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RESEARCH INTERNSHIP: ANUSANDHAN

**EXAMINING THE EFFECTS OF POOR
ACCESS TO WATER IN INDIA
USING KUSUMPUR PAHARI AS
A CASE STUDY**

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EXECUTIVE SUMMARY

Despite India claiming to meet the Millennium Development Goal (MDGs) of halving the proportion of population without access to safe drinking water, a lot still needs to be done. The 2011 census figures report that only 47 percent of households have source of water within the premises while 36 percent of households have to fetch water from a source located within 500 m in rural areas and 100 m in urban areas ¹. However what cannot be gauged from these statistics is the harsh reality of life for the people who suffer from these problems. Poor access to water has innumerable obvious implications which in themselves are hard, for example lack of drinking water and problems in bathing, washing, cleaning etc. However besides these, there are various social and economic implications too as will be examined in this paper. Spending innumerable hours in the pursuit of water has a high opportunity cost in terms of forgone time and wages. Also, this problem shapes the social fabric of a community, shaping relationships and lifestyles. It is not uncommon for fights to break out over the most precious yet the most basic commodity on earth- water. Furthermore the lack of accessible water facilities and struggle for every drop increases the domestic burden and leaves no time for anything else. Following Amartya Sen's definition of development being 'expansion of real freedoms that the citizens enjoy to pursue the objectives they have reason to value, and in this sense the expansion of human capability can be broadly seen as the central feature of the process of development,' ² it is clear that India is rather far from its dream of being a developed nation. The water problem has an implication not just for those who suffer from it but also shapes the future of the nation as a whole. As India stands on the precipice of a great demographic dividend, it is imperative to educate and impart skills to the children so as not to make the demographic boon a bane. However, as is observed in Kusumpur, external interventions to educate children are ineffective when the children, primarily girls are burdened with increased domestic responsibility and the task of queuing up for hours to fill up a container with water. Another necessity to realize the demographic dividend is good health. However lack of water affects personal and community cleanliness leading to a breeding ground for diseases. Consumption of bad water also leads to various ailments. In this paper I will use Kusumpur Pahari, an urban slum in the Vasant Vihar area of Delhi to elaborate on the aforementioned effects of water unavailability.

INTRODUCTION

Defining the Issue: Water availability in India

India is urbanising very fast and along with this, the slum population is also increasing. India's urban population is increasing at a faster rate than its total population. With over 575 million people, India will have 41% of its population living in cities and towns by 2030 from the present level of 286 million and 28%.³ however, most of them do not have access to basic facilities like drinking water and sanitation.

Census 2011 data shows that 20% of Indian households have to travel more than half a kilometer for drinking water, and that this figure has actually grown in rural India. Taps (43%) and handpumps (34%) are the two main sources of drinking water, followed by wells and borewells. While taps are the most common source for urban India (71%), handpumps are most common for rural India (44%). In ten years, however, there has not been an increase of even 2 percentage points in the proportion of urban residents with access to a tap. Over 20% of Indians get their water from unsafe sources including untreated sources for tap-users and uncovered wells.⁴

Also, while 87 per cent of the households now use tap, tube-well, hand-pumps and covered wells as the main source for drinking water, only 47 per cent have the source of water within the premises. A good 36 per cent households still have to fetch water from a source located within 500 metres in rural areas and 100 metres in urban areas.

Experts say Government spending on water and sanitation is grossly inadequate. According to the Centre for Budget and Governance Accountability, Government spending under these heads has been on the decline, from 0.59 per cent of GDP in 2008-09 to 0.54 per cent in 2009-10 and further down to 0.42 per cent in 2010-11.⁵

But the most serious malfunction in India's water-supply system is its hazardous quality and gigantic cost to human health and our exchequer. India ranks 120th out of 122 countries in potable water-quality. In 2005, a Central Pollution Control Board countrywide survey found 66 per cent of samples had unacceptable

organic values, while 44 per cent had coliform, occurring generally from faeces. Chemical contamination through over-exploitation of groundwater, resulting in excessive iron, nitrates, arsenic and fluoride is equally widespread. Even more disturbing is that 80 per cent of the government's supply is dependent on this groundwater. Arsenic contamination is now grim reality in, ironically, almost the entire Gangetic belt notwithstanding its ample rivers while fluoride contaminated drinking-water similarly affects 20 States. ⁶

