June 2023

Organizing and Communicating Health: A Culture-centered and Necrocapitalist Inquiry of Groundwater Contamination in Rural West Bengal

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Organizing and Communicating Health: A Culture-centered and Necrocapitalist Inquiry of Groundwater Contamination in Rural West Bengal

by

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Communication
College of Arts and Sciences
University of South Florida

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Date of Approval:
June 23, 2023

Keywords: water insecurity, health communication, organizational communication, culture-centered approach, necrocapitalism

DEDICATION

This dissertation is dedicated to communities across the globe advocating for change and justice.

ACKNOWLEDGMENTS

This dissertation is a collective endeavor that has helped me to become a better researcher and person. First of all, without the 53 research participants, this current project would not have existed. I appreciate the time each of you gave me. I am profoundly indebted to your openness to share your stories/knowledge with me.

I thank my dissertation chair and my committee members for helping me to complete this dissertation and preparing me for future projects. Your guidance has been critical for the evolution of this dissertation. All of you and your work have influenced how I approach my research, teaching, and service. In this learning process, I owe a debt of gratitude to my advisor and mentor Dr. Ambar Basu for the constant reassurance, for my intellectual growth, for always being helpful in every step of my academic progress and process, for rigorously engaging and critiquing with my writing, for nurturing this project, for making me think more about my practical and theoretical contributions and the list is endless. I would also like to thank Dr. Ambar Basu and Dr. Patrice Buzzanell for encouraging me to apply for the USF dissertation completion fellowship. It gave me the time and space to work on/improve my arguments in the sub-fields of health and organizational communication. Dr. Buzzanell, thank you for your encouraging words, supporting this project, asking thoughtful and important questions, and pushing me to think more about de-westernizing our field. I would also thank Dr. Mahuya Pal for always supporting this project and helping me to more critically engage with my data. I am so grateful that I took Power and Control in Organizations which informed my intellectual approach to understanding water insecurity and how water is organized in the research sites for this

project. It is one of the best classes I have taken in the department. To Dr. Heather Zoller: I wrote the following in my MA thesis acknowledgement, “I am so grateful that you read and critiqued my writing thoroughly so that I improve.” I reiterate what I wrote then and add that I am fortunate to have your continued support. Thank you for pushing me to think more about organization of participation in environmental health context and practical implications. Outside of my formal committee, I would want to thank Dr. Sonia Ivancic for teaching the most profound ideas in Materiality & Communication. Our conversations around non-human actants have influenced my intellectual journey. Dr. Aubrey Huber, thank you for your commitment to critical and social justice pedagogies. Our Critical Pedagogy course helped me to become a better teacher-scholar, think about student success inside and outside of classroom and begin strategizing how we can reimagine the academy to be a more inclusive space for everyone. I am also thankful to everyone in the brilliant Department of Communication at USF who has generously given me their time in different ways and created a superlative academic environment. Also, a big thank you to USF alum Drs. Sasha Sanders and Zhenyu Tian, without you both my time at USF wouldn’t be the same. Thank you for all the wonderful memories around cooking and singing together, painting, sharing academic experiences and reflecting on our respective journeys. To my mother, Bishnumaya Mukherjee, for keeping me well-fed throughout my fieldwork and being excited (and at rare times, worried) about my incessant travel. To the loving memory of my father, Indra Dulal Mukherjee, who always believed in me more than I did in myself. To my in-laws, Sadhana Parial and Arabinda Parial, for your consistent excitement about my research and sharing them with others. Finally, I would like to thank my spouse, Arijit Parial, for your support during the grand and the simple moments throughout the process of writing this dissertation.

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ABSTRACT

As a discursive point of praxis, this dissertation project seeks to record knowledge from below around the overlaps between health, water and health interventions emerging from rural communities located in North 24 Parganas and Purulia in West Bengal that are disproportionately impacted by water-insecurity. My dissertation also documents how multiple-stakeholders such as local NGOs, international NGOs, non-profits, and donor agencies organize access to safe water and health interventions for the water-insecure communities located in North 24 Parganas and Purulia. The integration of the CCA and necrocapitalism afford theoretical and methodological guidance in this dissertation to help document the localocentric stories emerging from the subaltern communities impacted by water-insecurity. By centering the stories that are often decentered from mainstream knowledge making spaces, the goal of this research project is that the local narrated lived experiences, as interpreted and recorded in this dissertation, might inform the organizing of future health interventions designed and developed for similarly marginalized communities. For my dissertation, I conducted a seven-week field study in West Bengal and employed various ethnographic research methods, including in-depth interviews, group interviews, focus group discussions, participant observation, field notes (including photographs) and reflexive journaling to collect data. Though the critical thematic analysis of the data that emerged from my fieldwork, I learn how research participants with minoritized caste and low-income backgrounds routinely challenge, disrupt, and re-organize the dominant frames of health, water, and health interventions as articulated by global local organizational actors (such as local NGOs, international NGOs, non-profits). Additionally, the narratives emerging

