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HIGHLIGHT

Redefining Irrigation as if Gender Mattered

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Across the different kinds of organizations working on water related issues, we find a visible absence of women as water professionals. At the micro level, women are organized to manage and maintain drinking water sources and infrastructure, but they are absent in the irrigation sector which relates more to commodity production. At the meso level, civil society groups hardly have women water activists and even fewer articulating gender concerns in the water sector.

This Highlight explores women's participation in the irrigation sector within the water bureaucracy as well as at the community level. The paper draws on two studies undertaken by SOPPECOM in Maharashtra: the first considers women in irrigation at the community level; and the second examines the presence of women in the water bureaucracy. It also draws on a two year long process of building capacities of women elected on the water users' associations (WUAs), the institution for participatory irrigation governance.

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Redefining Irrigation as if Gender Mattered[1]

Research highlight based on SOPPECOM, et al. (2008); SOPPECOM (2009)[2]

Introduction

A typical scene at an irrigation office in Maharashtra denotes complete absence of women. This extends to NGO meetings/ conferences in the Irrigation sector and to women's participation in WUAs as well.

Women could say something about domestic water and sanitation but how can they talk about irrigation? So well internalized is this belief system that one of our rural women interviewees who is on the managing committee of a WUA says, "What do women know about irrigation ? Men can take the lead and take all the decisions to run the WUA; we only need to work on the fields".

The continued absence of women in irrigation sector, despite the shifts in policies and the changing notions of gender and gender equity in the sector, warrant a far more nuanced explanation and cannot be brushed aside as socio-cultural constraints.

Across the different kinds of organizations working on water related issues, we find a visible absence of women as water professionals. At the micro level, women are organized to manage and maintain drinking water sources and infrastructure, but they are absent in the irrigation sector which relates more to commodity production. At the meso level, civil society groups[3] hardly have women water activists and even fewer articulating gender concerns in the water sector. Similarly, the women's movement too does not seem to have taken this issue beyond the domestic water sector where impacts of water scarcity on women's health and time are highlighted. The bureaucracy is, of course, the worst represented as far as women water professionals (WWPs) go, in numbers as well as in the articulation of gender concerns. It is evident that across all these sectors (State and civil society) and levels (micro, meso, macro) in the water sector there are interconnected threads as well as sector and level-specific explanations for the low numbers of women.

This Highlight explores at women's participation in the irrigation sector within the water bureaucracy as well as at the community level. The paper draws on two studies undertaken by SOPPECOM in Maharashtra, the first that looks at women in irrigation at the community level[4] and the second, which looks at women in the water bureaucracy[5]. It also draws on a two year long process of building capacities of women elected on the WUAs, the institution for participatory irrigation governance[6].

It argues that despite changes in policies and an increasing programmatic emphasis on gender equity, things remain unchanged. It indicates the need to contest the dominant irrigation thinking if it has to achieve the agenda of equity and social justice.

Decentralised public sector irrigation reform and women in Maharashtra

One of the components of participatory irrigation reform in Maharashtra has been to include women in the decision making committee at the community level. With this decision, about 5000 women will be brought into irrigation governance across the state.

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[1]This IWMI-Tata Highlight is based on two separate research studies carried out by SOPPECOM with support from IDRC, South Asia Office, New Delhi and SaciWaters, Hyderabad, India. It also draws on a two year project on capacity building of women water leaders supported by SDTT. It is not externally peer-reviewed and the views expressed are of the author alone and not of IWMI or its funding partners.

[2]These papers are available on request from p.reghu@cgiar.org

[3]There is a large body of literature on civil society that broadly covers the spectrum of all actions outside the state apparatus.

[4]'Water rights as Women's Rights….', study conducted from 2006-2009 to look at the impact of decentralized water governance on women, supported by IDRC, Canada

[5]Situational Analysis of women water professionals, study conducted through support from SaciWATERs, India on women professional in the water sector in South Asia (2009)

[6]As part of project on capacity building of women elected on the managing committees of WUAs in Ghod major irrigation project, north Maharashtra, SOPPECOM trained women from about 36 WUAs in various aspects of irrigation governance.

