

Gender Dimension of Climate Change Adaptation:

an exploration into the perceptions of women and the community

Dhanashri Brahme



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Foreword

As we begin to prepare ourselves for climate change and work towards adaptive measures, we realize that all our resources have to be harnessed towards this end. We humans hold the key to worsening the mess we have created or to making a breakthrough and better the situation for our coming generations. No more do we have the luxury of having only the 'privileged few' important people take up this responsibility. Everyone is important. Each one needs to pitch in.

In rural India women have always been given the back seat. They are left to caring for the children, doing the household chores and the tedious aspects of farm related work. They are supposed to be the 'doers'. But, the work that they do is affected by the weather and climatic factors. This paper explores the life and work of women and how these are affected by climatic conditions. Incidentally, as the view and opinion of women differs from that of men, it brings to light another angle, one we would miss if we restrict ourselves only to their more vocal male counterparts. The views of both are essential. The views of both give us a more complete picture of the situation. Addressing the issues raised in the views of both will hold the answer to how we respond and adapt to climate change.

And those who silently and sometimes unknowingly experience the problems also sense the possible solutions, but only when probed. This paper invites us to look into and probe the different angles and aspects where the climatic factors affect the lives of women. It further invites us to work with women to prepare a list of possible solutions as viewed by them. From these we can then put together some solutions for action. The very act of provoking thought over this subject which is still untalked about in rural India, will itself stimulate 'adapt – ability'.

I invite you to share your thoughts, comments and critique with us. Do write to publications @wotr.org

Marcella D'Souza
Executive Director – WOTR

Gender Dimension of Climate Change Adaptation: an exploration into the perceptions of women and the community

Dhanashri Brahme¹

Abstract

Substantial past work and documentation exists on gender and environment issues, but there is little explicit research on the gendered impact of climate change. Women being the poorest in the world will be most vulnerable to the impact of climate change, exacerbating existing inequities in health status, access to food and clean water. While women and other marginalized groups are more in need of adaptation strategies, they are least able to access opportunities for negotiation and mitigation planning. In fact, prevailing gender relations within the community

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- 1 The author undertook this exploratory study on behalf of WOTR during her sabbatical from UNFPA – United Nations Population Fund. The views contained in the document are those of the author and not of UNFPA or UN and its other agencies.

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determine the impact of climate change on men and women. And so also conversely, climate change is likely to deepen existing gender inequities owing to its link with individual access to resources such as information, skills, and technology that will determine ability of groups to cope with circumstances.

With this objective of understanding the general community view on climate change, this exploratory study was undertaken to gather specific perception and experiences of women and document any existing coping strategies being employed to deal with climate change.

The study was conducted in the semi arid region of Maharashtra where most households rely on agriculture as their primary source of income. The FGDs revealed that there is little difference in the views of women or that of the larger community based on their geography or exposure in terms of being old or new watershed villages. Changing with times and weather has become second nature and so women don't apply thought to the changes that they are making in daily life. This made it difficult for them to recall changes and coping mechanisms that are being already employed. Women are supplementing family income by engaging in wage labour. For women, time and leisure as resources are becoming increasingly scarce.

Women talked about a number of inter-linkages, be it fodder and livestock, natural manure and food or even quality of food grains and agricultural practices. Through their discussion, an entire cycle of change has emerged, seemingly driven by both external factors such as weather and market forces and some intrinsic ones, such as perception, attitude and convenience. Not to forget, some small changes in gender roles brought about by necessity than the

‘need to change’ itself. Agriculture remains the centre of women’s lives. The discussion in a way unraveled the many implications of uneven weather patterns on women’s lives with agriculture as its fulcrum.

Women felt that they don’t know enough about climate change to think about strategies to respond to it. But when the discussion revealed some of the small adjustments they have indeed made in response to changing weather, they recognized the value of their own knowledge. They agreed that women’s groups need to undertake further introspection to understand emerging coping strategies. Just as women are coming together to solve household problems, they are capable of finding ways of dealing with the weather as well. Men too agreed that living within means has become a personality trait of women. Besides the stereotype, what this communicates is the need to recognize and use the knowledge of women in responding to climate change.