from subaltern spaces made visible how community members residing in water insecure areas configure structural solutions and navigate and negotiate the social, cultural, and institutional structures at individual and community level. By centering marginalized voices from Global South, this dissertation contributes to the larger goal of promoting social justice and equity around health and water by challenging dominant narratives circulated by local and global organizational actors and de-westernizing research, policy, and practice.

CHAPTER ONE: RESEARCH CONTEXT

Research Statement

Drinking water contamination and depletion of natural water sources, often aggravated by climate change due to contemporary realities of globalization (such as economic and industrial development) and lack of adequate investments in water infrastructure worldwide, is specifically noticeable in marginalized communities (Armoudian & Pirsoul, 2020; Dinar & Dinar, 2017). As such, it becomes critical to address the equity issues in developmental projects and technological interventions trying to fix the issue of water depletion and in-access to safe water for the communities who live on the margins of our societies (Bhavnani et al., 2019). Communities at the margins of our societies are often absent from the mainstream discursive spaces. In addition, they are routinely exploited by prevailing social, political, economic, and cultural structures of globalization (Basnyat, 2020; Bhavnani et al., 2019; Dutta, 2014; Jamil & Dutta, 2021; Kumar & Jamil 2020). However, the marginal actors also articulate alternative health practices, and challenge dominant structures of power to create more equitable living circumstances. This bottom-up process of re-organizing the forces and outcomes of globalization, or inclusive globalization/globalization from below comprises people and groups of people challenging dominant systems and globalization from above and the policies/structures that dominant and powerful stakeholders put in place (Basu, 2011; Dutta & Pal, 2020; Ganesh et al., 2005; Pal & Dutta, 2012, 2013; Pal & Buzzanell, 2013; Cruz & Sodeke, 2020).

In this dissertation project, I document how communities at the margins residing in water-insecure areas (areas impacted by groundwater contamination of arsenic in flood-prone

villages in North 24 Parganas and fluoride contamination of groundwater in drought-prone villages in Purulia, West Bengal) marked by in-access to safe and continual source of water, communicate about their health challenges/experiences, potential solutions to these challenges, and navigate the remedial health interventions they receive from local-global structures such as local NGOs, international funding agencies, international policy consultancy firms, international NGOs, international research institutes, and other international donors. My dissertation also examines how multiple-stakeholders such as local NGOs, INGOs, non-profits, and donor agencies organize access to safe water for the water-insecure low-income rural communities in West Bengal. Drawing from theoretical ideas such as necrocapitalism (Banerjee, 2008) and the culture-centered approach or CCA (Dutta, 2008), I center the localocentric narratives (Basu, 2010) emerging from the communities affected by water-insecurity with the hope that their narrated lived experiences, as interpreted and documented in this dissertation, might inform the organizing of future health interventions created for similarly marginalized communities. To this effect, a goal of my dissertation project is to share with NGOs working at my research sites, recommendations on the interventions they have implemented to address water insecurity and related health issues.

In my previous research, I have examined how stakeholders (such as individuals living with arsenicosis, community health workers, and public health officials) in West Bengal define the problem of contamination of groundwater (used for consumption) by arsenic. This previous research also presented about the role of community participation in health promotion efforts in marginalized communities[1] (Mukherjee, 2019; Mukherjee & Sastry, 2020).

