

*Actions &
Reflections Series*

(WTR- 2)

**WOMEN, WATER, IRRIGATION
RESPECTING WOMEN PRIORITIES**

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Women and Water Perceptions and Priorities

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[Abstract:

Public canal irrigation system suffers from many deficiencies –inefficiency, unreliable delivery of water, inequitable water distribution causing – tailenders deprivation, neglect of maintenance causing deterioration of infrastructure, poor and insensitive service to farmers etc.

Transferring irrigation management of Water Users Associations is considered essential for improving the canal management. Those, particularly NGOs committed to gender priority would like women to be brought in the “main stream” of irrigation management by encouraging them to participate actively in the affairs of Water Users Associations. The paper that seeks to examine such an approach, begins with reporting on the interaction with women groups in six villages which had different sources of water for domestic use but one common feature – they were all served by a canal. Participatory Rural Appraisal conducted in these villages brought out that women’s priority concern was very largely for water for domestic use- drinking, cooking, washing, bathing.... These women had hardly any interest in canal waters as they were perceived to be meant for agriculture, not meant for meeting “their” priority requirements.

The paper then examines two issues:

1. How can canals serve better the women’s priority needs for domestic use of water?
2. The paper then examines what women can do for improving the canal management and better functioning of water users’ associations. The paper concludes that those trying to bring women into “main stream” of water management should first know, remember, respect and work for women’s priority needs for water for domestic use.]

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1 WOMEN'S NEEDS AND PERCEPTION:

Visiting a canal with engineer

We were moving in the command area of an irrigation project. From the car window I could see some women washing their clothes in the canal. I requested the accompanying engineer to stop the car. As we were approaching the women, the canal engineer told me that quite often they tried to dissuade women from using the canal water for such purposes. Somehow they manage to reach the canal and use it for their purposes. By the time the engineer could finish his explanation, we were close to the women. When I asked them why they were using canal for washing clothes, they said, there was no other convenient arrangement in their village and therefore they preferred to walk down 2kms distance to wash their clothes in the running canal water. The engineer was feeling more uncomfortable.

I asked the women: "Is it convenient to wash clothes in the canal?"

Women: "It is better than what we have in the village. Of course it is difficult to wash clothes on the slope of slanting canal side".

I asked: "If government is ready to help, what kind of arrangement would you like?"

Women: "Some kind of platform made of flat stones on which we can sit and wash clothes, using the canal water"

Back in the car we proceeded further. Now it was engineer's turn to stop the car to show me group of women washing clothes in another canal. When we reached the women, we found that there was indeed a platform on which women were washing their clothes. To my surprise, I turned to the engineer, how come? He said, "We learnt about the problems of women in a nearby village and therefore constructed this facility."

"Is it permissible? What about the funds?"

The engineer was now in full form. "No problem. If we want we can manage, after all it is a small expenditure. It can be accommodated in the canal maintenance grant".

Village Sankarpura(Anand District, Gujarat, India)

I joined the group of women sitting on the ground. Some of the women had covered their faces with their saree, the pardha system. The men folk were requested to move behind so that the women do not have to cover their faces. This incident involving moving of the men behind the women group and the women uncovering their faces created a relaxed atmosphere. After some 'ice breaking' dialogue, I asked women about the various uses of water. As the group was mentioning the uses they were noted in a chart paper.

1. Drinking
2. Cooking
3. Bathing
4. Washing clothes
5. Water for animals to drink and wash
6. Agriculture

The discussion turned to how much water is required by each family. They described the requirement in terms of 'beda' (a beda means two pots one over other) that women carry on their head. The number varied from 5 to 15 depending upon the number of people and animals in a family. Then we discussed sources of water. There are two dug wells in the village from which water could be drawn lowering the pot tied to a rope. The women however preferred to carry water from the tube well of a farmer. Extent of trouble would depend upon the distance of the houses from the tube well. That took us to drawing the social map of the village, showing location of houses and their distance from the tube well. Initially hesitant, the women were now drawing the map. Each one tried to mark her house. The wells and the tube well were also shown.

Besides the dug wells and the tube well, is there any other source of water? The women looked at each other. I asked: "I understand there is a canal serving your village?"

