for that which was that she had increased the
	height of the tape due to which the pressure of
	water decreased. Overall she now looks very
	satisfed). We are thankful to water committee
	which has solved our water problem. Now
	we are getting enough amount of water
	regularly. 'Comitte re karan Hamari problem
	khatam thai gai che'. (Due to Committee our
	problem finished).
8. Mr. Govind Krishnan	Water problem existed in our village before
(50 Years)	evolution of water committee which has
	solved water problem in our village.
9. Mr. Vinod P Sawak	(i) Village is getting water from Water
(38 Years), 'n' tube no.	committee due to which water problem
(30 Tears), TT tase no.	of village has finished. And also o more
4.	incidents of community violence.
	(ii) Water committee also provides water to
	public places like temples, mosques,
	community hall etc.
	(iii) Water committee also supplies water for
LOSF SAME	tree plantation done by village people.
10. Mr. Welgibhai (37	Water Committee has solved our entire water
- '	problem.

Years), 'n' tube no. 9.	Catiofiad
11. Mr. Babubhai	Satisfied
Makwana (50 years), 'n'	
tube no. 25.	
12. Mr. Eliash Siddique	Satisfied.
(33 years), '∩' tube no.	
9.	
13. Mr. Majaramabhai	Satisfied.
Chawala (88 years).	
14. Mr. Jaintibhai Ahir	Due to this technique whole village is getting water in good way. Also getting water in pure and timely manner saves time of village people. This technique is quite simple too. 'Pehle to bhai behno pani pivasu bimar padta hatha pad comitee re karan bimari kam thai
(35 Years),	gai che'. (Due to committee there are lesser
'∩' tube no. 16.	incidences of diseases in village).
15. Mr. Dewat Jaisat	Satisfied.
Makawana (65 Years)	
16. Mr. Bechubhai	Satisfied.
Bichalbhai Chawada	

(60 years)	
17. Mr. Meghar	Satisfied.
Bhimabhai Makwana	
(52 Years)	
18. Mr. Hussain Ahmed	Satisfied.
(60 years)	
19. Mr. Pachan Hira	We are getting lots of benefit out of this
Rebari (38Years)	technology
	(i) Saving of time
	(ii) Cleanliness
	(iii) Getting water regular and on equal
	basis.
20. Mrs. Pureben Hira	Satisfied.
Rabari (62 Years), '∩'	
tube no. 24.	
21. Mrs. Jiveeben	People now realize the value of water; they
Khimabhai bagheri (35	are not wasting it – a commendable
Years)	achievement.

Step 2 – Evaluation

Date of visit: August 26th to September 1st, 2008.

Name of the expert(s) making the visit: Dr Suboodh Kumar Bishnoi

1. Preliminary performance indicators for accessing whether the intended direct benefits have been fulfilled:

Intended Benefit	Indicator	Method of Verification
Saves electricity	Lesser time spent in	
(It takes just 9 hours to	supplying water (Although	
supply water to the whole	there is no electricity	
village compared to the	meter because government	
earlier 18 hours thus,	provides electricity free of	
saving 9 hours of	charge but lesser time	
electricity).	spent means lesser	
	electricity burnt while the	
	motor runs)	
Equal distribution of water	Water pressure	Filling time for 10 lit
to each household.	Discharge (l/h)	buckets at each household.
to each nousehold.	Time of water supply	
Technical functioning	Performance in last 4 years	Experts visit
Acceptance by local	How much water he is	
community	getting ever and got never	

Unintended Benefit	Indicator	Method of
		verification
Family health	Less water borne diseases due to better	
improvement	quality of water	
Lesser disputes among		
villagers leading to a more		

cordial environment.		
Ecologically beneficial as	Around 15 years back, the water table	
ground water level has	was at 60 feet depth. With every two to	
come up	three years the boring was dug another	
	15-20 feet to get enough water to supply	
	to the villagers. As a result, the water	
	table had gone down as low as 350 feet	
	depth and that too with little benefit. But	
	after the implementation of 'n' tube	
	system, there has been no need to	
	further dig the boring as the water table	
	has risen to 200 ft. depth.	

