

Addressing the Social, Cultural, Gender, and Equity Dimensions in WASH (Water, Sanitation, and Health), Orissa, Through Consumer Participation

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ABSTRACT

This article outlays the social, cultural, gender, and equity dimensions in water-linked health and illness issues. Reinforcing the fact that access to water and sanitation is a fundamental human right and is essential to a healthy life and human dignity, this article locates the water consumer within the structural, social, and cultural contexts. It explains consumer behavior as a meaning-making exercise influenced heavily by the context and sociocultural circumstances. And so it advocates the importance of engaging consumer participation in the design and intervention of water, sanitation and hygiene technologies, and program and communication campaigns.

Keywords: water, sanitation, communication campaigns, consumer participation, equity, gender.

1. INTRODUCTION

Globally, there are nearly 1.7 billion cases of diarrheal disease resulting in 1.9 million annual deaths and accounting for 4.2% of global burden of diseases in Disability-Adjusted Life Years (World Health Organization [WHO] estimate). Diarrhea also disproportionately affects children and contributes to the already burdened role of the female caregivers. WHO (2013) estimated that diarrhea killed around 760,000 children <5 every year. Further water- and sanitation-linked infections also create morbidity for children and women at different life stages. A Gates foundation research report suggested an association between enteric infections and gut dysfunction which might lead to lower immunity and impaired growth and developmental outcomes. These have led to organizing a significant portion of the Water and Sanitation WASH issues as an integral part of the millennium development goals, and there have been many programs and campaigns to address them. This article focuses on the manifestation of these issues in India and discusses the sociocultural, equity, and gendered dimensions of the water and sanitation issues and the culture-centered nature of consumer behavior, and suggests how involving a participatory approach might lead to better outcomes.

2. THE INDIAN CHALLENGE

Water and sanitation issues pose a huge challenge across India with just 31% urban and 21% rural population reporting improved sanitation facilities and only 25% of population having access to drinking water on their premises (UNICEF, 2008). The report further noted that 67% of Indian households do not treat their water even if it could be chemically or bacterially contaminated. Additionally, 594 million Indians defecate in the open, and 44% of mothers dispose the children's excreta in the open leading to microbial contamination

of the environment. Adding to this, research by the Public Health Association of India reported that only 53% of the population washed hands with soap after defecation, 38% of the population washed hands before eating, and only 30% of the population washed hands with soap before preparing food. The severity of the water and sanitation problem is responsible for 454,400 annual diarrheal deaths translating to nearly 1,250 deaths daily. Diarrhea bouts and respiratory infections are the prime reason for child deaths in India. WASH issues also contribute to the huge 48% child malnutrition and reduced learning abilities among children. These also manifest in the general population in intestinal nematode infections, lymphatic filariasis, trachoma, schistosomiasis, malaria, etc. The Indian government has developed multiple programs to address these with local nongovernmental organizations (NGOs), United Nation bodies, and international NGOs and has allocated significant resources to address these challenges through various technical and social interventions.

3. CHALLENGES IN ORISSA

The challenge of sanitation and hygiene across India is reflected in the state of Orissa¹ where only 14.1% of rural households have access to toilets, and the access and infrastructure problem is compounded by the low priority given to sanitation and hygiene; to communication, and more reliance on designing an "engineering/technology" solution that ignores the social and behavioral aspects. Orissa and India are both missing the millennium development goals' target for sanitation. There are many other challenges identified in water and sanitation in Orissa. One is that many households with toilets still continue to practice open defecation, and 37% of

1 Orissa is one of the 29 states in India situated on the eastern coast.

household who had toilets adjacent to their houses did not use them which indicates a behavioral issue grounded in the local social ecology and structures. Unavailability of water was reported as a major reason for nonuse of toilets. Furthermore, 38% had problems with design, and 30% had problems with the location of toilets which raises questions about the degree of community participation in the process. In safe practices, 94% of caregivers identified safe disposal of children's stool, but 75% practiced unsafe disposal, and the practices related to collection and disposal of household garbage were unhygienic (Figure 1).