"Yes, of course, that is for agriculture." I drew their attention to the list they had prepared about the uses of water, which included agriculture. They explained they had in mind buying water from the tube well owner, an expensive proposition. Canal was not very regular and therefore if the crops required they had to turn to the private tube well owner. But when the canal water is available, can they use the water for the purposes that have listed? They liked to but were not allowed by the canal officers and even farmers, the men. Canal water is for agriculture.

If allowed would they like to use canal water for the listed uses?

“Yes of course, It is much better than carrying loads of water on the head. We are losing hair, becoming bald !.”

Suppose the canal authority allowed, what would they do?

“At present we carry the clothes as also a wooden plank so that we have some kind of platform to wet, soap and rinse our clothes. If allowed we would like to have a flat platform made of stones where we can sit and wash clothes. We will also use the facility for animals to drink and we can wash them. Women showed readiness to collect contributing if required by the Panchayat (village council)”.

Vadabar (Mehsana District):

Meeting with villagers, mostly women, of a backward community. All the women illiterate. There was a water trough very close to the meeting place. Animals were drinking water and women were bathing and washing clothes. Starting discussion with the village trough, I asked various uses and sources of water in the village. There were a number of wells in the village area but four all had saline water, not good for drinking and cooking. The water trough and four wells were shown in a map on a chart paper. Also the lanes and houses in the village to find out the distance from the sources of water. Women have to bring 5 to 15 ‘beda’s to meet the water requirements of the family. I asked: “Since you wash clothes and bathe with the water in the trough, at least you are not required to carry water for bathing.” Women said, “Only we come to the trough. We have to carry water home for men’s bathing.” I exclaimed, women bathe in open and men in the comfort of home! Is it not strange? Women laughed and said that is how our life is organised. What are the other sources of water? I thought they would now mention the canal that was passing by the village. The women mentioned the village pond, which collected rainwater that was sweet. If filled up during rains it can provide water to the village for two years. But that is not happening for last five years. “What could be done?” I wondered loudly. The women suggested that if canal water could be diverted to the pond it could be filled up. “Yes, good idea. Why don’t you approach the canal officers?”

I was informed that there was an open channel dug by the village community to divert some canal water to the pond. Later on they laid underground pipe connecting the canal to the pond. They raise fund by contributing Rs.300 to Rs.500 per family. “Very good, so your problem is solved ?”

Women sullen and dejected informed: “Yes until the canal authorities plugged with cement concrete the outlet from which the pipeline carried water to the pond. They could not tolerate such unauthorized use!” I discussed with the villagers mostly addressing women, “I mentioned some options that can be considered for dealing with the problem of water by rain water harvesting, approaching the canal authorities for giving permission for taking canal water to the village pond etc. Women remained skeptical .

I did not discuss the question of women’s participation in the management of canal for agriculture.

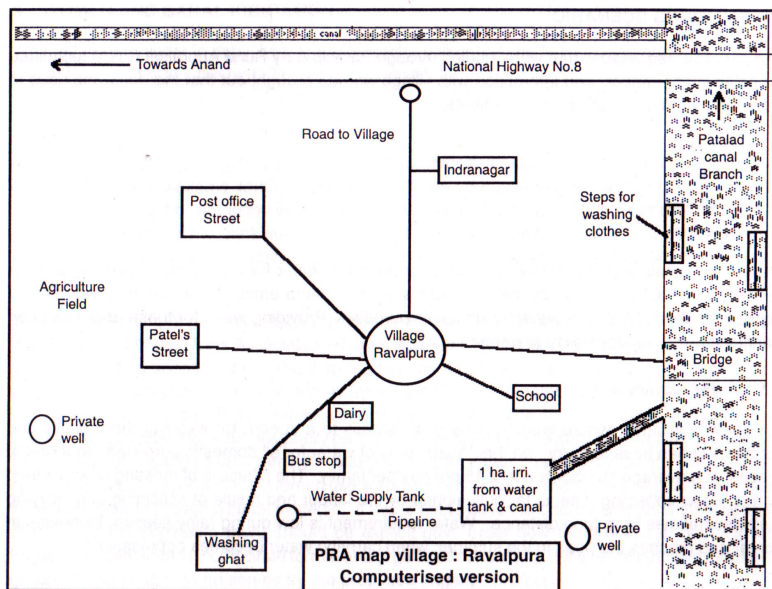
Ravalpura (Anand District)