Our studies and community interventions helped us to understand the impact of this reform in terms of women's presence and active participation in irrigation governance. To specifically analyze what this has meant to women in terms of their access over the resource, planning process, distributional issues, and to their own self-learning and empowerment. More than 60 women members and those elected on the managing committees of the WUAs were interviewed. Our findings suggest that unless the scope of irrigation thinking extends beyond the realm of the public and enters the domain of the household, gender justice cannot be achieved.

Extent and nature of participation

Participation is seen as a key to the process of decentralisation. Participatory approaches in the WUAs included activities like planning of water allocations, crop planning, setting up of water tariff, contributing towards the capital and operation and maintenance (O&M) costs. All of which understood participation as a means to achieve improved irrigation efficiency and not as an end in itself to empower people.

This perception around participation determined, to a great extent, women's presence in the sector. Hence, despite the quota for women, very few attended meetings and most were unaware of their membership to the committee and their role in it. The process of selection was of course non-participative, in that the women were merely selected as male proxies in most cases.

Women and land ownership

One of the important reasons for women's physical absence in irrigation governance is the lack of land ownership in command areas. Women are excluded from being members to the WUAs because they are not owners of land within command areas. Lack of ownership of land within the command areas excludes a large majority of women, including those belonging to land holding households within the command areas. This continued exclusion from resource ownership also predefines certain roles and expected behaviours which are reflected in the lack of participation of women elected on the managing committees of WUAs.

Culture of Irrigation

Participation is rooted in discriminations in society. Caste, class, gender and other social groups that one belongs to largely determine how effective participation would be in influencing governance practices. While this is true for most sectors and institutions, what separates irrigation from sectors like health or domestic water is its definition. Irrigation is associated with the productive sphere - where commodities are produced and exchanged for cash or kind. This association of the productive and market related work with the male excludes women from participation. This understanding was reflected in a myriad ways - right from the way women were selected on the committees to the timings, place and the conduct of the meetings thus creating a culture of irrigation which becomes the main constraining factor for women and also certain social groups to participate in the sector.

Meetings were held at a time and place which were most inconvenient to the women. Moreover, irrigation commands are not confined to village boundaries making it difficult for women to travel to another village for a monthly meeting. So, of the three women on the managing committee, only one who is in the village where the meeting is held, attends it. One of whom we interviewed said, “If there were more women we would have spoken our minds. It's difficult to speak out in a room full of men with only 2-3 other women around. More numbers would have led to better articulation of our concerns". So unless there is handholding and conscious effort made, women would rarely want to challenge this male space.

Meetings are rarely conducted in a democratic way, with people getting little time to feel part of the meeting. These are usually dominated by the 'veterans' allowing for little space for the new to become a part of the process - especially so if the new are women.

The assumption that irrigation governance closer to home would bring large number of women in the public space does not really hold true and especially not in irrigation which is a male dominated sector. Although governance was closer home, women were diffident of speaking up in front of male elders whom they have known for so many years. The visibility that comes with being part of the same patriarchal and caste-ridden context is often a major constraining factor for women to come out and counter that context.

However, importantly the difference we saw between the domestic and the irrigation sector was stark and pointed out that it is the culture of the sector, its association with the technical, male and upper caste that deterred women from participating in irrigation governance. The long standing debate between productive work and reproductive work is brought to the fore and women's association with the reproductive and men's association with the productive is seen to apply in this case as well.

Inclusion and participation in sector reforms process is critical from the point of view of ensuring that the hitherto excluded sections like women, dalits and the poor participate and benefit from water use planning. The influence that these sections exert over decision making processes seems to be limited in our study areas. The ability to participate across caste, class and gender, was

constrained due to their inability to negotiate and articulate on equal terms as a result of historical conditions of structured inequalities.

Water Bureaucracy

The same thread runs through in the water bureaucracy as well. The study with women engineers and other staff working with the irrigation sector in Maharashtra aimed to understand the extent of women in the sector and reasons for their low presence. The enquiry began with understanding the backgrounds of these women and what facilitated or constrained their presence and performance in the sector.

