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Gender and Peri-urban Water Security

Struggles, Hazards and Opportunities in South Asia

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problématique

As geographical areas subjected to rapid urbanisation and constantly changing land use, peri-urban sites offer women and men greater economic opportunities. At the same time, peri-urban residents are also drawn away from traditional means of livelihood. As the city encroaches into prime agricultural lands in the fringe areas, occupations become more subsistence in nature. This increases women's workload. Often women, who migrate from rural

areas after marriage and settle in peri-urban zones, face enormous challenges in accessing water. In peri-urban contexts, water is shared and accessed informally by most stakeholders and users. This research brief underscores challenges, hazards, and opportunities in accessing water resources and their gender consequences. We investigate four South Asian peri-urban resource-constrained locations and focus on changing gender relations in peri-urban areas.



Women in Peri-urban Khulna engaged in Agriculture

@Uthpal Kumar

why gender relations matter in peri-urban?

Gender and water interactions in a peri-urban terrain evolve and manifest through revised roles and responsibilities that challenge the stereotypical social construct of men and women. Because of transitory nature of the landscape, altering the lifestyles, aspirations and access to commodities, access to water becomes crucial in peri-urban locations. As a consequence, women's involvement in multiple tasks increases due to male migration for daily wage work outside the village.

Peri-urban areas being outside the formal administrative system, where water supply is dependent on elements such as electricity, physical condition of pipe networks, distance, and location of the water source, gender relations may affect accessibility or inaccessibility to water. Because of the changing nature of the peri-urban terrain coupled with institutional and planning vacuum within which they are located, gender roles surrounding water are constantly evolving.



Location of Water Points in public spaces along the main village road allowing no privacy for women

@Hamidul Huq

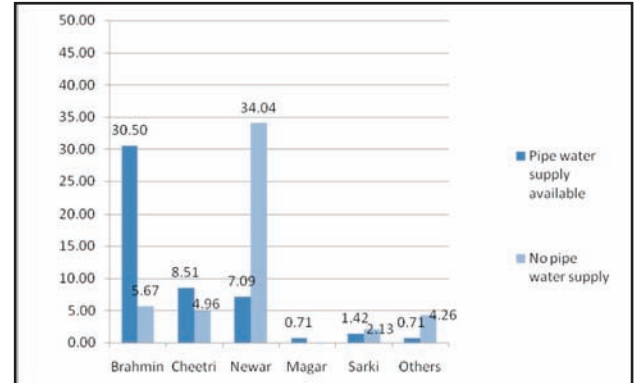
research findings

► Gender and Class

In the peri-urban research sites- Khulna, Bangladesh limited tube wells, often located near main roads adjoining the city reduces privacy for women to bathe, while sharing with their male counterparts (who leave for work in the city) during peak hours of the morning. The unplanned infrastructure coupled with lack of

balance in gender relations within the home hampers women's involvement in other economically gainful activities like kitchen gardening and attending to livestock, which are critical in supplementing the household income in these villages.

In Kathmandu, Nepal, inefficient and age-old water infrastructures increases women's labour in water collection. Limited public water stand-posts affects the time women, particularly from economically marginalised communities, spend in collecting water leading to regular conflicts. Private household connections are expensive and require an investment of NPR 10,000 (US \$114 in 2013) making them unaffordable for people from lower socio-economic communities such as Newars (see chart below).



Caste-wise Proportion of Households with Access to Pipe Water Supply in Jhaukhel (Peri-urban Kathmandu)

In portions of the natural hilly tract of Mallampet village in peri-urban Hyderabad, India, government housing schemes implemented without providing for water connections. This increases the time spent by women in collecting and carrying water up the steep slopes. Further, it creates problem when water is released during the afternoon by the panchayat when menfolk are out for work and unable to support in this activity. In other peri-urban research sites of Hyderabad, such as Aliyabad and Raviryala, water infrastructures lack maintenance, which has been found to affect the scheduled caste communities who have to travel longer distances within the village to fetch water from other stand posts. The lack of concern and initiative to improve the infrastructure arises out of class/caste biasness of the panchayat or lack of empowerment of these communities to negotiate for their rights.



Women carrying water on elevated terrain in Peri-urban Hyderabad:India

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► Health and Security

Women living in households on a higher terrain such as in peri-urban Kathmandu, Nepal, convey the risks of water collection. They have to travel long distances and face physical problem in getting head loads of water up the hill. The water supply has been erratic and since traditional sources of water such as streams are drying up, women are dependent on water utilities.

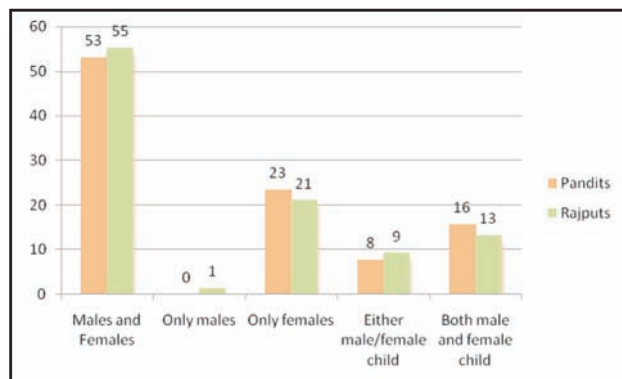
Furthermore, the use of wastewater for irrigation, because of dwindling freshwater sources leads to serious health implications. These include skin problems, headache, diarrhoea, and fever. In peri-urban areas of Kathmandu, these adversely affect women, as men are mostly engaged in the non-farm sectors. Polluted canal water used by women in Chhoto Boyra for bathing because of the longer distance which has to be travelled to fetch fresh water. This makes them prone to fungal infections. Our research shows that for some diseases, women are more prone.