KUSUMPUR PAHARI

The urban settlement of Kusumpur Pahari comes under the category of a Slum Colony or JJ Colony and has had evolved over the years mainly through a process of migration and networking of poor families from the relatively more backward regions of some states in India. ⁷ The residents work as auto drivers, manual labourers, domestic help, *mistrys* etc.



As you enter the narrow winding lanes of Kusumpur, the most ubiquitous and thus striking feature are the blue cans scattered in every nook and corner. They are guarded by anxious women who have been waiting for the Jal Board tanker. A women I met told me that she said been waiting for the tanker for hours, it had no fixed time and her daughter had already made several calls to the local Jal Board office to speed up the process.



There is a carefully laid out system for access to water in this locality. Kumsumpur is divided into several blocks, each of which is visited by the Jal Board tanker separately, with the frequency varying from twice a week to once in fifteen days. The residents, mostly the womenfolk and children, line up with blue cans to fill up water. They have to carefully ration this water, which is used only for drinking purposes, till the next visit of the tanker.



For other purposes such as bathing, washing, cleaning etc, they use water from the bore wells installed by the government. However, alluding to the inequality referred to above, one woman related how those who had managed to fill up excess water used the clean water even for non drinking uses while the rest struggled to save every drop. Concerning the bore wells, even they had designated slots when specific people could fill their share of water. Also, they often went out of service, inconveniencing the afflicted residents further.



Social

During my visit at the onset of March, the residents were dreading the coming summer when water usage understandably increased. It is not uncommon to see fights break out over water in such extreme weather conditions. Thus one can see how, besides issues in the primary uses of water, other aspects of life are also affected direly. Spending hours waiting in line for water and then rationing every drop also increases the domestic burden faced by the female residents. On the other hand, in a testimony to the human spirit, residents narrated that they often borrowed water from neighbours in event that they ran out of it. They then repaid the neighbours when they next got their instalment of water.

Economic

Besides social, there are also economic implications of the water problem. The many hours that women in Kusumpur spend, queuing up for and filling water, could be used for more productive pursuits. Some

women have to forgo their daily wage on days the tanker comes while some others cannot work at all, in part due to the increased domestic burden.



Also, the relatively well off residents resort to buying water at the rate of Rs 5-6 per can in desperate situations. Others still have to travel long distances to get water. The actual expenditure on water coupled with the more prominent opportunity cost of the time spent in getting water totals a great economic waste.

Education

Kusumpur has a plethora of NGOs such as Ritanjali, Literacy India, AAMF who have taken initiatives to educate the children. Certainly the literacy scenario has improved drastically over the years in the presence of so many educational opportunities, both governmental and private.



As the teacher in Ritanjali narrated, education in general and of the girl child in particular, was tolerated but in most cases no efforts were made by parents to encourage it. Girls often had to withdraw in the face of household duties and even those who were studying could not devote adequate time and attention to school. However, there was improvement. Though only 3 girls were pursuing class 12th, there was an instance of a girl having made it to Delhi University. However, as mentioned above, these efforts are not as effective now as they would be in the presence of basic water facilities. Often the students, primarily females, have to miss entire days in order to stand in queue to fill up their share of water. Not just students, teachers themselves have to miss classes when it is the turn of their block to receive a visit from the Jal Board tanker.