2. Results of Assessment:

Intended Benefit	Indicator	Fulfilled	Comments (with
		Yes/no	reference to the used
			indicators)
Equal distribution of		Yes	Approximately it takes
water to each			around a minute to fill 10
household			ltrs. bucket
Technical functioning	Yes		System is working
			extremely well
			irrespective of minor
			cases of pipe leakages,
			etc.
Acceptance by the	Yes		Users are mainly
local community			satisfied with the system
			and consider it a success.
Water conservation		Yes	Initially water was

		supplied about 18 h/day as compare with new system in which supply only 9 h/ day
Energy saving	Yes	Electricity bill were not available because it is government policy to free electricity supply, but compare to 18 h/day water supply there are only 9 h/day.
Less mosquito breeding	Yes	

Layout of 'n' System (Known as Reverse U system)



Summary of User Perceptions

Both Individual Interviews and group Discussions

Questions (Q):

S.	User Name	Questions	Results/ Comments
No.			
1.	Mr. Punjabhai	Q1: Are You Happy with the	Before the existence of
	Bichawada (50	technology? If Yes why, if no	water committee we were
	years)	why not?	having problems of water
			even not for drinking but
			also for bathing and
			cleaning of clothes. It has
			proved as a boon for us.
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	We now wish to go for
		may not like with the	complete sanitation and
		technology or which could be	improved hygenicity in the
		improved (if yes, what and	village.
		how)?	
		Q5: Do you have equal access	Definitely yes.
		and pay a fair price?	
		06. 4	NT 11
		Q6: Are you aware of any	No idea

		misuse of the service?	
2.	Mr. Haren	Q1: Are You Happy with the	Yes, it is a good thing for
	Kumahar (40	technology? IF Yes why, if no	this village as it has solved
	years), 'n' tube	why not?	the water problem of the
	years), II tube		whole village.
	number 13.	Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	Varli Water committee is
		may not like with the	very good for us. It has
		technology or which could be	solved water problem in
		improved (if yes, what and	our village.
		how)?	
		Q5: Do you have equal access	Everybody has equal
		and pay a fair price?	access and is supposed to
			pay Rs.5/month which is
			quite fair.
		Q6: Are you aware of any	No
		misuse of the service?	
3.	Mr. Memabhai	Q1: Are You Happy with the	The best part is that even
	Ramjibhai Ahir (45	technology? IF Yes why, if no	the places which are
	Years)	why not?	situated on higher height
	Chairman 'Pani		are also getting sufficient
	Samiti'		water. Thus, it has lead to
			equality besides providing
			people confidence in their
			own cooperation thus
			leading to other schemes
L			

			related to sanitation, etc.
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	We have started schemes
		may not like with the	related to use of sewerage
		technology or which could be	water for irrigation after
		improved (if yes, what and	purifying it and so we want
		how)?	to build a check dam and
			install a purification plant
		Q5: Do you have equal access	All consider it a beneficial
		and pay a fair price?	proposition.
		Q6: Are you aware of any	In the capacity of
		misuse of the service?	Chairman, I would say that
			in any such case we would
			first issue a warning and if
			no heed is paid to that then
			it will be followed by the
			cutting of connection. We
			charge more amounts from
			people desiring a
			reconnection after getting a
			written agreement signed
			by the offender.
4.	Mrs. Jasuben	Q1: Are You Happy with the	I am not just happy for
		technology? IF Yes why, if no	myself but for the whole
		why not?	village. It is a wonderful
			system. I would say
		 	<u> </u>