I collect water from a tubewell, installed by the KCC which is half a kilometre away from my house, and fetching water from this tubewell takes about half an hour per trip. I therefore use canal water for bathing and washing, because collecting fresh water for bathing and washing from the KCC tubewell is an arduous task. As a result, I am suffering from skin diseases now. (Rashida Begum, Lobonchhara peri-urban village, Khulna, Bangladesh).

Focus group discussions with women have revealed that consumption of fluoride-contaminated water, in a situation where purchasing water is an economic burden leads to joint pains amongst women in the Padmashali in Aliyabad and Scheduled caste community in Raviryala with conditions worsening when fetching water from public stand posts further away due to insufficient supply at the nearest water supply point. With men going out for work and unable to help with water fetching activities during the day, problems only aggravate.

► Gender and Caste Dynamics

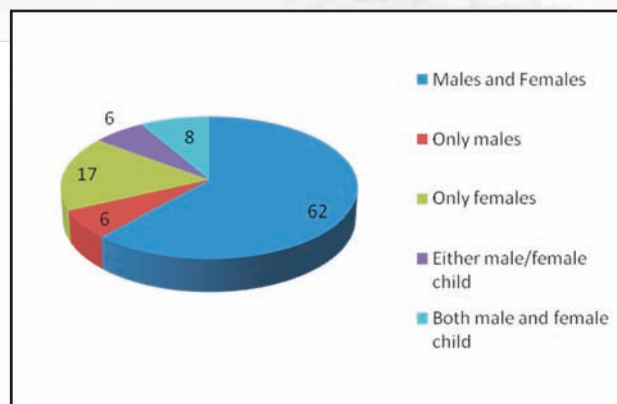
In Sultanpur, a peri-urban location in Gurgaon, India, water scarcity is changing social norms regarding women's mobility and the practice of purdah. In the absence of regular piped water supply and increasing male out-migration, upper caste women



Water Fetching Responsibilities by Pandits and Rajputs (Higher Castes) in Peri-urban Gurgaon

are increasingly moving out of the home to fetch water from public sources. This was not the case in the past. Peri-urban communities claim that "purdah hat gaya hai" (there is no veiling).

In peri-urban research sites in Hyderabad and Kathmandu, gender roles surrounding water collection for domestic consumption are more equal. Our research indicates that men fetch water during the early hours of the day, and after returning from work (see the chart below that shows that joint responsibility of fetching water is assumed by both women and men)



Water Fetching Responsibilities in Peri-urban Hyderabad

Thus, they share the burden of water collection with their spouses. Men in peri-urban Kathmandu, often cycle to neighbouring villages and distant stand posts to collect water when water crisis is acute, especially in summers. Thus, men support women, who then have more time to engage in other domestic activities, because they believe that there is a need to support women in fetching when water supply is erratic and the basic requirements within the home remain the same. In Hyderabad, although the schedule for men and women from morning to evening vary tremendously, men have been found involved in fetching water either in the evening or in the early hours of the morning, or whenever at home.



Men on two wheelers in peri-urban Kathmandu engaged in collecting water

using gender centric research methods

In order to understand the changing gender relations, gender disaggregated data has been collected through household survey and focus group discussions (FGDs). Information related to water use, water sources and collection were collected from a male and female member within the same household. 1500 responses each from females and males were collected in four research sites. Apart from this, gender disaggregated qualitative information were collected through FGDs. Depending on the social contexts, women and men were interviewed separately, like in Gurgaon, while in Hyderabad, separate meetings were held with women in the village to capture their responses. The quantitative responses were analysed and compared with the qualitative data to get a complete understanding of the situation in peri-urban areas.

summary

- ▶ In peri-urban areas, gender-water equations are not simple. When water infrastructure is not planned, women are adversely affected. Their domestic labour increases. Furthermore, they are exposed to harm and violence in public spaces. Water contamination increases health risks and poses a challenge for domestic consumption and farming. Since women are engaged in these activities on account of gender roles and daily male migration to the city for work, they are adversely affected.
- ▶ Water insecurity has also altered caste and gender roles. High caste women are now accessing more public spaces, and in some contexts, men are increasingly sharing the burden of water collection for domestic use.
- ▶ Lack of consideration for the poorer communities while providing for a suitable infrastructure is an important issue. Power relations within peri-urban areas play a critical role in determining access to water. The cost of water infrastructure is increasing and water access is largely determined by social power. Gender relations in these fast and changing contexts are an area for future research.



Training of Women in Raviryala village
:Peri-urban Hyderabad: India

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way forward

Gender-friendly infrastructure: There is a need to increase water points and women and men users need to be involved in site selection. These spaces should be safe for women to use water for bathing and washing. Concern for the needs of women and men are critical during the planning of peri-urban areas in order to provide access to water for daily chores, as well other income generating activities which women often pursue, in order to supplement the household income. Water availability is another issue that needs attention from gender perspective.

Supporting women's participation in water planning and management: Involving women in the local administration and forming women-led committees that can influence the local administration is important. It is also critical to expose the links between water contamination and health. Involving women from existing self help groups in peri-urban areas can help in this process, since they are already involved in other developmental activities and could serve as the first step towards demanding for change.

Gender roles: Gender and class disaggregated information collected by this project shows that gender roles have changed. To understand long-term changes in gender and different gender patterns in diverse peri-urban locations, disaggregated data needs to be collected and analysed by both government and non-government agencies to map changes over time. These changes, should feed into framing specific gender policies related to water security, infrastructure development and urban reforms.

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