The meeting with women was arranged in the office of village milk co-operative. It was a floor above the center where the society collected milk twice a day for sending to the district milk union for processing and distribution. Late in the evening it was not very convenient time for women to meet and yet, there were more women than we expected. Some carried their children also. Difficult to conduct a PRA on “Women and Water”. Even though questions were directed to women some men sitting around all the time volunteered to provide information. I requested them to move to an adjoining room. Women felt relaxed and spread out . PRA exercise started with a few women with whom it was possible to communicate.

Uses and sources of water: USES: drinking, cooking, bathing, drinking and washing animals, washing clothes, washing utensils, agriculture. The most important sources were piped water supply scheme of the village. The most difficult problem was erratic power supply which kept women waiting for hours. Those who don't have pipe connection at home collected water from the neighbors. There were localities at higher level, where piped water could not reach. There was a washing ghat(enclosed waterstand with facility for washing and bathing) for women, but inadequate. Without drainage, all surroundings were slushy, dirty. There was no time to get into these issues, though very vital for women. . We were interested in women's perception about the irrigation canal as a source of water to meet their requirements. They did not even mention it. When we referred the PRA map of the village, women pointed out those living close to the canal use it for washing clothes. There was a platform for washing clothes constructed by the canal authorities. There was need for extending the platform but most of the women preferred to have facility for washing close to the village.

The village was prosperous. Women were more involved in their household duties and their contribution to agriculture was only for weeding and harvesting. All other operations were done by engaging labourers when required. Yet these women were expressing their grievances before a stranger how they were suffering because the village leaders do not care for their needs of water for domestic purpose.

We left the village without discussing the possibility of women participating in canal management.



There was similar exercise done by staff of DSC in villages Rajpur, Kanzara Khadalpur.

2. Emerging Scenario:

The canal saved villages that were studied through PRA technique for establishing rapport and interaction with village women brought out that the following uses of water are common in all the seven villages:

1. Drinking
2. Cooking
3. Washing
4. Bathing

Water for animals was mentioned by 5 villages where as water for agriculture, cow dung and for construction was mentioned by women groups in one village each. Thus primarily women are concerned about the use of water for domestic purposes providing water for these uses has been the traditional responsibility of women.

Water requirement

Except a village where women have easy access to a stream for washing the utensils and clothes, women have to carry on their head pots of water for all domestic purposes. In terms of 'bedas' the average number is about 15 per day per family. The pleasure of meeting other women at the water collecting site, is far out weighed by the labour and hustle of collecting and carrying water sometimes from long distance. Water requirement is the low during rainy season, increases in winter and reaches the peak in the summer, when carrying water becomes oppressive.

Sources of water

Only in one village women could get water from the village scheme of piped supply reaching homes. Not all houses have water connection. In the rest of the villages women collect water from private wells, suffering the load on their head for long distances and sometimes humiliation from the private owners. They would like to have village pipe supply made more reliable. Some villages are suffering the problem of saline ground water. Though all the villages studied were served by canal, only in one woman mentioned it as a source of water. We had to remind the village women of canal water as a source and their response was yes, but it is for agriculture. Only in one village irrigation

authority has provided some facility in the canal for washing clothes. Other villages would also like to have it. The development agencies working for improving water supply and those have women in the center of their programme objectives, would be well advised to work for helping women in easing their problems of obtaining water for domestic purpose.

3. WOMEN AND CANAL IRRIGATION

We may now consider in detail what irrigation sector can contribute to domestic water supply that has the highest priority for women.

Design

In order that canals can serve women's needs of water for domestic use, women should be involved in designing canal systems when it is close, to villages. If it is not close, a channel loop may be constructed taking it closer to the village. It should have facility for women to use canal for washing clothes and for animals to drink and for cleaning them. Alternative design for this purpose should be developed that provide convenient facility to women without damaging canal structure and quality of water.