The study was located within the Water Resources Department (WRD) in Maharashtra where we interviewed more than 15 women engineers and other staff and also assessed the number of women within the WRD through available secondary data.

Low Numbers

Table 1 points to the low number of women in the irrigation bureaucracy in Maharashtra. Of the 2323 employees in the 5 irrigation offices we studied, only 175 (7.53 percent) were women. Worse, only about 2 percent of the technical staff and 11 percent of the administrative staff were female. In all, we found only 7 female Assistant Engineers, 4 female Sectional Engineers and another 7 female Technical Assistants among the technical staff; and no female employees at higher ranks such as Executive Engineer or Superintending Engineer.

The major constraints brought out by the women came from: (a) the type of work women did and were expected to do; and a distinct but related factor (b) the content and structure of irrigation engineering itself. The two factors are intertwined and cannot be completely separated. We discuss our findings under two broad heads: the socio-cultural issues that determine women's presence or absence in the irrigation bureaucracy; and the lack of women's presence as a result of the culture of irrigation itself.

Gender and organizational issues

A wide range of organizational issues from physical infrastructure and facilities to rules, hierarchy, work atmosphere and relations determine women's participation in the sector. One of the stark realities which we observed were missing or badly maintained toilets. The reason cited by women for this was that women are simply not seen as part of the irrigation staff because of their low presence.

Maternity benefits are also grudgingly given. A telling comment from an irrigation engineer in Maharashtra located at the State office said, "pregnant women are often seen as problems - but the nine months given to the women should be seen as an investment for the future". Men are not comfortable seeing women as their leaders or

Table 1 Women Water professionals in a sample of five irrigation Department Offices

Type	Number of total employees	Number of female employees	Percentage of female employees
Technical Staff	933	18	1.93
Administrative Staff	1390	157	11.29
Total	2323	175	7.53

bosses, negotiations are thus carried out at the senior level to prevent women from attaining these positions.

Another crucial area is the formation of collectives within the organization. Usually most crucial decisions are taken after office hours and this was voiced very strongly by the women engineers. They added that women find no time to be part of these informal collectives. They are too preoccupied on both fronts and find it very uncomfortable to interact with men in these informal decision making spaces. One of them said, "I think my work was not noticed because I am not able to be part of the informal meetings with the boss".

Women too try to form their collectives, but these are more in the nature of platforms for sharing of injustice done to them in terms of promotion, appreciation of work, their personal lives etc. This happens only in offices where women are in sufficient numbers.

Culture of irrigation

Culture of a sector can be defined in several ways that relate to the form the organization takes, the content of work and priorities it lays, mode of governance, work relations and task allocations to name a few. Culture is shaped through the well internalized belief systems that define the work you do, the choices you make about your careers. One important reason cited by women engineers for their low presence was the kind of educational choices they are expected to make. A Deputy Engineer puts this very succinctly, "teaching, health and education are considered as the most suitable options for women. Teaching because you are teaching values - children are moulded and that work is seen as women's work. There is no male interference there".

Women were neither encouraged to take up site work nor were they encouraged to manage finances, both these were guarded as male domains. In the words of a senior engineer, "mostly women are working in less important places, like drafting letters, and other communications, dealing with administrative problems etc. My case is different, as I have already proved my capability. So no one bothers me now. I had to fight the culture of the organization which only made women work at the office; but tell me what design work is complete without implementation at site?"

Images, symbols and metaphors

Any description of a good water sector officer started with a "he". Most thought that technical competence was very important for success in the sector and the ability to think rationally and take instant decisions. Mostly men were seen to possess these qualities, although women too were confident of their own abilities in some instances.

One very capable senior officer in Maharashtra said, "Women face problem in this sector because we lack somewhere in knowledge and daring compared to men. We should be tough to survive in this." Another one added, "But women lack the capacity to take instant practical decisions on site. Because they have not received that kind of exposure they are always confined to the desk".