Introduction

Substantial work in the past exists on gender and environment issues, gender and agriculture, gender and energy as well as gender and water but a very little information available on gender and climate change (DFID 2008). Climate change affects everybody and it is not gender neutral. It is believed that men and women will be faced with different vulnerabilities to climate change impacts due to existing inequalities such as, their role and position in society, access to resources and power relations that may affect the ability to respond to the effects of climate change (WEDO 2007; Commission on the Status of Women 2008).

Climate change is a global phenomenon, with impacts that are already being experienced on a human level. Climate change will impact the most marginalized communities with limited access to resources and avenues to deal with changing weather patterns and the resulting

environmental phenomena (IPCC 2007). Women being the most vulnerable will have the impact of climate change, exacerbating existing inequities in health status, access to food and clean water. As women and other marginalized groups are more in need of adaptation strategies, they are least able to access opportunities for negotiation and mitigation planning. Prevailing gender relations within the community will determine the impact of climate change on men and women. And so also conversely, climate change is likely to deepen existing gender inequities. Women have a strong body of knowledge and expertise that can be used in climate change mitigation, disaster reduction and adaptation strategies. (Interactive expert panel Emerging issues, trends and new approaches to issues affecting the situation of women or equality between women and men "Gender perspectives on climate change" issue paper, 2008).

Case studies conducted in South Africa and Nepal showed that gender differentiated impacts of climate variability were because of the unequal distribution of roles and responsibilities of men and women. It resulted into, women bearing the most burdens resulting from climate variability impacts (Dr. Babugura A. in 2010, Brigitte Leduc, ICIMOD, 2008).

Gender inequality is a major factor contributing to the increased vulnerability of women and girls in disaster situations. The World Conservation Union/Women's Environment and Development Organization (IUCN/WEDO) report mentioned that women and children are 14 times more likely to die than men during disasters (Araujo, A., 2007).

The study by Masika 2002, mentioned that climate change exacerbates existing inequalities in the key dimensions that are not only the building blocks of livelihoods, but are also crucial for coping with change, including: wealth; access to and understanding of technologies; education; access to information; and access to resources (Masika 2002).

Box1: Women's Vulnerabilities vis-à-vis Climate Change Impact

Climate change impact	Women's vulnerabilities
Crop failure	Household food provision – inability to grow, process, manage food, maintain vegetable gardens; increased agricultural work
Fuel Shortage	Household fuel provision; drudgery in collecting fuel and fodder; inability to raise small livestock; food-fuel conflicts – food consumption and nutrition levels
Shortage of Safe, Clean Water	Household water provision; drudgery in collecting water over long distances; exposure to contaminated sources
Resource Scarcity	Economic drawbacks; lack of land tenure; resource-dependent livelihoods; pressure on time to pursue income generation activities, school dropouts, early marriage
Natural Disasters	Greater incidence of mortality and morbidity; reduction of life expectancy;
Health status/Disease	Lack of access to healthcare; increased burden of caring for young, sick and elderly, malnutrition, limited options for pregnant women and inability to plan families
Displacement/Distress migration	Loss of livelihoods; lack of adequate shelter; conflicts
Civil War/Conflict	Loss of livelihoods and lives; sexual violence and trauma

Source: WEDO, 2008 (modified)

A scoping study on knowledge and gap done by DFID mentioned that there are there climate change impacts are different for men and women and the impact on agriculture, health, water have gender dimension (DFID 2008).

Another study done in Andhra Pradesh by FAO mentioned that gender makes a difference in dealing with climatic shifts and also the coping strategies (Dr. Lambrou Y., 2009). But there is little existing research considering the linkages between gender and climate change.

The present study was conducted with the objective of understanding general community's view points, the specific perceptions of women and documenting any existing coping strategies.

This will help to design focused and gender sensitive interventions, and capacity building inputs at the community level.