Drawing conclusions in the paper "Gender and Irrigation Management" Margreet Zwarteveen has rightly mentioned, "explicit consultations should be held with women users and women's ideas and concerns should be included" in designing and managing canal systems. If this is not to be left to chance and on to the sweet will of the irrigation engineers there should be explicit govt. order how the process of planning and irrigation system should incorporate formal and organized consultation with representatives women's groups in the villages to be served by the proposed irrigation project

Redesigning:

For the existing canal systems there would be need for redesigning of canals when they pass near village habitations so that they take care of the priority need of water for domestic use. After gaining some experience how this can be done, government orders should be issued. That will ensure that women's needs for domestic use of water is no longer neglected, nor at the sufferance of canal officers.

Water supply scheduling

Which crops to raise in the farm is an intra family decision. However when there is shortage of water in the irrigation system, canal authorities have to decide when to first release water in a season and how many waterings to provide, with what frequency. This depends upon farmers views about main crops to be raised. It has been reported in several studies that men prefer cash crops and women food crops for consumption . In Shri Lanka Paddy is ‘male’ crop, millet ‘female crop. When canal authorities consult farmers about planning for irrigation season it should be imperative that they consult women groups also and consider their preferences.

Management

One special requirement that has been brought out in all studies and infact which is obvious, is that women farmers when they do not have male members in the family, should not be required to attend to night irrigation. While planning rotation canal officials are not likely care if the night turn farmers are women. This is usually managed through mutual understanding. However experience has shown, as reported by Shilpa Vasavada, that in Gardi project this requirement was completely neglected even when the management was with WUA. There is need for government order that canal officials should have a list of women headed farm families and in planning the rotation, they must see to it that women are not required to go to their farm land in night for irrigation purpose.

4. PROBLEMS OF IRRIGATION MANAGEMENT

Mr. L.K. Joshi who was Joint Secretary in the Ministry of Water Resources, Govt. of India, has in his famous review of irrigation sector in India (1997) presented as ‘Paradigm Shift’ has lifted the following ailments of public irrigation management in India.

- a. Water delivery is unreliable
- b. Water distribution is inequitable and tailend deprivation is almost universal.
- c. Small farmers are deprived of water
- d. Water use is very inefficient, leading to over irrigation in part of the command that leads to wastage of water
- e. There is no group or individuals incentive for farmers to conserve water and economize its use
- f. Service to farmers is poor and marked by insensitivity

- g. Leavy of water rates and the recovery has no relation to the actual cost of water.
- h. There is widespread deterioration of infrastructure: From the analysis of the performance of 24 irrigation projects done by Central Ground water Board, it is possible to add a few more deficiencies to the list provided by Mr. L.K Joshi.
- i. Excessive canal seepage.
- j. Inefficient drainage and water logging.
- k. Main system's deficiencies
- l. Mismatched cropping pattern and calendar

Mr. Joshi summarizes the weaknesses of the present system in these words: "The approach is top-down. The prescriptions are handed from the top and irrigation is managed more according to standard administrative procedures than by local variable needs."

Left to themselves the irrigation establishment will only tinker with these problems. They have almost built-in incapacity to face these problems squarely and undertake bold reforms which are very necessary for improving the performance of the vital irrigation sector. There is therefore need for influencing and supporting irrigation reforms by those who have wider understanding of development, particularly rural development and who can look at the issues from variety of perspectives, required for serving the cause of improving performance of irrigation sector. Since the irrigation engineers would not take initiative for reforming the system they are managing, pressure has to be brought from outside by those who value the significance of irrigation in economy particularly rural economy of the country and ensure its benefits for the people including the poor.

Participatory Irrigation Management

All this indicates need for reforms and the direction of reforms. The management has to be transformed by creating much larger scope for the farmers to participate in planning, construction and management of irrigation systems. This is Participatory Irrigation Management (PIM) that was initiated by NGOs/Non-Profit Organisations, which is being increasingly accepted in policy atleast in principle.

Making success of PIM is indeed a difficult task, involving motivating and organizing farmers into WUAs, guide them to get their organization registered and contribute share capital; take responsibility for planning of water supply in every season for which applications have to be collected from individual members; managing water distribution to the satisfaction of farmers particularly tail enders against unreliable release of water by the irrigation authorities and out of turn taking of water by the head reach and other head

strong farmers; fixing and collection of fees and paying government charges; maintenance of the system; maintaining accounts, resolving inevitable conflicts and so on. This requires shaking of the system, that as I described elsewhere, is in the state of equilibrium, a malignant equilibrium.

