Sanitation and Safe Drinking Water for All: Developing a Sustainable Approach to Achieving the Goal

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Abstract: Poor environmental sanitation and unsafe drinking water are key health factors in India. According to a review of various government plans and programmes, sanitation has received the least priority in the previous government implemented plans, and as a result, most rural and urban areas in the country lack proper facilities for waste water and excreta disposal, as well as solid waste management facilities. The services that have been given thus far have also deteriorated over time as a result of neglect and a mismatch between the demands of the people and the resources of the local bodies. This report aims to highlight more sustainable solutions for drinking water and sanitation in both rural and urban sections of the nation.

Keywords: sustainability, sanitation, water supply, health, environment.

INTRODUCTION

Humans have continuously attempted to overcome the threat posed by premature death owing to illnesses and diseases. The character of this fight has continuously shifted between individual and institutional, subjective and social. 'In living together, men experience health issues that impact individuals and communities, and societies build mechanisms to deal with such difficulties' (Rosen, 1958). Humans have acknowledged the necessity of hygienic procedures since antiquity. Although the reasons claimed for exercising cleanliness, such as disposing of human excreta, vary. Historically, these behaviors were related with religion. Foucault noticed similar kind of improvements in France. In his work, Foucault discusses 'politico-sanitary anxiety'. Sanitation and the environment took precedence in the development of urban medicine during an era characterized by the miasmatic theory of disease, when cities were cleaned by air and water. The first step toward environmental cleaning was to individualize corpses, coffins, cemeteries, and the second was to build slaughterhouses on the outskirts. Although quarantine was once the only potential weapon that restricted individual movement, with the emergence of urban medicine, restrictions were imposed on things such as air and water; it was the medicine of things rather than individuals (Foucault, 1998). This led to town planning, ventilation of cities, and the introduction of sanitation and environment in the understanding of health and disease, expanding this to multiple disciplines. The following line from Frederick Engel's description of working-class circumstances in England shows that environment and sanitation were becoming increasingly important in the field of health in England at the same time:

"All putrefying vegetable and animal things emit gases that are clearly harmful to health, and if these gasses have no method of escape, they will surely pollute the atmosphere. The filth and stagnant pools of the working-people's quarters in the major cities have, therefore, the worst influence on public health, because they create precisely the gasses that cause sickness, as do the exaltations from tainted streams" (Engels, 2001).

The worry of sickness spreading from the proletariat to the bourgeoisie. The tale of England and Wales is an important chapter in the history of sanitation and its relationship to public health. Until the Industrial Revolution, cities were mostly the property of the wealthy, with the impoverished constituting a smaller proportion of the population. With the 18th century Industrial Revolution, difficulties such as slums, the buildup of garbage and human excreta, overcrowding, and a range of social problems occurred, as the underclass population increased. Frequent outbreaks of cholera, particularly the pandemic that began in Paris in 1832, exacerbated their suffering. As a result, it is clear that the urban bias that emerged during the Industrial Revolution continues to influence and alter hygienic policy over the world.

Safe drinking water, sanitation, and sustainable development in rural India:

Humans must have access to safe drinking water and adequate sanitation. In the absence of either of these, it has a direct impact on sickness and death rates, particularly among children, as well as increasing women's misery and susceptibility. In reality, inadequate environmental sanitation and unsafe drinking water are key health factors in India. According to WHO/UNICEF and the Joint Monitoring Programme (JMP), a "improved water source" is defined solely by the technical conditions of the water source (pumps, standpipes, boreholes, etc.); the social conditions of access and water quality are frequently omitted from this category, obscuring the realities of access to water in poor urban communities (cited in Crow and Mcpike, 2009). Waterborne infectious diseases account for approximately 60-80% of all infections in the nation. Because sanitation has historically been given the lowest priority in the government plans, the majority of the country's areas are extremely unsanitary due to a lack of suitable infrastructure for waste water and excreta disposal, as well as solid waste management. Furthermore, whatever services are supplied have worsened with time due to neglect and the gap between people's needs for these services and municipal organizations' resources, as well as their rising managerial challenges. Subsidy-driven sanitation efforts, particularly in rural areas, have had limited coverage due to serious physical limitations, problems in adopting and using toilets, and corruption in toilet construction with subsidies, which are some of the major barriers to sanitation coverage and usage improvement in rural India.