[1] I conducted an IRB-approved study for my MA thesis project at two sites in West Bengal, India—Kolkata (conducted in-depth interviews with public health officials), and a village located in the district of North 24 Parganas (conducted a group interview with community health workers and arsenicosis-affected participants- in

For my current fieldwork-based dissertation, I employ various ethnographic research methods, including in-depth interviews, in-depth interviews that turned into group interviews, focus group discussions, participant observation, field notes (including photographs) and reflexive journaling to collect data. Through an interpretation of the data I collected, I attempt to understand the lived experiences of people struggling to access health resources (such as safe water, health information, medical care, stable incomes) in two arsenic and fluoride contaminated research sites in rural West Bengal. In doing so, I employ the notion of localocentricity, nested within the CCA, to attend to the voices of people at the margins—rural, low-income, minoritized caste— navigating local-global structures to document how health and organizing discourses and structures (re)produce health inequality and water disparity. I add to the body of CCA research by illustrating how discourses around health, health intervention and water are re-organized by the community at the margins of water insecurity in two research sites in West Bengal. I also employ the notion of necrocapitalism (Banerjee, 2008) to illustrate how violence, dispossession and displacements are organized through interventions (aimed at water-insecure communities) sponsored by not-for-profits and other donor agencies.

Throughout this dissertation I use the term 'water insecurity' which is defined in multiple ways due to its complex nature and multifacetedness. According to Jepson et al. (2017), water security encompasses different conceptual domains, leading to diverse definitions of water security and water insecurity. Despite this diversity and ambiguity, there is widespread interest in

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2018). Arsenicosis is the effect of arsenic poisoning due to exposure to arsenic-laced water for 5 to 20 years (Chakraborti et al., 2018).

Mukherjee, P. (2019). *Analyzing the Discourse of Community Participation within a Multi-Stakeholder Arsenic Remediation and Intervention in West Bengal* [Thesis]. University of Cincinnati.

various aspects of water security, "including water availability, affordability, quality, and its social and economic dimensions" (p. 3). Water security is a significant concern across multiple disciplines, such as agriculture, law, anthropology, geography, economics, biomedicine, public health, and public policy. Many international governmental and nongovernmental agencies, including the United Nations, USAID, and the World Bank, recognize the importance of water security and draw upon these diverse framings to allocate substantial financial resources and mobilize efforts to ensure water security for people, communities, ecosystems, and countries. The range of definitions for water security and water insecurity reflect the complexity and interdisciplinary nature of the concept, as well as the differing perspectives and priorities of various stakeholders involved in addressing water-related challenges (Jepson et al., 2017).

Broadly, water insecurity has been defined as a condition where individuals, communities or regions are marked by an inaccess to continuous and sufficient amounts of safe water to meet human needs, human well-being, socio-economic development, and sustaining overall livelihoods (Saltana et al., 2022; UNICEF, 2013). Saltana et al. (2022) mentions that compared to food insecurity, research on water insecurity is relatively new. But like food insecurity is on the rise, water insecurity in minoritized communities is a growing problem as well (Longbottom & Gordon, 2023; Saltana et al., 2022; Schraedley et al., 2020). Though there is enough water to sustain present global water demands, water is denied to large swaths of population across the globe due to systemic injustices (Aniss et al., 2020; Mesmer et al., 2022). According to Wutich et al. (2022), water insecurity is more than having access to piped water connection and includes the "relations that produce unsafe or inaccessible water; high economic, social, and psychological costs; and experiences of poverty, illness, uncertainty, and distress associated with water insecurity" (p. 6). Extant literature on water insecurity offers ample evidence of adverse

effects of water insecurity impacting human health and well-being including dehydration, diarrheal diseases, emotional stress and physical violence (Arsenault, 2021; Bulled, 2016; Collins et al., 2019; Saltana et al., 2022). The two main indicators of water insecurity in my dissertation project are exposure to unsafe water (due to arsenic and fluoride contamination of groundwater and seasonality) and inaccess to continuous and reliable safe water sources for drinking, cooking, sanitation, hygiene, agricultural work and maintaining health and daily life activities (such as farming, bathing, cooking, cleaning utensils) in households and communities. Water insecurity is not solely a material resource issue but also comprises discursive and cultural dimensions (Mesmer et al., 2020). Buzzanell (2021) also highlights this interconnected nature of the material and discursive which cannot be artificially separated while examining social phenomenon. She writes that the intersectional injustices concerning race and gender resulting in disparities, climate change, pandemics, politics and power in organizations, and multiple "complex and simultaneous inclusions-exclusions have been experienced by many for a long time" (p. 129).