4. SOCIOCULTURAL, EQUITY, AND GENDERED DIMENSIONS

A review of published research and analyzing communication exchanges with water and sanitation practitioners on field further confirms that addressing the public health challenges posed by water and sanitation is more of a social, structural, ecological, cultural, and gender issues; a topic firmly rooted in dimensions of equity. Scholars note that water might mediate the micro-organism/parasite transmission to humans, but it is unsafe sanitation and hygiene practices, lack of environmental hygiene, gender

issues, and structural conditions that accelerate the transmissions and morbidity (Akpabio & Subramanian, 2012; Jewitt, 2011). For example, a huge inequity is manifested when only 13% of men collect water in India, the rest is done by women. Data report that women can take up to six trips a day for collecting water, and in rural areas this averages out to 10 miles a day and 15 L per trip. The major responsibilities of cooking and washing in rural households are also handled by women. These connect to higher risk for infection, risk of sexual, gendered violence, school dropouts, physical injury, exhaustion, stress, and other vulnerabilities. There is a huge socioeconomic cost too as a major segment of population viz., the women spend enormous amount of time just collecting water.

Furthermore, lack of toilets and other sanitation facilities also pose risks in terms of violence, lack of menstrual hygiene, personal shame, and loss of personal dignity. Lack of toilets is cited as one major reason for adolescent girls dropping out of school. Lack of toilets, access to toilets, water for safe disposal, and open defecation make the women and children more vulnerable in terms of physical and mental health and create inequities. Examining the water and sanitation issues through a gender lens brings forth

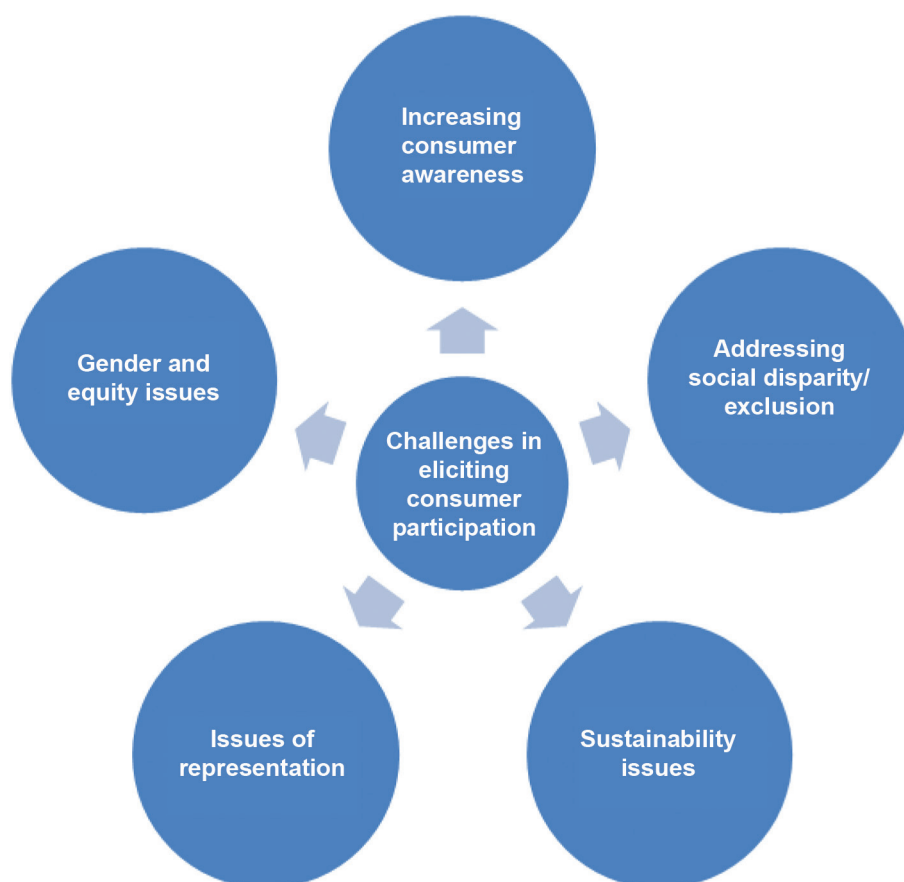


Figure 1. Challenges in eliciting consumer participation.

these unique perspectives. The use of safe water and sanitation practices and the display of safe behaviors lie very much in the social landscape than in an engineering framework. The roles of gender, beliefs, local knowledge, norms, values, and spirituality influencing the broader contexts of behaviors (for which contaminations and diseases spread) have to be examined for any intervention (Akpabio & Subramanian, 2012). Jewitt (2011) notes that various spatial and temporal dimensions of cultural and environmental factors constrain intervention efforts.