Understanding Sustainable Development:

The administrator of the United Nations Development Programme (UNDP) defines sustainable development as,

"Sustainable human development is defined as development that not only provides economic progress but also distributes its benefits fairly; that regenerates the environment rather than destroys it; that empowers people rather than marginalizes them. It prioritizes the poor, broadening their options and possibilities, and allowing them to participate in decisions that impact them; it is development that is pro-poor, pro-nature, pro-jobs, pro-democracy, pro-women, and pro-children" (quoted in Sachidananda 1999).

Achieving sustainable development requires not only the sustainability of the economic and resource systems, but also the sustainability of the economic and social systems. In fact, providing clean drinking water and sanitation is one of the most crucial aspects of sustainable development. To make the

most use of development, it is critical to raise awareness about education in both urban and rural areas, as well as to promote improved health among individuals and their children. Safe drinking water and sanitation provide non-health benefits as well, such as direct implications for economic development, employment, agriculture, housing, health, and other variables. Although the notion of sustainable development is embedded in most environmental and development policies, some opponents express worry about the term's ambiguity (Nayar, 2004). In fact, Dr. Nayar asserted that the politics of sustainable development is 'anti-south, anti-poor, and anti-ecological' when evaluating the process of actual sustainable development in the nations of the north and south, as well as the rising differentiation in this process between the two

Equity is vital in water supply and sanitation services. Despite the fact that few research on water supply and sanitation have been conducted in India, the situation is nearly identical to that of other developing nations. It has been noticed that women and children are the most vulnerable because they are burdened by societal structures and hierarchies, as well as the issue of shame and dignity that arises as a result of a lack of clean water and sanitation. Ben Crow and Jamie McPike's paper on access to drinking water and women's work in low-income urban areas of the global south describes women's lives and the various challenges they face when collecting water (time of access, uncertainty, quality of supply, and costs) (Crow and McPike, 2009). The author sheds light on the question of how access to water and gender relations interact in low-income metropolitan regions of the developing world. Different factors, such as problems obtaining water from public places, which is inconvenient in many ways, including the fact that it takes a long time and requires a lot of effort because they have to travel quite far at times to get water from public taps, and, most importantly, it has an impact on the people's economic situation. Women spend almost 2 to 4 hours obtaining water from public sources, particularly in rural or urban regions with poor incomes. Again, the cost of water is a huge issue for individuals living in poor urban areas, as well as those in rural ones. The majority of individuals who reside in these locations work on a regular basis, making it difficult for them to spend even the smallest amount of money. In many low-income communities, the cost of water has a negative impact on women because it is their responsibility to organize funds for this reason. Traditionally, in low-income communities such as Lagos, women do not receive money from males in the family since it is socially inappropriate (Etta, 1999). However, the authors concluded that "the global figures on improved access to water in urban areas focus only on the technology of access, overlooking social obstacles like the collection of time and the cost of access, and thus obscuring the wide-ranging social advantages of household water connections" (Crow and McPike, 2009).

Furthermore, school sanitary amenities have an influence on teenage females' enrollment in schools. They are also subjected to harassment while going to gather water and in community defecation zones. Young children are especially susceptible when they do not have access to clean water, and it is up to mothers to care for their ill children. Personal hygiene cannot be achieved without access to clean water and the disposal of waste water. At the same time, access to clean drinking water is a fundamental human right that is critical to achieving gender equality and sustainable development. Furthermore, it has been seen that when women are involved in water and sanitation initiatives, they are more effective and durable, and they contribute significantly to economic development in addition to achieving gender equality.