Women and Participatory Irrigation Management

Let us now see what women can contribute to the success of PIM, remembering that PIM is promoted mainly by government irrigation engineers and by some committed NGOs.

Margereet Zwarteven etc. also have mentioned that in Philippines women control the cash flow and therefore their involvement in pricing policy may help in water fees collection. Sara Ahmed and Shilpa have given examples of women members of the executive committee providing leadership for collecting fees in advance so that the problem of collections is avoided. She also gives example of the women groups managing 2 out of 7 sub minors in an irrigation project enforcing discipline in taking water by turn and other regulations.

Shilpa claims that women handle conflicts more competently in irrigation management, adding that her example pertains to tribal area where men get drunk unable to deal with issues in calm and fair manner!

All the authors, advocating the need to bring women in the 'main stream of PIM' and in strategic position of decision making in WUAs, recognize the problem of traditional division of gender roles- men dealing with the world outside the home and with the assumed 'hard' tasks in agriculture. Women's world is her home and the farm where she provides substantial labour, sometimes exceeding men's contribution. The distinction is more ideological, attaching more value to 'men's tasks'. Says Margereet Zwartevenm who recognizes 'participation may be less attractive for women, partially because the cost spent on traveling and attending meetings may be relatively higher for them; also because norms and values are not always supportive of women engaging in public meeting. Social transaction costs are higher for women than for men.' Studies have shown that women carry more workload than men not only in the household affairs but sometimes in farming also. Though they dislike it and prefer household duties when the family can afford paid labour to substitute family labour, as found in Patel Community in Ravalpura village, mentioned earlier in the paper

S.Ahmed and Shilpa desire and claim 'self confidence and self esteem' as well as more respectable status in the society, as larger benefits arising from women's participation in

irrigation management. Such outcomes are very welcome, but few development agencies, governmental and otherwise, would be keen to incorporate them in their plan of irrigation sector reforms.

Keeping all this in view what may be the right approach for the development agencies promoting PIM moving from the reality of desirable to the reality of possible. Even Margreet Zwarteven have drawn attention to “too much emphasis on what is desirable (empowerment) and too little on what is possible. Irrigation management institutions have the main task of ensuring that right amount of water is delivered at the right time, at right place, cannot be expected to be interested in the empowerment of women, neither they have the capacity to change gender inequities”.

Tasks for irrigation agencies

So far as government irrigation agencies promoting PIM are concerned it will be useful to (a) develop in them gender awareness programmes and (b) PR techniques to understand and appreciate women’s perception, needs and priorities with respect to water. It should be therefore considered an achievement if they (c) formulate systems and accept as their responsibility, to incorporate in irrigation planning and management the special requirements of women as listed in section-3 – in designing canal system, in redesigning, water supply scheduling, and management of water delivery.

Tasks for NGOs

The NGOs, which are committed to not only efficiency but also equity, should ensure that (a) The agenda for reforms should include securing government orders to give importance to meeting the ‘domestic’ need of water as listed earlier in section 3 – in designing and redesigning canals, in scheduling, in planning water supply rotation; (b) Securing orders will be only the first step. Operating them satisfactorily will be the major task requiring NGOs to orient the irrigation bureaucracy and induce implementation; (c) They should also strive for creating enough space and scope for women to present their special requirements and contribute their strengths to successful working of WUAs. Besides reservation of some position for women in the executive committee, it is important (d) to help the WUA members to elect such women who can conveniently attend meetings and other duties. For women to contribute to better working of WUA, it is not necessary to rove that women are farmers and women are irrigators. Even a non-farming educated woman can help WUA in better record keeping ! In fact similar criteria are applicable when electing male members: leadership quality and availability of other adult males in the family to look after family business (e) They may also organize women’s group

separately so that the women can collectively present their requirements through the women members of the executive committee. Such members in turn can keep the women informed about the decisions in the executive committee meetings. (f) The NGOs can also provide encouragement to the women through training and exposure visit to WUAs where women are more actively participating and contributing to the success of PIM. Appointing women staff members help and train women to get confidence and overcome initial resistance (Elena)