Surubhai Rebari		especially for women,
(55 Years) , '∩'		when I remember the times
(33 16413), 11		of few years back when I
tube no. 17.		used to bring water by
		carrying pots on my head
		from quite a distance.
	Q2: Are you using the	Yes, I am.
	technology (regularly)?	
	Q3: Is there anything which	Not at all.
	may prevent you from using the	
	technology (regularly), if yes	
	what?	
	Q4: Is there anything which you	How I wish it could have
	may not like with the	been introduced to us
	technology or which could be	womenfolk a little earlier.
	improved (if yes, what and	
	how)?	
	Q5: Do you have equal access	Yes
	and pay a fair price?	
	Q6: Are you aware of any misuse of the service?	No.
5. Mr. Prabhat bhai		Varli water committee has
5. Mr. Prabhat bhai	Q1: Are You Happy with the	Varli water committee has
(48 Years), 'n'	technology? IF Yes why, if no why not?	
tube no. 3	why not:	water. Everyone is getting
tube no. 5		pure and sufficient water.
	Q2: Are you using the	Yes
	technology (regularly)?	
	Q3: Is there anything which	No
	may prevent you from using the	
	technology (regularly), if yes what?	
	Q4: Is there anything which you	Its success is leading to

		may not like with the	other cooperative schemes
		technology or which could be	1
		3.	and it should continue to
		improved (if yes, what and	be like this only.
		how)?	
		Q5: Do you have equal access	Yes, I think everybody
		and pay a fair price?	thinks it is a fair price.
		Q6: Are you aware of any	No
		misuse of the service?	
6.	Mr. Hematgar	Q1: Are You Happy with the	Yes, it should be adopted
	Goswami (40	technology? IF Yes why, if no	by as many villages as
	Years), 'n' tube	why not?	possible.
	10015), 11 1000	Q2: Are you using the	Yes
	no. 23	technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	It is an exemplary system
		may not like with the	
		technology or which could be	
		improved (if yes, what and	
		how)?	
		Q5: Do you have equal access	Yes, everybody has equal
		and pay a fair price?	access which is the main
			benefit of this scheme.
		Q6: Are you aware of any	No
		misuse of the service?	
7.	Mrs. Kuwerben	Q1: Are You Happy with the	We are thankful to water
		technology? IF Yes why, if no	committee which has
		why not?	solved our water problem.
			Now we are getting
			enough amount of water

	bhura (60 Years),		regularly. 'Committee re
	'∩' tube no. 18		karan Hamari problem
	11 1400 110. 10		khatam thai gai che'. (Due
			to Committee our problem
			finished).
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	Initially she told us that she
		may not like with the	is not fully satisfied with
		technology or which could be	the system, due to the low
		improved (if yes, what and	pressure. When we pointed
		how)?	that matter with the 'Pani
			Samiti' then they found the
			reason for that which was
			that she had increased the
			height of the tape due to
			which the pressure of
			water decreased. Overall
			she now looks very
			satisfied
		Q5: Do you have equal access	Yes
		and pay a fair price?	
		Q6: Are you aware of any	No misuse.
		misuse of the service?	
8.	Mr. Govind	Q1: Are You Happy with the	Yes, it is an extremely
	Krishnan (50	technology? IF Yes why, if no	beneficial technology for
	Years)	why not?	the village. It has provided

			us a permanent solution to
			-
			our water problem without
			creating ecological
			imbalances too.
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	It should be adopted by the
		may not like with the	other villages too.
		technology or which could be	
		improved (if yes, what and	
		how)?	
		Q5: Do you have equal access	Yes
		and pay a fair price?	
		Q6: Are you aware of any	Few instances of misuse
		misuse of the service?	have been observed and in
			that case a warning is
			issued to the first timer. In
			case of repetition a fine is
			imposed and finally the
			connection is cut if still no
			heed is paid.
9.	Mr. Vinod P	Q1: Are You Happy with the	(i) Village is getting water
<i>)</i> .		technology? IF Yes why, if no	
	Sawak (38 Years),	why not?	from Water
		, 11, 11, 11, 11, 11, 11, 11, 11, 11, 1	committee due to
			which water problem
	100 m		of village has
			finished. And also o
			more incidents of
<u> </u>		l	