Methodology

As a part of the study, focused group discussions (FGDs) were held with women's groups in 11 out of the 25 project villages spread across 3 clusters of Sangamner and Akole blocks of Ahmednagar district. The villages were selected based on whether they consisted of tribal population, whether they were old or new in terms of past watershed intervention and the general geography in terms of being near the highway or remote, hilly terrain or among plains.

Details of sample villages

Cluster	Villages covered	Block
Pathar I	Wankute, Kauthe Budruk, Khangedara	Sangamner
Pathar II	Warude Pathar, Malegaon Pathar, Jawale Baleshwar, Karjule Pathar	Sangamner
Akole	Wanjulshet, Khadki Khurd, Waghdari, Ghoti	Akole

Information pertaining to agriculture, fuelwood, fodder and water availability as also disease patterns was collected with the help of FGD. In order to elicit responses over a period of time, a participatory rural appraisal (PRA) exercise was conducted with women's groups where they were asked to talk about change in agriculture practices or water availability over a 20-25 year period and across seasons. Following the PRA, general discussion was also held with men who had joined the PRA exercise or those wanting to express their general views on the subject.

Perception of women about climate shift – assessing change

At the outset it is important to mention that in the local language (Marathi) it is difficult to differentiate between the terms climate change and weather change in scientific terms. While discussing with the community the terms 'vatavaran badal', 'havamaan badal', 'naisargik badal', were interchangeably used. Though technically the difference between climate change and changing weather patterns is huge, this was done as the community as yet is not recognizing the nuance between these phenomena. Thus, community responses were elicited by referring to changing weather pattern rather than climate change per se. Even on change in weather it was difficult to elicit definitive views and perceptions from women. While they acknowledged that weather had changed, they hadn't given this occurrence too much thought. The impact of change in weather was described by them especially in terms of crop failure. But, they did not seem to perceive erratic or late rainfall as a pattern yet – only an occurrence not a pattern. One reason could be that they perceive late or no rain as a phenomenon occurring only over the last 2-3 years. Since women don't see this as an established pattern, they haven't considered changing the regular practices, be it agriculture or fuelwood and fodder collection.

The reasons for not seeing a pattern in the changing weather seemed also cultural. An agricultural cycle that has been based on rainfall for centuries is probably making the community believe that erratic rainfall is an exception. There is hope that rain will always come at its usual time. Even though its arrival shifts in some years, this will

not be the case always. At the other end of the spectrum is the belief that natural phenomena are outside human control and therefore they have to be accepted. There is very little that people can do about them. Some women also expressed a fatalistic view of the world coming to an end and extreme weather being one of its many indications.

Overall, the community and women specifically are not yet thinking about what steps they can take to respond to changing weather. The cumulative influence of climate change is not seen so clearly by women. While they do recall the droughts and the adverse conditions associated with it (especially older women), these are only events in their memory, not connected to a weather pattern and long term climate change.

Men seemed to talk more about climate change based on information gathered from newspaper. Similar was the change with youth, mostly young men, who referred to their experience in the cities and their understanding of climate change. To a large extent, climate change meant disappearing forests, erratic rainfall and human excesses – wood being used as timber, use of plastic and consumption patterns in cities.

Change in practices and coping mechanisms – findings from sample villages

Generally speaking, the FGDs revealed that there is little difference in the views of women or that of the larger community based on their geography or exposure in terms of being old of new villages. One reason could be the newness of the issue of climate change, on which, views and perceptions had not been crystallized yet. Both knowledge and information were still evolving on the issue just as the phenomenon itself!

Weather change

Women felt that rainfall has extremely unpredictable. Rains come late and fall erratically. The season has moved to July-September

and even in these months, there is too much rain at one time and then a long dry spell in between. This pattern has played havoc with agricultural activity. Such variation, according to them is not limited to rainy season alone. Winters are dry rather than moist, which was not the case in earlier days when the dew used to benefit Rabi crops. The season is much shorter than before and not as cold as it used to be 20-25 years back. This has meant a longer summer, starting from February and ending only in July, if the rains come in that month. The group felt that the summer heat is harsh and summers are long because forests have been destroyed. It is not possible to work in the farm through the afternoon, which wasn't the case when these women remembered their parents tilling the land. Women expressed helplessness in understanding the season cycle and making changes in their lives, especially in agriculture. An uncertain season cycle was also held responsible for increase in crop diseases and even illnesses among people.