Similarly, the issue of water insecurity is not new and has continued to grow worse despite various efforts (Chawla, 2020; Shiva 2016; Zou, 2023). In an effort to remediate water insecurity, multi-stakeholder[2] models of public health interventions (involving local communities at the margins, local NGOs. INGOs etc. connected and operating in a centralized and bureaucratic system), such as the ones I focused on in this dissertation, health discourses are not value neutral. Such discourses often emphasize market-based solutions, obscure structural inequalities, and construct health as an individual "choice" of consumption (Dutta, 2015; Zoller, 2017). Lived experiences and problem-solution narratives of people who are at the heart of the

[2] The term multi-stakeholder has been defined in a variety of ways but for my project I am using the term to imply the "representation and participation of more than two categories or perspectives" (Bisht, 2008, p. 135)

problem are often missing from such discourses, which are mostly framed by health intervention agents employed by donor organizations (Dutta and Basu, 2018). Communication researchers have called for alternative approaches to such master health narratives and organizing practices; these alternative approaches have the potential to guide social and political action and disrupt the dominance of a Eurocentric[3] way of understanding health organizing and health interventions (see Basu & Dutta, 2008; Dutta et al., 2018; Dutta & Pal, 2020; Pal & Dutta, 2013; Sastry, 2016). These alternative approaches foreground health experiences communicated in participant communities (communities who are targets of these health interventions) in order to formulate health strategies that enable the agential marginal actors to take charge of their health and well-being (Basu et al., 2022; Kumar, 2021; Olufowote & Livingston, 2021; York & Tang, 2021). Case in point, Basu and Dutta (2008) examined how two commercial sex worker/CSW communities in the city of Kolkata, West Bengal, participate in "localized sense making related to health and HIV/AIDS" (p. 91). The authors explained how participatory communicative practices "emerge from CSWer communities and how these practices challenge commonly held ideas about participatory health communication models in marginalized spaces" (p. 91). They also pointed out that marginalized sex workers in both these communities do actually communicate about their own health needs and develop communicative strategies to address these needs.

The CCA theorizes health and health disparities beginning with the voices of marginalized cultural members (Jamil & Dutta, 2021; Mukherjee & Basu, 2023). The CCA also

[3] Eurocentric logics around health are marked by delegitimizing other or indigenous epistemologies or ways of knowing about health in the context of groundwater contamination by arsenic and fluoride in rural West Bengal. A Eurocentric way of understanding health programs in this context emphasizes the top-down transmission of health messages that erases voices of the marginal actors residing in toxin-affected communities.

investigates how communities situated at the margins negotiate power across three theoretical constructs: structure, culture, and agency (Dutta, 2008). I explain these fulcra of CCA in Chapter 2. Theoretically and methodologically founded on the CCA, my dissertation project examines issues of power around top-down health interventions/programs or ""product(s)" in the health consumer market" (Basu & Wang, 2009, p. 77)[4] that are organized by external organizations such as local NGOs, international NGOs, international funding agencies, government, international policy consultancy firms etc. in marginalized spaces.

Individuals residing within communities affected by groundwater contamination are often subjected to health interventions directed towards behavior change around safe water consumption, even as such interventions are promoted as participatory campaigns/programs[5] (Dutta & Basnyat, 2008; Mukherjee, 2019; Mukherjee & Sastry 2020). Dutta and Rastogi (2016) mentioned that scholars doing critical work around global public affairs indicate the "tendencies in global campaigns where under the rhetoric of participation, communities are involved to disseminate what is considered 'knowledge' by the power elite (Dutta & Basnyat, 2008; Pal & Dutta, 2008)" (p. 214). Communication scholars who challenge the participatory allusion to top-down health initiatives, suggested that health campaigns in marginalized spaces might work best when they foreground community participant voices. Critical communication scholarship indicates how individuals in underserved communities are absent from prevailing communicative processes and spaces mostly due to the will of economically powerful actors and dominant social configurations which (re)produce conditions of exploitation, exploitative relationships and

[4] Basu and Wang (2009) used the term health product to refer to different kinds of offerings (such as physical goods, services, ideas, knowledge) relating to public health.