Vandana Shiva criticized the 'National Master Plan for India for the International Drinking Water Supply Decade (1981-1990)', stating that it emphasized everything except water and adopted the western model of water supply system, resulting in failure. Furthermore, Western male consultants who are in charge of creating water purifying technology for tiny communities, particularly in third-world nations, are indifferent to gender conventions. These initiatives are typically centralized and capitalthey intensive, and are not necessarily technologically appropriate. In contrast, the indigenous technologies employed by Third World women are decentralized, low-cost, and mechanical (Shiva, 1988). It is critical to recognize that, whereas men oversee water supply in Western nations, women in tropical or rural developing countries are responsible for creating clean drinking water using traditional methods. According to Vandana Shiva's work,

"Contemporary development work in the Third World superimposes scientific and economic paradigms shaped by western, gender-based ideology and communities in other cultures. We already know that most development programs and initiatives based on such ideas result in ecological degradation and women's marginalization; they violate one's integrity while destroying the productivity of the other. Women, as victims of the aggression of patriarchal systems of development, have risen against it to defend nature and maintain their life and nourishment (Shiva, 1988, p. xv).

Building sustainable drinking water supply and sanitation in rural India while addressing current disparities:

Although the environmental problem exists all throughout the world, the severity of the problem varies by nation, and even within the same country, it differs from urban to rural areas. Environmental issues, such as crises caused by the deterioration of land, water, and forest resources, are widespread in rural communities. Rural communities rely heavily on natural resources such as wood, fodder, and food, thus it is critical to take long-term steps to protect these resources from further degradation. Every year, a large area of land gets drowned due to natural disasters; in the event of a drought, the land cannot be used for any useful purpose, such as agriculture. Similarly, potable water is necessary. As previously stated, women are primarily responsible for arranging water for the entire family, and in doing so, they must endure numerous difficulties, including carrying the weight every day, and the stigma associated with their caste adds to their anguish. Again, forests produce a wide range of things such as food and wood for fire, and they also sell extra wood on the market to make money. Rural people in India live considerably closer to the environment than urban people, therefore any degradation would leave them defenceless and powerless.

However, over the years, the issue of rural water supply and sanitation has been a key impediment to the battle against water-borne illnesses. Despite the government's significant investment in sustainable development in this field, the problem persists in the majority of the country's rural areas. Debabar Bannerji stated that the country's current poverty is to blame for the destruction of the rural environment. While mentioning some of the primary constraints that are accountable for the low state of potable water supply and sanitation, he adds,

"The issue of water supply and sanitation in a large country like India is primarily one of human ecology. Deep and pervasive poverty is at the basis of the country's profoundly unfavorable ecological circumstances, which affect a substantial proportion of the population, both rural and urban. When almost half of the population does not get two square meals a day all year, it is possible to understand the state in which they live." (Bannerji, 1982).

According to D Bannerji, poverty is a huge barrier to meeting even the most fundamental human needs. Poverty causes numerous adverse circumstances in both rural and urban settings, and it has a significant impact on potable water supply and sanitation as well. It also has a significant impact on preventing access to essential utilities such as power and roads. In reality, Bannerji's examination of the nineteen communities found that there was very poor environmental sanitation in every hamlet. According to the survey, the majority of families in the villages lack toilets, indicating not just a poor hygienic situation in the hamlet but also the plight of the women. He also stated that simply installing toilets in houses will not result in major change; rather, people's socioeconomic conditions must improve generally. In fact, he believes that individuals should feel the need for such amenities rather than having them imposed through schemes or health measures (ibid). In his study, he also discusses cases of prejudice against impoverished people in relation to water taps. He mentioned a community named 'Pullambadi' where the government had installed piped water supplies, and how there were relatively few taps in the underprivileged neighbourhoods. Because there were so many families and so few taps, these residents were unable to obtain water from other taps, causing significant discomfort. Because several families rely on the same tap, they eventually dried out as a result of excessive use. Apparently, they had to utilize wells that had been disused for a long time and had been exposed, resulting in an epidemic of significant health concerns among the population. As a result, despite the government's attempt to install water pipelines, the venture's failure has resulted in an even more dismal situation for the population (ibid, pp 69-71).