Tasks for gender-centred/gender priority NGOs

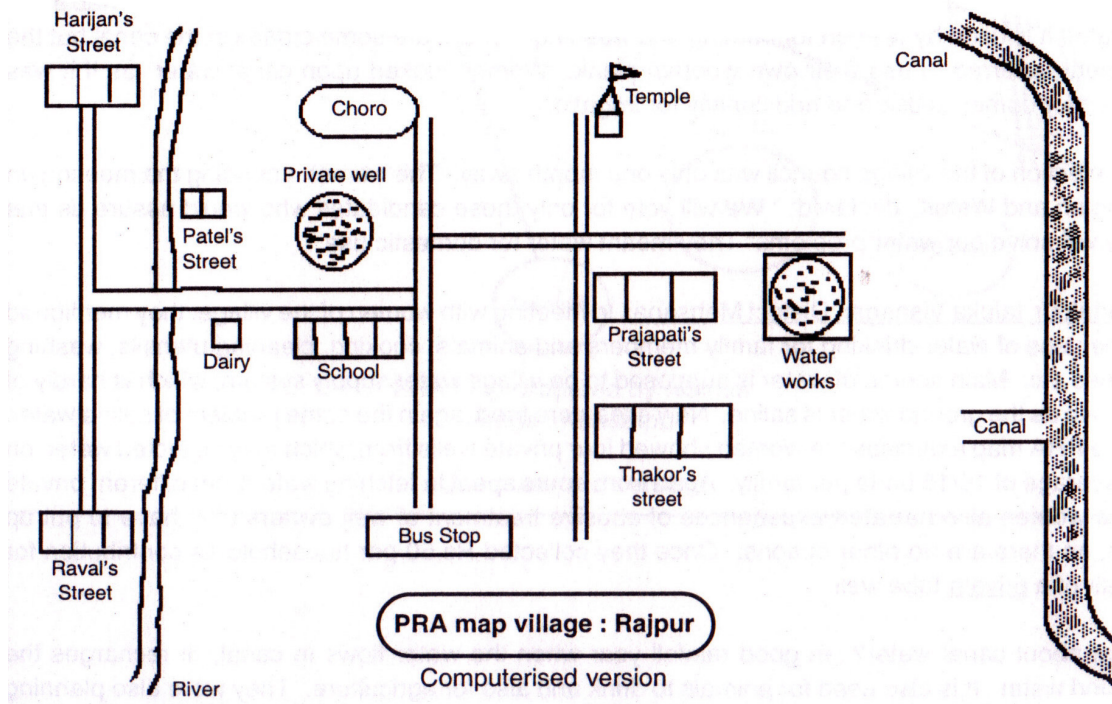
The NGOs that are gender equity committed, working for women's empowerment, can contribute by (a) demonstrating through examples in diverse cultural situations how women could shoulder responsibility and through leadership qualities ensure better performance of WUAs – tribal and non-tribal, good rainfall and low rainfall areas etc. Though 'island of excellence' has its own value, it is considerably enhanced when its feasibility is demonstrated in good number. (b) Detailed documentation of the process, positive gains and problems resolved and unresolved will further add to the value of such examples. It may be useful to keep in view Christine Van Wijk's, counsel 'Kwaule points out that shifting the balance from men to women is no solution either because it caused men to oppose women's role or even withdraw from the project'. To avoid such backlash reforms towards desirable have to be pushed with circumspection. (d) Such organizations could also take up the change and get changed that only men are considered as heads of family and therefore entitled to represent family in the WUAs (e) They would require to work for removing administrative and legal hurdles in women's full membership of WUA. (f) While 'main streaming women', they would be well advised not to neglect the mainstream issues of canal irrigation reforms. Unlike other women centred activities like micro-finance, PIM cannot be conducted in isolation at micro level. It is not possible to ignore other requirements of irrigation reforms, many of which are gender neutral, but impact the gender sensitive micro management. (g) Again securing administrative and legal entitlement for women to participate fully in WUA FS would not be enough. Such organizations will have to work for translating such orders into reality on the ground. This has been found necessary for example, in case of legal rights conferred on daughters to equal share of ancestral property. This has yet to be translated into reality. Traditional mind-set has to be changed to translate legal provisions into reality as has been done by Bina Agarwal in her book "One's own field ????": A strong case has to be made out not only about the desirability but about feasibility. These subsequent steps of creating awareness and demonstrating feasibility by promoting actual cases.