	'∩' tube no. 4.		community violence.
	Ti tuoc no. 1.		(ii) Water committee also
			provides water to
			public places like
			temples, mosques,
			community hall etc.
			(iii) Water committee also
			supplies water for tree
			plantation done by village
			people.
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes what?	
		Q4: Is there anything which you	Should lead to many more
		may not like with the	•
		technology or which could be	such other schemes
		improved (if yes, what and	benefiting the rural village
		how)?	in the true sense.
		Q5: Do you have equal access	Yes, it is a fair enough
		and pay a fair price?	price.
		Q6: Are you aware of any	No
		misuse of the service?	
10.	Mr. Welgibhai (37	Q1: Are You Happy with the	Yes, everybody gets not
	Years), 'n' tube	technology? IF Yes why, if no	just sufficient and timely
	rears); II tube	why not?	water supply but water is
			also pure.
		Q2: Are you using the	Yes.
		technology (regularly)?	
		Q3: Is there anything which	No
<u> </u>			

	no. 9.	may prevent you from using the technology (regularly), if yes what? Q4: Is there anything which you may not like with the technology or which could be improved (if yes, what and	It is quite fine as it is.
		how)? Q5: Do you have equal access and pay a fair price?	I think everybody thinks it is a fair price for such a good supply.
		Q6: Are you aware of any misuse of the service?	No, not aware of any misuse.
11.	Mr. Babubhai Makwana (50 years), 'n' tube no. 25.	Q1: Are You Happy with the technology? If Yes why, if no why not? Q2: Are you using the technology (regularly)? Q3: Is there anything which may prevent you from using the technology (regularly), if yes what? Q4: Is there anything which you	Yes, quite happy with this people's initiative Yes No No, it is fine.
		may not like with the technology or which could be improved (if yes, what and how)? Q5: Do you have equal access and pay a fair price?	Yes, everybody has an equal access.
			-

years), 'n' tube technology? IF Yes why, if no this village. why not? Q2: Are you using the Yes	
vears). 'O' tube	
O2: Are you using the Voc	
Q2. Are you using the res	
no. 9. technology (regularly)?	
Q3: Is there anything which No	
may prevent you from using the	
technology (regularly), if yes	
what?	
Q4: Is there anything which you I am sure it v	vould lead to
may not like with the much bigger the	nings.
technology or which could be	
improved (if yes, what and	
how)?	
Q5: Do you have equal access Everybody	has equal
and pay a fair price? access and is	supposed to
pay Rs.5/mor	nth which is
quite fair.	
Q6: Are you aware of any I am not aware	e of any such
misuse of the service? thing but if the	there is then
there are pr	ovisions for
that too.	
13. Mr. Q1: Are You Happy with the Yes, I am.	
Majaramabhai technology? IF Yes why, if no	
Chawala (88 why not?	
years). Q2: Are you using the Yes	
technology (regularly)?	
Q3: Is there anything which Nothing.	
may prevent you from using the	
technology (regularly), if yes	
what?	
Q4: Is there anything which you It looks like	e a perfect
may not like with the	

		technology or which could be	solution.
		improved (if yes, what and	Solution.
		how)?	
		·	A 11 .1 1 1
		Q5: Do you have equal access	All the people have access
		and pay a fair price?	to it.
		Q6: Are you aware of any	Not aware.
		misuse of the service?	
14.	Mr. Jaintibhai	Q1: Are You Happy with the	Due to this technique
	Ahir (35 Years),	technology? IF Yes why, if no	whole village is getting
	'∩' tube no. 16.	why not?	water in good way. Also
			getting water in pure and
			timely manner saves time
			of village people. This
			technique is quite simple
			too. 'Pehle to bhai behno
			pani pivasu bimar padta
			hatha pad comitee re
			karan bimari kam thai gai
			che'. (Due to committee
			there are lesser incidences
			of diseases in village).
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	Now we all should pay
		may not like with the	attention to health aspect
		technology or which could be	of villagers too.
		improved (if yes, what and	
		how)?	