CONCLUSION

Bannerji's account of the inequitable distribution of water supply and sanitation in the country's rural districts is supported by historical facts. In 1943, the Bhore committee raised the topic of water sanitation and environmental hygiene, linking it to the nation's overall growth. It placed equal attention on water and sanitation in both urban and rural regions. Although nothing noteworthy occurred on this front following independence, the recommendations of the Union Government's Environmental Hygiene Committee, which was constituted in 1948-49, were not followed until 1960. An analysis of several plans reveals that water supply and sanitation in rural regions were given less importance, and the allocations were insufficient to provide complete coverage. The two critical initiatives were primarily viewed as techno-centric activities. The eighth and ninth five year plans aimed to ameliorate the condition for SC/ST groups. This was the first time the national planning commission recognized social stratification as an essential factor, but the method taken to ameliorate the issue was centered on modifying behaviors. Even in the subsequent fiveyear plans, the emphasis has been on techno-centric approaches rather than understanding people's perceptions of water and sanitation; for example, in India, without taking into account social dimensions such as gender, achieving sustainable development in this sector is a pipe dream. Although, in the ninth and tenth five-year plans, the IEC technique was used rather than addressing the sanitation issue in the greater framework of development. According to the National Council for Applied Economic Research (NCAER), more than half of the rural population still lacks access to clean drinking water despite significant government spending, implying that investments have mostly been made in metropolitan regions. The majority of government-implemented programs remained inoperable due to a lack of sufficient maintenance and financing (Pathak, 2011).

REFERENCE

- [1] Bannerji, D. (1982). *Poverty, Class and Health Culture in India* (1st ed.). New Delhi: Prachi Prakashan.
- [2] Crow, B., & McPike, J. (2009). How the Drudgery of Getting Water Shapes Women's Lives in Low Income Urban Communities. *Gender, Technology and Development, Sage Publications*, 13(1), 43-68.
- [3] Doshi, S. (1999). *Rural Sociology* (1st ed.). Jaipur: Rawat Publication.
- [4] Ebam, E. F. (1999). Makoko Low-Income Settlement in Lagos, Nigeria: Gender and Urban Natural Resource Management. In Women Managing Resources: African

- Research on Gender, Urbanisation, and Environment (1st ed., pp. 30-51). Nairobi: Mazingira Institute.
- [5] Engels, F. (2001). The Condition of Working Class in England. In *The Sociology and Politics* of *Health* (1st ed., pp. 8-14). New York: Routledge.
- [6] Foucault, M. (1998). The Birth of Social Medicine. In *Essential Work's of Foucault* 1945-1984 (1st ed., pp. 134-156). New York: New Press.
- [7] McNeil, W. (1975). *Plagues and Peoples* (1st ed.). New York: Doubleday Anchor Press.
- [8] Nayar, K. R. (1994). Politics of Sustainable Development. *Economic and Political Weekly*, 29(22).
- [9] Nayar, K. R. (2004). Rural Health: Absence of Mission or Vision. *Economic and Political Weekly*, 39(45).
- [10] Pathak, P. (2011). Social Dimensions of Water Supply and Sanitation: A Study of Two Villages in Barpeta District, Assam (Master's thesis, Jawaharlal Nehru University, New Delhi, India).
- [11] Rosen, G. (1958). A History of Public Health (1st ed.). New York: M D Publications.
- [12] Rosen, G. (1971). Madness in Society: Chapters in the Historical Sociology of Mental Illness. *Journal of the History of the Behavioral Sciences*, 7(2), 214-215.
- [13] Sachidananda. (1999). Social Dimension of Water Supply and Sanitation in Rural Areas (1st ed.). New Delhi: Concept Publications.
- [14] Shiva, V. (1988). Staying Alive: Women, Ecology and Survival in India (1st ed.). New Delhi: Kali for Women.