5. CULTURE CENTERED NATURE OF CONSUMER BEHAVIOR

Human beings as consumers are suspended in meaning frameworks where their behavior and actions represent and create meanings. So, human behavior and human agency and the capacity to act are situated in the cultural meaning making landscape: their culture, their belief systems, their practices, and their norms. So, in WASH consumer behavior, an important aspect is to study the meaning-making processes of the water consumers with respect to their meanings of health, meanings of water, and meanings of sanitation and hygiene. Research into consumer meanings noted that water is regarded as a home of deities, goddesses, and ancestors in several cultures. As communities developed their habitations around different sources of water, the presence of water contributed to many meaning making processes in their lives and water assumed a religious and spiritual symbol – a polymorphic meaning system (Akpabio, 2012a, 2012b; Jewitt, 2011). A similar meaning-making process was noted in meanings of health where health is equated to availability of work, money, spiritual and mental comfort, and spirits' manifestation (Acharya & Dutta, 2012a; Dutta, 2008). Similarly, research and documentation noted sanitation and associated taboos/meanings of cleanliness varying across gender and cultural situations. So, it is important to understand the cultural nature of the water consumer behavior and highlight community assets and meanings, as a form of cultural strength through a collaborative process (Dewitt-Webster and Airhihenbuwa, 2005). Situating the water consumer behavior in the cultural framework will give us useful explanations as to how can we communicate effectively with the consumer to adopt certain technology or behavior.

6. PARTICIPATORY APPROACH

Reviewing the current campaigns, researchers noted that there is an absence of these cultural and environmental discourses in much of the current health and sanitation communication campaigns (Acharya &

Dutta, 2012a; Airhihenbuwa, 2007). Using the conventional wisdom of biomedical science and epidemiological evidence-based investigations results in the intervention designs missing out on the structural, cultural, and contextual factors (Airhihenbuwa, 1999; Dutta, 2008). So, to design an effective water-linked health and wellness program intervention, along with the engineering component, we have to build the social-engineering side where we locate the water consumer in his/her cultural context. The task of locating the consumer in her sociocultural and ecological contexts means engaging the consumer and eliciting the consumer's participation (Acharya, 2009). This necessitates listening to the consumers' voice, as well as her experiences and locating them within the local structural framework and the local ecological landscape (Airhihenbuwa, 1999, 2000; Airhihenbuwa, King, & Spencer, 2001; Dahlberg & Krug, 2002; Dutta, 2008). A local ecological knowledge contributes to the scientific efforts by exploring the diversities of cultural, socioeconomic, physical-environmental, and temporal factors in explaining water and sanitation practices (Akpabio & Subramanian, 2012). This is underlined by the fact that the different health behaviors, water, and sanitation practices are a manifestation of various contextual influences of physical/environmental, socioeconomic, and cultural factors (Acharya & Dutta, 2012b; Airhihenbuwa, 2000; Akpabio, 2012a, 2012b). For example, a typical water users' context is impacted by poverty and its dimensions, and they trap the consumer in its vice like grip, in a web of deprivation which impacts their water- and health-related outcomes (Chambers, 1983; Dutta, 2004). Our technological solutions and interventions apart from being based on scientific evidence and understanding of disease etiology should have factor cultural values and belief systems of the consumer which form their views about the diseases and also the cure (Airhihenbuwa, 1999, 2007; Akpabio, 2012a, 2012b; Azevedo et al., 1991; Dutta, 2008; Jewitt, 2011; Odumosu, 2010). So, consumer participation in the different processes forms an important part.

7. PRACTICE IMPLICATIONS

This underlines the key point that there is the need to involve the consumer in our research and intervention efforts to address water- and sanitation-linked health and wellness issues. The participation of the consumer has to be elicited in the design and implementation of the water, sanitation, and hygiene interventions. The other key reasons why we should engage consumer participation are as follows:

- The consumer is the ultimate user.
- The culture and ecology of the consumer influence her actions.

- The consumer assigns meaning to the issues/technology.
- Each consumer group has their own communicative practices.
- Consumer voices are important for technology use and adoption.
- Consumer decides whether technology succeeds/is effective.
- The technology-supported solution will play out in the cultural, structural, and political contexts of the consumer.

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