[5] The word "intervention" is being used interchangeably with "program" and "campaign", all of which denote the top-down orientation of most health initiatives organized by organizations in the Global North in Global South spaces.

marginality (Cloud, 2006; Dutta and Basu, 2018; Pal, 2016). For instance, Dutta and Basnyat (2006) investigated the participatory project in a USAID-sponsored radio drama in Nepal that promoted the notion of family planning. The participatory claims of the project co-opted "the actual participation of the subaltern Nepalese people by enlisting participatory channels to push the agenda of the status quo" (p. 451). Critiques suggest that global neoliberal public health organizations such as USAID, who shape health agendas and intervention designs, often fail to achieve collective participation as a way of defining health priorities and potential health solutions (Petersen & Lupton, 1996; Tesh, 1994). This entails moving beyond a narrow focus on market-oriented solutions and individual behaviors and taking into account the broader social, economic, and political factors that influence health and wellbeing.

According to Harvey (2007), neoliberalism emerged as a response to the economic quandary of global capitalism around 1960s. Harvey (2007) mentions that neoliberalism can be either viewed as a political scheme (maintaining class power and serving the interest of the privileged elite groups and accumulation of capital) or a utopian project advocating for the primacy of free markets, limited government intervention, and individual choice and reducing state interference in the economy and promoting market competition for greater economic efficiency, and individual freedom. However, neoliberalism as a theoretical template to reorganize global capitalism has "not proven effective at revitalizing global capital accumulation, but it has succeeded in restoring class power" (Harvey, 2007, p 29).

Harvey (2005) explicated neoliberalism as a rationality and:

> a theory of political economic practices that proposes that well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an

> institutional framework characterized by strong private property rights, free markets, and free trade (Harvey, 2005, p. 2)

In the context of my study, I use the term neoliberalism to refer to the configuration of dominant local global organizational actors including local NGOs, international non-profits that are oriented towards privileging "the private market and undermine the language of public investment and protection we associate with public health promotion" (Zoller, 2008, p. 390).

While one part of my dissertation project seeks to understand localized health narratives in the context of water (in)security and contamination, another part focuses on the organizing of health interventions by local-global actors (such as local nongovernmental organizations, nonprofits, aimed at promoting public good) for the contaminant-affected communities. Scholarship on nonprofit organizing aimed at promoting public good within the U.S. context have indicated the problematic nature of neoliberal thinking, increased use of market rationalities, and business-thinking/profit-making mentalities that are often harmful for some vulnerable populations (Dempsey, 2012; Jensen, 2021). For instance, in the context of food insecurity in the U.S., de Souza (2019) explained how food pantries aimed at promoting public good became a site of othering the already marginalized population by framing hunger and food in-access as an individual-level problem leading to 'neoliberal stigma'. The author focused on how white structures not only shape the experience of hunger but also are involved in charitable responses around food distribution, fundraising for purchasing food, and meeting immediate needs without promoting any structural transformation.

Dempsey (2007, 2009) wrote that discourses produced by value-based non-governmental organizations (that are bounded by the social mission of empowering the marginalized communities) have significant impacts on the communities who are the targets of their aid. The

formulae by which health interventions are organized and delivered - discursively and materially - by neoliberal nonprofit capital interests shapes how health is made sense of, spoken about, practiced and re-organized (Elers et al., 2021). In this context, the concept of necrocapitalism offers a lens to deconstruct the nature and agendas of interventions that are organized and managed in marginal spaces.

Banerjee's (2008) ideation of necrocapitalism is linked with neoliberal thinking or is based on the understanding that contemporary neoliberal organizational accumulation relies on structural violence to create/develop death worlds and to facilitate the exploitation of natural resources. Further, contemporary imperial agents facilitate necrocapitalism's model of organizational accumulation by turning marginalized communities/Indigenous populations into a big investment opportunity/sector producing incessant forms of capital accumulation around dispossession/dislocation and the subjugation of life (Banerjee, 2006; Friedman, 2021; Lawreniuk, 2020; Shalhoub-Kevorkian & Wahab, 2020).

The framework of necrocapitalism has been used in scholarly work. Alcadipani (2014), for example, mentioned how death is produced as a result of information marginalization that blue collar workers experience as a result of which they expose themselves to water contamination and toxic substances in an industrial chemical plant located in Brazil. The crisis of human and natural ecologies often stems from the structural violence of transnational economic and political systems that enable a distant/disconnected actor (such as investors, neoliberal institutions, transnational corporations) to introduce developmental technological projects resulting in displacement and resource extraction (Downey et al., 2010; Simons and Handl, 2019; Mastaler, 2019). Necrocapitalism creates cultural conditions for extreme marginalization, and a

necrocapitalist lens of inquiry thus (like a CCA-based inquiry), calls attention to the violences of capital and power, including the continued erasures of the margins.