One comment from Kauthe Budruk was especially striking, where women felt that if they don't change with the changing weather, losses are certain. Changing with times and weather has become second nature and so women don't apply thought to the changes that they are making in daily life. This made it difficult for them to recall changes and coping mechanisms that are being employed already.

Agriculture

The groups view was in earlier days the traditional method of agriculture was practiced, agriculture was not mechanized. Similarly, seeds were traditionally preserved and used. Main crops included Sava, Warai, Nagli, Dhavul, Rice, Hulge and Khurasne. This was also because agriculture was largely subsistence based and crops cultivated for home use. Women felt that Sava is nowadays cultivated as an exception and Warai, Hulge and Dhavul are rare and cultivated to a lesser extent than before. It appeared that the protein rich millet has been fast replaced with carbohydrates like rice. It can be reasonably predicted that this has impacted community diet. To ensure good and fast yield, today's farmer uses chemical fertilizers and improved/modified seeds. Rice seedlings were developed through local seeds,

which have now been replaced with hybrid ones. Reduction in livestock has also impacted use of natural manure such as dung in agriculture, according to some women.

Unpredictable rain, according to women in Khandgedara, has led to people trying to make the most of available water. In such circumstances, the crop taken is in response to market needs rather than the needs of the household. Thus, only one kind of crop is seen in the area such as onion or tomatoes. Cultivation of pulses and cereals is reducing each year. This has also meant that cash resources have to be generated to meet all the household needs from the market. Often, women are for this very reason supplementing family income by engaging in labour work.

In terms of women's workload, sowing done largely done by women. Secondly, delayed and less rain increased weeds in the field. These have to be removed by hand which again is usually a woman's job. Thus the agricultural workload of women has increased both because of the weather as well as change in agricultural practices to benefit from a yield that can reach the market more rapidly. Overall, the increase in produce is not in keeping with the increased in workload and agricultural investment. Neither does it fetch a market price that is in line with the investment. Youth from the villages pointed this out as one of the reasons why they are staying away from agriculture. It is too uncertain to ensure a good quality of life.

Food

Rice and wheat has replaced other varieties like Hulge, Nagli and Warai. The diet of most families now mostly includes rice/wheat and Bajra. Pulses and vegetables are being purchased from the market based on affordability. Upon probing, women mentioned that vegetables are rarely cultivated near the homestead. Lack of time was given as the reason, but, when vegetables such as Pumpkin, Allu (green leafy vegetable), and Brinjals/eggplant were mentioned that can be grown without much effort and water, the women felt that these things are just not done anymore. The discussion did leave an unanswered question in their mind as to what could be done

to grow these vegetables at home. Women remembered collecting vegetables from forests when they went for fuelwood collection. These vegetables, they felt have more or less disappeared.

On the whole, women from many villages mentioned that while the quantity of food grains has increased due to improved seeds, fertilizers, etc., this has happened at the cost of quality. The Marathi term used for food grains with rich nutrient value was 'kassdar'. Reference was also made to the growing cultivation of cash crops as opposed to cereals and pulses, directly determining the extent to which the daily diet is balanced. Women from Wankute added that food today does not satiate hunger. One feels hungry sooner. This wasn't the case before when men and women used to have a full meal in the morning and work in the field the whole day without the need to eat again till dinner.

In the context of changing weather, women from Kauthe Budruk mentioned that they eat cold foods during the increasingly harsh summer months. Many of these things, women don't recognize as practices that are helping them cope. Women's knowledge therefore will require further and consistent probing and documentation. Often their inability to articulate limits the extent to which their concerns and needs are recognized and incorporated in designing and executing interventions.