	1	T	
		Q5: Do you have equal access	Yes
		and pay a fair price?	
		Q6: Are you aware of any	No
		misuse of the service?	
15.	Mr. Dewat Jaisat	Q1: Are You Happy with the	Yes, I am a big advocate of
	Makawana (65	technology? IF Yes why, if no	this technology.
	Years)	why not?	
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	Nothing
		may not like with the	
		technology or which could be	
		improved (if yes, what and	
		how)?	
		Q5: Do you have equal access	Yes, I think everybody
		and pay a fair price?	thinks it is a fair price.
		Q6: Are you aware of any	No
		misuse of the service?	
16.	Mr. Bechubhai	Q1: Are You Happy with the	Yes, it has made our
	Bichalbhai	technology? IF Yes why, if no	village a better place to
	Chawada (60	why not?	live in.
	years)	Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	It is okay
		may not like with the	
	1	l .	<u> </u>

		technology or which could be	
		improved (if yes, what and	
		how)?	
		Q5: Do you have equal access	Yes to both
		and pay a fair price?	
		Q6: Are you aware of any	No
		misuse of the service?	
17.	Mr. Meghar	Q1: Are You Happy with the	Yes, it is an extremely
	Bhimabhai	technology? IF Yes why, if no	beneficial technology.
	Makwana (52	why not?	
	Years)	Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	We are now going on for
		may not like with the	purification of sewerage
		technology or which could be	water and I would like for
		improved (if yes, what and	this trend to continue.
		how)?	
		Q5: Do you have equal access	Yes
		and pay a fair price?	
		Q6: Are you aware of any	No misuse. In case of
		misuse of the service?	misuse there are certain
			punishments to keep away
			people from misusing.
18.	Mr. Hussain	Q1: Are You Happy with the	Yes, it is quite a good
	Ahmed (60 years)	technology? IF Yes why, if no	technology.
	(3.2.5)	why not?	
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which	No

		may prevent you from using the technology (regularly), if yes what? Q4: Is there anything which you may not like with the technology or which could be improved (if yes, what and how)?	It paves the way for further people's cooperative schemes.
		Q5: Do you have equal access and pay a fair price? Q6: Are you aware of any	Yes
		misuse of the service?	
19.	Mr. Pachan Hira	Q1: Are You Happy with the	We are getting lots of
	Rebari (38Years)	technology? IF Yes why, if no why not?	benefit out of this technology (i) Saving of time (ii) Cleanliness (iii) Getting water regular and on equal basis.
		Q2: Are you using the	Yes
		technology (regularly)?	
		Q3: Is there anything which may prevent you from using the technology (regularly), if yes what?	
		Q4: Is there anything which you	Now the problem of water
		may not like with the technology or which could be improved (if yes, what and how)?	for irrigation too should be solved in the same manner.
		Q5: Do you have equal access and pay a fair price?	Yes, price may be lowered

			for some poor people.
			Although women and
			children and exempted
			from this but still I just
			guess that some people
			find it quite difficult.
		Q6: Are you aware of any	No
		misuse of the service?	
20.	Mrs. Pureben	Q1: Are You Happy with the	Yes, fully satisfied. Just
	Hira Rabari (62	technology? IF Yes why, if no	what we needed.
	Years), 'n' tube	why not?	
	rears), ii tuoc	Q2: Are you using the	Yes
	no. 24.	technology (regularly)?	
		Q3: Is there anything which	No
		may prevent you from using the	
		technology (regularly), if yes	
		what?	
		Q4: Is there anything which you	No
		may not like with the	
		technology or which could be	
		improved (if yes, what and	
		how)?	
		Q5: Do you have equal access	Yes
		and pay a fair price?	
		Q6: Are you aware of any	No
		misuse of the service?	
21.	Mrs. Jiveeben	Q1: Are You Happy with the	I have no words to describe
	Khimabhai	technology? IF Yes why, if no	my thanks. People now
	Bagheri (35	why not?	realize the value of water;
	Years)		they are not wasting it a
			commendable
			achievement.
			acine veinent.

Q2: Are you using the technology (regularly)?	Yes
Q3: Is there anything which may prevent you from using the technology (regularly), if yes	No
what?	X/:11 1 11
Q4: Is there anything which you may not like with the	Villages should go in for full self-dependency
technology or which could be improved (if yes, what and	following such schemes.
how)? Q5: Do you have equal access	Yes
and pay a fair price? Q6: Are you aware of any misuse of the service?	No