My dissertation project adds to the literature by exploring how the conceptualization of necrocapitalism can be used to study how global-local nonprofit organizations (local NGOs, international NGOs) facilitate organizational accumulation involving in-access to safe water sources and maintenance of structural violence (such as social, economic and political inequality, malnutrition, lack of access to resources and communicative platforms) that (re)produce health inequality in the Global South. By using both the CCA and necrocapitalism[6] as conceptual/theoretical lenses to guide my dissertation, my project has the potential to make visible (via documentation/interpretation of localocentric articulations) the chronic violence of structural absences as articulated by local communities marked by water insecurity and thus generate nuanced understandings of health and health interventions organized and managed in these spaces.

This project will extend critical health communication literature that focuses on marginalized spaces and also add to critical organizational communication work on how health programs are organized and re-organized in underserved communities and how those health programs are challenged. , set in two sites affected by water-insecurity in West Bengal, my research records local health experiences on how discourses around water are organized in marginal spaces by dominant local-global and how those discourses are locally re-organized. In what follows, I present relevant epidemiological data around water contamination and water insecurity, followed by the relevance of my project to the field of health communication and organizational communication.

[6] The connections between CCA and necrocapitalism will be discussed in discussed further in Chapter 2.

Significance of Research

It has been estimated that globally more than 300 million people are affected by the contamination of groundwater by arsenic and fluoride (Bhattacharya et al., 2020; Bibi et al., 2017). Over half of the world's population depends on groundwater for consumption purposes (Mpofu, 2020). In India, around 85% of the population depends on groundwater for consumption and irrigation purposes due to a lack of alternatives to (even) visibly polluted surface water (Human Rights Watch, 2016; Mitra et al., 2020; Roy, 2008; World Bank Report 2012).

Examining groundwater contamination remediation programs in fluoride and arsenic-affected low-income rural areas in India, particularly in the state of West Bengal, is significant—practically and theoretically. Epidemiological data reveals that individuals residing in impoverished rural communities in state of West Bengal in India constitute the second largest population at-risk for known groundwater arsenic poisoning and contamination, with communities in Bangladesh (West Bengal shares its international border with Bangladesh) being the largest population at-risk (Chowdhury et al., 2000; Das et al., 1996; Mandal et al., 1996; Rahman et al., 2001) It has been reported that in rural West Bengal, malnourishment among low-income communities' leaves individuals residing in these marginalized communities susceptible to various arsenic-induced health hazards (Bhowmick et al., 2018; Chaudhuri et al., 2017), such as malignant arsenical skin lesions, respiratory disease, gastrointestinal disorder, various kinds of cancer, liver malfunction, nervous system disorder, diabetes and severe cardiovascular malfunction (Guha Mazumder et al., 2020; Santra et al., 2013). In West Bengal, the district of North 24 Parganas is considered to be one of the worst arsenic-affected districts (Chakraborty et al., 2015; Raman et al., 2020) in the country.

Similarly, the epidemiology of endemic fluorosis[7] is considered to be a major public health problem in India. More than 60 million people in India drink water having more than the optimal concentration of fluoride (Khairnar et al., 2015). In West Bengal, the impoverished rural and Indigenous population in the district of Purulia (known for its water scarcity) is "the worst affected, because of the absence of centralized water treatment system in these areas" (Bhattacharya & Chakrabarti, 2011, p. 152; Bera et al., 2022; Rudra, 2021). Chronic exposure to elevated levels of fluoride along with malnutrition and strenuous manual labor may lead to various kinds of bone diseases, mottling of teeth, and lesions of the endocrine glands, thyroid, liver, kidney, and other organs (Ayoob & Gupta, 2006; Ghosh et al., 2013).

Besides epidemiological evidence (as mentioned above) that ascertain that Purulia and North 24 Parganas have a high proportion of the population impacted by groundwater contamination, the high incidence of multidimensional poverty[8] in both the districts is also a reason behind the research site selection. It has been estimated that multidimensional poverty in the district of Purulia is higher than that on a national level (Bagli, 2019; Roy et al., 2018). Existing literature indicates the problem of groundwater contamination by arsenic and fluoride significantly affects the health of cultural members stuck in broader structures of rural poverty and malnutrition (Bera et al., 2021; Golui et al., 2017; Samal et al., 2013).