Fodder availability

Women from all the villages agreed that the availability of fodder has reduced tremendously. Likewise, the livestock population has also reduced. But, despite this there isn't enough fodder and sometimes families are purchasing fodder from the market. Another explanation given by women from Wanjhulshet and Khadki Khurd was that cultivation of rice does not generate as much fodder as other crops, especially millets. Also, improved seeds may have increased the yield but it has not benefited fodder availability. An atypical inter-linkage emerged during the discussion with women in Wankute. In their analysis, reduced fodder has led to the decrease in livestock. At the same time, children have started going to school as opposed to grazing

the cattle. Women felt both these reasons are equally responsible for the change in the livestock holding pattern. This is besides the fact that even for the reduced numbers of cattle green fodder has to be purchased from the market at the rate of ₹200 for 100 small bundles (each bundle on an average weighing 5 kgs).

Fodder availability in earlier years meant that families kept large livestock leading to milk production for household use. However, women from Wankute and Khandgedara were quick to add that milk and milk products such as curd, buttermilk, and ghee were usually saved for men and boys.

Fuelwood availability

Women clearly remembered that fuelwood used to be available near the village in earlier years, even as they talked about doing this task as little girls. Proximity to the village saved time and effort. In addition, dry wood –twigs and branches were easily available. The groups felt that wood is now sold as timber and charcoal and has huge value in the market. The drudgery in fuelwood collection has increased. It not only takes more time but often only green branches are available which have to be lopped as opposed to collecting fallen branches that are dry. Interestingly, one of the groups also felt that task division has somewhat changed within the household based on the kind of fuelwood that is available and the method of collection. Often times, men too are involved in fetching fuelwood as it now involves lopping and cutting trees. Another interesting viewpoint was the change of term. According to women ‘jungles’ have become ‘forests’ – meaning protected areas and therefore forests cannot be accessed with ease. Women from Khangedara mentioned that they are protecting their forests and therefore are using other sources of fuel than depending on wood from forests. They also added that variety of trees has been significantly affected – a reference perhaps to shrinking biodiversity in that area. Women were of the opinion that only Saag/teak trees are now predominantly found in the forests.

Groups along the highway and closer to towns from the Pathar clusters felt that lack of fuelwood is not much of a concern as other

forms of fuel are not being used such as LPG and kerosene stoves. At the same time, the use of dung cakes based fuel has significantly reduced. With reduced numbers of livestock, dung is not available in large quantities. Also, the multiple and new demands on women's time has meant that they do not spend as much time in collecting dung as they used to. Older women said that they try to collect dry twigs/small branches and dry dung if they take the goats for grazing. Younger women are doing this task to a lesser extent. Women expressed the need to have access to non-wood based fuel options to improve their quality of life. This was said not only because of the lack of availability of fuelwood and the fact that it will continue to be limited, but also because women wanted convenient options as cooking fuels. Just like urban women, they wanted reduce their effort and improve their lives.

Water availability

Drinking water was filled from rivers and wells in the past years. The river usually had water for almost 8 months. Women remembered filling water with a bowl when the river water used to dry up. The scenario has changed now in many ways. The water in the river dries up sooner. In some villages, water is being supplied through a tanker in summer months. As for bore wells, water is difficult to find even at the depth of 300ft. At the same time, piped water has reached villages and homes. It is usually available through the year. So the shortage of drinking water is not as much as the limited availability of water for irrigation. However, women talked about the deteriorated taste of water. They also felt that easy availability of water at home is leading to its wastage rather than judicious use.

Disease pattern

In their own terms, women felt that in olden days illnesses were simpler and home remedies were sufficient. For example, a medicinal herb/*vanaspati* called *Dharvi* was used to treat any injury and it used help in healing. In case of fever, herb called *Satva* was used and it helped to cure fever. In present times, hardly anything can

be cured without going to the hospital or health centre. Both the extent and the intensity of illnesses have increased. It wasn't clear from the discussion whether these medicinal herbs are available and work in today's situation. Equally important is to assess whether the knowledge regarding such herbs and vanaspati is lost along with the herb itself.