Meanwhile the development agencies may better respect women's priorities in water for domestic purpose and see what irrigation can do to meet this requirement. Simultaneously they should be creating scope and space for their contribution to irrigation sector reform, particularly through PIM. They should hold on to the faith and reality that society is changing towards more gender equity. As happening in the developed countries including in the Indian households, the gender roles would change, giving women much more freedom to contribute their strength to the 'main stream' activities in economic, social and political spheres. This approach demands combination of innovative work and patience, all the time respecting women's 'reproductive' and domestic responsibilities as well as their present perceptions and priorities.

PRA Exercise with Village Women to understand their needs and priorities

Rajpur District Sabarkantha.

The piped water supply provided water that was used for cooking and drinking for people and animals. Other important water source was a stream passing by the village. When the water is flowing in the stream the women use it for washing utensils, clothes and also washing animals. If such washing is done at home the waste water would create puddles of nuisance. There is a canal where the women could wash their clothes. Using canal water is difficult, there is no stone platform. Women's main concerns were piped water not reaching the elevated parts of the village and irregular power supply.



Kanzara Taluka Vagdod, District Patan

A meeting with village women, which brought out relevant information and issues about the water in the life of women. The uses of water included apart from the usual list - house construction, house repair, make cow dung and mopping of the floor if tiled. The quantity required 6 'bedas' for a typical family of 5 people and 4 animals. 6 bedas(120 ltr) in winter, 16 bedas(240 ltrs) in summer. The main source is the village tube well, from which water is taken by pipes to four standposts located in different parts of the village. However the pumping equipment is not properly maintained. Half of the time it is not functioning. Women then have to collect water from the irrigation wells located away from the village site. They might spend 4/5 hours a day. Sometime girls leave their school for bringing water. Sometimes women have to hunt for water from one well to another because the pumping system may be out of order or because of the insulting behavior of the farmer. A woman broke down while narrating her experience "when I was in my parents place I was never sent out for fetching water. Married for 5 years there are many problems in bringing water for the family. Only yesterday in the hot afternoon I spent 4/5 hours hunting for water leaving behind at home my one year old daughter..." An elderly woman added, "Carrying water on the head women develop pain in the head and in the ears." Some backward communities have problem in approaching private well owners. During days of shortage of water, mostly women and children may forego daily bath, develop skin disease. While fixing marriage with the boys in the village the brides' parents are discouraged when they learn about the water problem in the village.

Women's main requirement was improving the village water supply system, and drainage facility so that the surroundings of their home may be clean.

Women were willing to take over the management of the village water supply. In fact twice they collected fund and repaired the system. There should be reserve fund built up for repair purpose so that no time is wasted in raising fund. They need a water trough for the animals.

What about the canal water? During years of low rainfall there is no water in the canal. When there is water, it is used by women for bathing and washing. There are some stones in the canal but the women preferred to use their own wooden plank. Women looked upon canal water as if it was meant for domestic use and additionally for irrigation !