Extant literature on groundwater contamination by arsenic and fluoride explores specific geological features related to toxicity, decreased economic efficiency due to chronic exposure to both the contaminants, the breadth of arsenicosis and fluorosis, technological interventions to

[7] Endemic fluorosis leads to chronic toxic lesions due to ingesting high levels of fluoride in drinking water (Guan et al., 2019)

[8] Multidimensional poverty refers to the "measure of both the number and the intensity of overlapping human deprivations in health, education and standard of living" (Dutta 2018, p. 53)

mitigate this public health problem and myriad health problems connected to drinking fluoride and arsenic-laced water for an extended period of time (Ayoob & Gupta, 2006; Bagla and Kaiser, 1996; Bera et. al., 2022; Chowdhury et al., 2000; Chakraborti et al., 2009; Ghosh et al., 2013; Guha Mazumder et al., 2010; Guha Mazumder et al., 2020; Hossain et al., 2006; Khairnar et. al., 2015; Mukherjee & Singh, 2018; Roy, 2008; Rudra, 2021; Santra et al., 2013; Singh et al., 2020; Thapa et al., 2017). My dissertation project extends this conversation by exploring how relevant stakeholders' (such as arsenic and fluoride-affected community members and community health workers) daily lives and health are affected by water insecurity and how they navigate the health programs targeted at them by external health campaign planners. My study will take an initial step at attempting to understand how public health is organized, and how health programs are conceived, framed, and executed in local marginalized spaces affected by water-insecurity (i.e., water scarcity and groundwater contamination by arsenic and fluoride) in rural West Bengal. By doing so, this project attempts to create an entry point to listen to the localocentric voices in toxin-affected communities in rural West Bengal. The CCA affords a meaningful theoretical lens to account for these local narratives of/from the margins of our societies and thus will likely offer us an (alternative) understanding of the problem of water insecurity and related remedial measures as communicated by individuals living in toxin-affected communities.

Centering these local alternative understandings on water-insecurity and health also offers us a chance to engage with ideas associated with "globalization from below" Ganesh et al., (2005). This notion of globalization from below creates opportunities for highlighting the possibilities of re-organizing globalization forces and their outcomes (such as a re-organizing of health interventions that are sponsored by global capital) so as to contribute to positive social and

political change (including challenging dominant structures of oppression). I argue that Necrocapitalism (Banerjee, 2008) as a conceptual framework lends itself well to help us understand how neoliberal capital/globalization indeed brings forth violence, dispossession, and displacement, making it even more urgent to engage with narratives from the margins that communicate about and actively work towards re-organizing capital-sponsored health interventions that target the already marginalized.

As such, necrocapitalism, as theorized by Banerjee (2008), is particularly undertheorized in organizational communication. Hence, the use of necrocapitalism as a theoretical framework offers an opportunity to understand how health programs (such as those related to safe water access), organized and managed in marginalized spaces by elite actors and international agencies, maintain colonial ways of community health development so as to establish behavioral "norms" that continue to widen the gap between health rich and health poor rather bridging this gap.

Overview of Dissertation

In summary, for my dissertation project, I foreground the localocentric articulations to include theoretical insights around health by disenfranchised groups who navigate various local-global health/developmental agendas. Engaging in dialogue and co-construction of the research participants' understanding of the overlaps between water insecurity and health and well-being can inform the organizing of future health interventions created for similarly marginalized communities.

This dissertation is structured as follows: first, in Chapter 2, I review extant literature around approaches to health communication, culture-centered approach to health communication, necrocapitalism, water contamination in minoritized communities, health

inequity, accountability in organizational context, and the overlaps between health and organizational communication scholarship. I conclude the literature review chapter by articulating the research questions guiding my dissertation. The three research questions guiding the study are:

> RQ 1: How do international funding agencies, local NGOs and International NGOs communicate about ground water toxicity in two water-insecure rural communities in West Bengal?
>
> RQ 2: How do local community members residing in two communities affected by water insecurity in West Bengal communicate about their health and overall well-being?
>
> RQ 3: How do local community members residing in two water-insecure areas in West Bengal organize alternative discourses on health interventions that are designed and deployed via local-global health organizations?