It was interesting that women thought reduction in home deliveries is not a sign of progress. Their view was that it was earlier possible to deliver healthy babies at home. The reason now this does not happen anymore is because women have become weak. They used to have 10 children and deliver them at home. Yet they were able to do other work. Today's women don't even touch water for one and half months after delivery to avoid infection. Clearly, the issue is not as much the place of delivery as it is the deteriorating health of women and increasing complications during pregnancy. Needless to say, pregnant women require rest and nutritious food and not all home delivery practices may be beneficial for the mother and the child. A balanced view on this front is required.

Women held the use of chemical fertilizers and the resultant poor diet for the general deterioration in health and indirectly also the ability of women to have many children. (The discussion did not cover aspects such as the number of children women may voluntarily want vis-à-vis the general perception of how children women should have or are capable of having). Women used to do much more work before than they are capable of doing today. Their bodies are weak and tire easily. This they felt was also the case with men. Though difficult to make a direct correlation, but, according to women illness such as diabetes, gall stones, complaints related to the uterus were all due to the change in weather. If one was to connect the dots, it is indeed possible to arrive at this conclusion, what with the inter-linkage between market, agriculture, food, diet, lifestyle and consumption!

Traditions and culture

To collect information pertaining socio-cultural practices that were connected to agriculture or weather patterns or that helped to mitigate

risks, the group was asked about festivals and marriages. Women did not come forward with specific traditions that helped to mitigate risks or deal with crisis. Festivals were mostly linked to agricultural activity, for example, Panchami, Pola, Dasera and Diwali. In olden days, Bajra cobs (pearl millet) used to be offered to gods during winter as the seasons staple food. That connection between food, festival and agriculture, women felt, has somewhat weakened. The significance of a harvest may no longer be associated with the festival in many cases. Overall, they felt that the importance of festivals has reduced and people prefer to celebrate them individually rather than together. The duration has also changed. Both marriages and festivals are observed for a shorter duration. People had hard pressed for time and life has become very demanding. One way in which the women expressed this was by saying that in earlier days a daughter used to come to her parent's place during festivals and stay for at least 8-10 days. Nowadays, daughters hardly get to visit or only come for a day. In case of marriages, women precisely mentioned that though marriage ceremonies are no longer held for more than 1-2 days, the cost of marriage has increased tremendously. People prefer short but grand marriages.

Discussion

Assuming that there might be differences in understanding of women from tribal, non tribal, watershed and non watershed villages, villages which are near to highway and remote villages data was collected on climate change and coping strategies. But overall it is seen that women from all types' villages have more and less similar understanding.

The present study has provided data about the perceptions of rural women about weather change and its impact on their daily lives. The detailed study findings cannot be generalized outside study settings. But the findings are important because they give insights for further research.

Weather change: The study shows that women have very superficial knowledge about climate change. The understanding of the nuance in changing weather pattern is still in early stages. Views and opinions

about causes and consequences amongst women are not fully formed. Similar to these finding the study done in Nepal (2008) mentioned that women had limited information and it is based on assumptions and projections.

Weather change and impacts: The participants from group discussion from all sample villages understood that change in weather impacted their lives. Because of the impact they had the information about weather.

Participants from group discussions mentioned that the effects of weather change are seen on agriculture production, water availability and taste of water, fodder and fuel wood availability as well as health. The FAO study (2009) mentioned that there are strong gender dimensions to the impacts of climatic shifts on farmer's livelihoods. Again similar to these findings the study done in South Africa by Abate Senbeta (2009) mentioned that the impact of climate change is seen on agriculture, water, ecosystem etc. The DFID scoping study (2008) mentioned the findings as deteriorating water quality similar to the current study.

Coping strategies: The study was conducted in semi arid area of Maharashtra so most of the farmers rely on agriculture as their primary source of income. Agriculture remains the centre of their lives. The discussion in a way unraveled the many implications of uneven weather pattern on women's lives with agriculture as its fulcrum. The adjustment that are made by women to accommodate changing weather, are considered as coping strategies.