A Sectional Engineer from irrigation department says, "An attendant in an adjacent office always thought I was a clerk in the irrigation office. She was shocked when she got to know that I was an engineer" - a telling comment on how women are perceived. Many women described their relationships with their male seniors as fatherly, brotherly and one senior engineer says, "My boss once introduced us in one public gathering as `these are my daughters'. This created a sense of attachment towards office, and it motivated me to do my best and live up to his expectations" - very patronising indeed.

The overall culture and the associations of irrigation with all that is technical and male does affect women's choices and their performance in the sector. It also affects the way the organization shapes up and the amenities it provides for its women employees.

Reflecting on the question of why women are so few in the irrigation sector, we see that women's absence in the water bureaucracy is largely determined by two associated factors. The first relates to the educational choices women make and the second relates to the major constraints that women face after entering the sector where the struggle between the public and the private sphere becomes significant. Educational choices are largely determined by what is considered as appropriate for women. Strongly internalised and nurtured belief systems play a strong role in determining women's choices. According to Keller (1978), this unexamined association between gender and science has been internalized as a belief system, into peoples' thinking and value systems. These values and the belief system get further perpetuated through the various socio-cultural practices to an extent that we stop questioning the content and the form of science and find reasons for women's absence outside of it.

The continuing exclusion of women scientists in disciplines such as engineering and physics is argued by many scientists as reflecting not only gender bias but also institutionalization of male bonding which render such disciplines particularly inhospitable for women scientists thereby creating a culture of its own. In fact, some feminist historians go as far as saying that the very definition of scientific genius remains an essentially masculine trait, some others challenge these positions by saying that these are further inhibiting the process of change by perpetuating gender stereotypes. Within the feminist critiques of science one sees a debate of those who are seen as anti-science (as it is seen as anti-feminist) and those who see a positive role of science and conceptualize subjectivity and objectivity as different from the mainstream views of science.

Conclusion

On a concluding note we come back to the findings of two studies that we discussed - women in WUAs and women in irrigation bureaucracy. Our key findings in both the studies show that it is the culture of the sector that predefines presence and effective participation. We also come back to the oft asked question of how and whether gender really matters when the goal of irrigation is its efficiency and expansion.

Gender, caste and all that is hitherto set aside matters simply because participation of diverse views and thoughts can make a big difference in terms of expanding the outreach of irrigation on more sustainable, equitable and democratic lines. Fair representation and a congenial space to voice your concerns should be the broader goal of any natural resource management agenda and irrigation is no exception to that.

Solutions that have emerged so far have simply tried to include women in the formal spaces without a commensurate effort to reconceptualize irrigation thinking and the role of various social groups within it. It would be useful to bring in changes that help in reshaping the definitions and thinking around irrigation. At the policy level this would mean supporting the formal inclusion of women and other social groups beyond representation and quotas. The more significant changes will have to be made through changing the discourses around irrigation.

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About the IWMI-Tata Program and Water Policy Highlights

The IWMI-Tata Water Policy Program (ITP) was launched in 2000 as a co-equal partnership between the International Water Management Institute (IWMI), Colombo and Sir Ratan Tata Trust (SRTT), Mumbai. The program presents new perspectives and practical solutions derived from the wealth of research done in India on water resource management. Its objective is to help policy makers at the central, state and local levels address their water challenges – in areas such as sustainable groundwater management, water scarcity, and rural poverty – by translating research findings into practical policy recommendations. Through this program, IWMI collaborates with a range of partners across India to identify, analyze and document relevant water-management approaches and current practices. These practices are assessed and synthesized for maximum policy impact in the series on Water Policy Highlights and IWMI-Tata Comments.

Water Policy Highlights are pre-publication discussion papers developed primarily as the basis for discussion during ITP's Annual Partners' Meet. The research underlying these Highlights was funded with support from IWMI, Colombo and SRTT, Mumbai. However, the Highlights are not externally peer-reviewed and the views expressed are of the author/s alone and not of ITP or either of its funding partners.

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