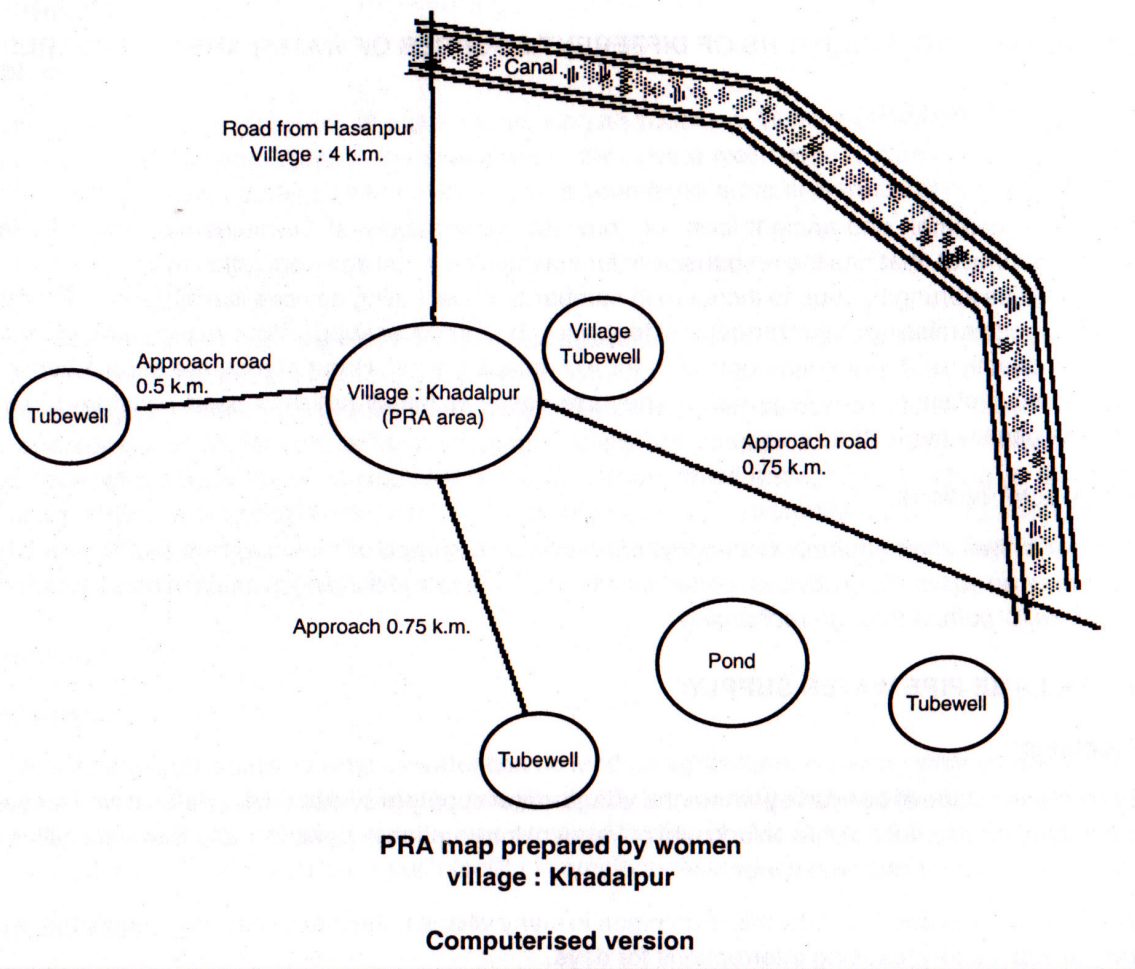
The election of the village council was only one month away. The women attending the meeting on “Women and Water” declared: “We will vote for only those candidates who would assure us that they will solve our water problems” They meant water for domestic use.

Khadalpur, District Mehsana

In meeting with women of the village, they mentioned same use of water-drinking for family members and animals, cooking, cleaning utensils, washing clothes etc. Main sources of water is supposed to be village water supply system, which is hardly of any use as the ground water is saline. New sites were tried, again the same problem of saline water. In the PRA map exercises the women showed four private wells from which they collected water, on an average of 10/15 beda per family. Apart from hours spent in fetching water from different private wells women also narrated experiences of abusive treatment of well owners they have to put up with, as there are no other options. Once they collected Rs.50 per house hold as contribution for repair of a private tube well !

What about canal water? In good rain fall year when the water flows in canal, it recharge the ground water. It is also used for animals to drink and also for agriculture. They were also planning to use one of the channels for bringing drinking water to the village. But how to raise funds? The village is backward and had to face 2/3 years of very low rainfall.

Khadalpur is in the process of setting up a Water Users Association(WUA) as required in Participatory Irrigation Management(PIM). The visiting DSC officers were overwhelmed by the problems the women were facing about water for domestic use. The visiting team left the village wondering what can they do to help the women about the problems and priorities of water as perceived by women.



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