The different coping strategies mentioned by study population are crop diversification, change in agriculture practices as per market demand, labour work, purchase of fodder from markets, bore wells for irrigation crossing long distances to get fuel wood, share resources and use of excess fertilizers to get more yield. The studies conducted by FAO (2009), ICIMOD (2008), DFID(2008) study showed similar kind of findings like crop diversification, wage work, drought resistant cropping, finding alternate ways to feed family, eating less. The UNDP study (2009) has similar finding as that of the current study like sharing resources mentioned by participants. The

participants had not thought about the sustainable coping strategies.

The Heinrich Böll Foundation (2009) in its regional summary on gender and climate change mentioned that women seem to cope better with the impacts of changing circumstances than men, by exploring opportunities that enable them to cope better. Women are also repositories of knowledge about crops and climate, the environment, natural resources, food preservation techniques, etc. (rather than men) and are seen to be such by men.

Thus after this preliminary exploration, there are several areas in which further research is required.

Concluding thoughts

Climate change is a new concept to the community. The understanding of the nuance in changing weather pattern is still in early stages. Views and opinions about causes and consequences are yet to be fully formed. In case of women, information about weather is more in the form of how it has impacted their lives than from the newspaper. In that sense, the FGDs and the PRA exercise provoked them into thinking about weather, if it is a pattern or an occurrence and why it is called a change of climate. The discussion appeared to have taken the women a step forward in reflection as opposed to passive acceptance of their circumstances and helplessness in the face of natural phenomena. At the same time, women felt that overall dependence on natural resources has decreased with increased reliance on artificial ones.

Women talked about a number of inter-linkages, be it fodder and livestock, natural manure and food or even quality of food grains and agricultural practices. Through their discussion, an entire cycle of change has emerged, seemingly driven by both external factors such as weather and market forces and some intrinsic ones, such as perception, attitude and convenience. Not to forget, some small changes in gender roles brought about by necessity than the 'need to change' itself. Agriculture remains the centre of women's lives.

The discussion in a way unraveled the many implications of uneven weather patterns on women's lives with agriculture as its fulcrum.

Women felt that they don't know enough about climate change to think about strategies to respond to it. But when the discussion revealed some of the small adjustments they have indeed made in response to changing weather, they recognized the value of their own knowledge. They agreed that women's groups need to undertake further introspection to understand emerging coping strategies. Just as women are coming together to solve household problems, they are capable of finding ways of dealing with the weather as well. Men too agreed that living within means has become a personality trait of women. Besides the stereotype, what this communicates is the need to recognize and use the knowledge of women in responding to climate change. After all, it is a matter of saving resources, preserving knowledge and ensuring judicious resource use in a way that it enables meeting the needs of many over a longer period of time – a view women whole heartedly embraced during the discussions.

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Watershed Organization Trust (WOTR)

The Watershed Organization Trust (WOTR) is a not-for-profit NGO founded in 1993. Its operations presently span five Indian states – Maharashtra, Andhra Pradesh, Madhya Pradesh, Rajasthan and Jharkhand.

WOTR's mandate is reflected in its vision *“communities, especially the poor within, are empowered and secure their livelihood and well being in sustainable ecosystem.”*

Since its inception WOTR has been working in resource-fragile semi-arid rain-fed regions through participatory watershed development. Now, WOTR has moved from “regenerating the degraded lands through in-situ harvesting of rainwater” to a holistic integrated and systemic ecosystems based model of community development that aims to address climate variation and climate change.

WOTR mobilises the communities to tap into their capacities to help them move on the path of equitable sustainable development – and along the way – reduce poverty, through regenerating the eco-space and watersheds they live in. It helps the rural communities in resource fragile rain-fed and drought-prone regions, to organise themselves, to respond to, emerging climate variations while enhancing their adaptive capacities, to address the climate change.



Watershed Organisation Trust (WOTR)

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