The issues related to schooling of the children to a large extent are linked to the social and economic context of the communities to which the school caters to. The schools in this area were originally established to cater the need of families of the two residential colonies in which they are located. Over time, parents living in the colonies began to send their children to the private ('public', in local parlance) schools; at present the MCD school caters primarily to children from the poorer settlements, located at the fringes of these colonies. The issue of water supply has adversely affected children's attendance. In Kusumpur Pahari children were often absent based on the tanker timings. Water logging and sewerage systems in the area are serious concerns in these two areas.⁸

It is important to appreciate how difficult education is for the females in this area when the burden of housework is so increased due to the daily struggle for water. On a side note, sanitation is another major issue for women in this area. In the absence of toilets, women often have to get up early in the dark and go to relieve themselves in the outskirts, in order to protect their modesty with the presence of so many strangers attracted to the malls nearby. Safety is another issue and they have to move in groups. The wider implications of these problems are that females often find it difficult to continue their education which closes the avenues open to them. This is one small part of the reason that it is not an uncommon practice in Kusumpur to marry off girls at a relatively young age. As mentioned by the teacher in Ritanjali, there have been instances of girls leaving studies midway due to early marriage.

Health

Our next stop was the health center run by ASHA- Accredited Social Health Worker. The incharge there informed us that there are often check up camps held in Kusumpur by various hospitals. The government and NGOs are both very active with regard to awareness and vaccination drives but people are still hesitant. However the water scarcity obviously results in bad hygiene and dirty surroundings. Though people build up some level of immunity over time and it is difficult to pinpoint the exact cause of diseases, the local doctor admitted that there were various cases of upset stomach, diarrhoea, and even typhoid which are caused in part due to bad water. Furthermore, consumption of inadequate amounts of water is in itself terrible for one's health.

Considering the national scenario, around 37.7 million people are affected by waterborne diseases annually (viral hepatitis, cholera, jaundice, typhoid are examples) while 1.5 million children die from diarrhoea alone every year. Ten million people are vulnerable to cancers from excessive arsenic and another 66 million are facing risk of fluorosis, now endemic in 17 States. The health impacts of drinking-water with other environmental pollutants such as industrial wastes have not even been properly studied yet.⁹

Conclusion

Two conclusions emerged distinctly from my trip to Kusumpur. First, unless the basic social infrastructure pertaining to water and sanitation is in place, external efforts in the fields of health and education will remain to a large extent, ineffective. And second, inequality exists in varying degrees throughout the world. On one level we have the most luxurious mall in all of Delhi where people spend lakhs of rupees on a handbag; and ten minutes from that mall we have a slum where people struggle daily to get something as basic as water to drink. But even within the slum, there are hierarchies. The relatively well off such as the doctor of the local clinic can afford to pay others to fill water for him, while many of the disadvantaged women have to forgo their daily wage to stand in line since 4 am in the morning to fill up their share of water. While some residents admitted, in extreme situations, to buying water from the nearby *Shauchalaya*, some of the less fortunate have to cycle over to the R.K.Puram Jal Board in their quest for water.



POLICIES REGARDING WATER SUPPLY IN SLUMS ¹⁰

GoI has been initiating targeted schemes and programmes to improve slum conditions since 1960s. But its policy focus has undergone a change over a period of time. In the 1970s and 1980s, the Indian government had a policy of 'no slums cities'. This warranted forceful resettlement and rehabilitation of slum dwellers. However, this didn't help in making cities slums-free. Then the Government started implementing slum upgrade programmes under which infrastructure development was encouraged.

Since 1972 the Government of India initiated a programme called Environmental Improvement of Urban Slums under which priority to drinking water and sanitation was given. Again in 1996 government initiated the National Slum Development Programme with substantial fund allocation. It had a specified focus on providing drinking water and community toilets. After spending close to Rs3,100 crore in nine years, it was discontinued. It was estimated that 46 million slum dwellers benefited from it.

In 2005 government started the Jawaharlal Nehru Urban Renewal Mission (JNNURM), an initiative to encourage reforms and fast-track planned development of certain cities. It has a financial commitment

of Rs1,50,000 crore during 2006-12. The larger objective of the mission is to integrated development of infrastructure services; accelerating the flow of investment into urban infrastructure services; planned development of cities including the peri-urban areas and universalization of urban services to ensure their availability to the urban poor.

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