Then in Chapter 3, I talk about the methods I employed for conducting this research, including the methods I employed to collect, analyze, and interpret my field-work data. In Chapter 4, I present my interpretations of data to respond to the three research questions mentioned above. In Chapter 5, I articulate the theoretical implications of my dissertation project and the praxis-related recommendations I offer to my NGO research partner.

CHAPTER TWO: LITERATURE REVIEW

In this chapter, I present an overview of health communication, then focus on the culture-centered approach to health communication, followed by literature on necrocapitalism, water contamination and health interventions affecting minoritized communities. Then, I examine the convergence of health communication and organizational communication as it pertains to my dissertation project. I end this chapter by proposing research questions that will guide my study.

Approaches to Health Communication Research

Health communication refers to the variety of "communication processes and messages that are constituted around health issues" (Zoller & Dutta, 2008, p. 3). Scholarship in this field generally follows either a process-based approach or a message-based approach, or a mix of these approaches. A process-based approach explores how health meanings are constructed or made sense of, navigated, resisted and maintained. For instance, a process-based perspective on the study of access to safe water might focus on the question: how do community members residing in water insecure areas resist the mainstream norms around handwashing behavior? Scholars discussing a message-based perspective highlight how effective health messages for populations and individuals are created and disseminated (Dutta, 2008; Zoller & Dutta, 2008). For example, research might focus on how health messages might be designed to encourage community members residing in water insecure areas to maintain hand washing behavior? Common topics in health communication scholarship that fall under a process-based and/or message-based perspective include patient-provider interactions or interpersonal health communication scholarship, social support, media representations of health, healthcare organizations and teams,

health campaigns, technology, culture and health and health care policy (Ashley, 2022; Bekalu, 2022; Hashmi et al., 2022; Jiang, 2019; McGetrick , 2019; Nah, 2023; Oh, 2021; Spieldenner & Nieto, 2022 ; Table, 2022; Yip, 2020).

Zoller and Dutta (2008) talked about three theoretical approaches to health communication including post-positivist, interpretive and critical approaches. As a dominant voice in health communication scholarship, post-positivist health communication research stems from epidemiological research focusing on incidence (quantification), distribution (by time, place and population), cause and control of diseases. Scholars in this domain determine the "behavioral and psychological variables important to the process of prevention and adopting healthier behaviors" (Finnegan & Viswanath, 1990, p. 17) and emphasize that theories must be predictive and generalizable. Post-positivist health communication scholars believe bias, subjectivity or personal agendas of the researcher distorts the findings of a study (Kline & Khan, 2019).

Scholars doing interpretive health communication research are invested in understanding the local construction of health meanings by documenting descriptions of contextually located health meanings and processes in detail. In this largely narrative-based perspective, researchers honor the stories of health, medicine and illnesses thereby generating newer understanding of a social problem (Zoller & Dutta, 2008). Interpretive scholarship tends to focus on describing and understanding socially constructed realities. For instance, in an autoethnographic account, Pangborn (2022) brings to attention the author's experience as a neonatal intensive care unit (NICU) mother via an understanding of how narrative medicine has capacities for cultivating hope and enhancing health and healing. Zoller and Kline (2008) mention that an interpretive approach emphasizes communication in everyday life, thereby providing rich accounts of health communication processes as people constitute and interpret the meaning of health and illness and

negotiate medical care from interpersonal and organizational settings. These studies capture moments of ongoing interactions and, as such, they are not generalizeable or predictive in any simple fashion. Yet, these studies add complexity to our understanding of health behaviors, including the role of culture, values, and emotion, and they offer a counter-balance to the individualizing tendencies of post-positivist research.

For critical health communication scholarships, investigation of power in health settings is a core value while taking a social justice orientation focused on issues of voice or representation and access to health resources. A foundational belief of critical health communication scholarship is that surface-level health meanings and behaviors mask deep-rooted structural conflict and inequities leading to health disparity (Dutta, 2008). Thus, for critical health communication scholarship, engaging in praxis or theoretically informed social change "involves pursuing connections between local practices and larger systems of power to facilitate change" (Zoller & Kline, 2008, p. 94). For instance, Jamil and Kumar (2021), document the health experiences of labor-based immigrant communities in Middle Eastern countries within the larger context of global flows of people, services, and goods. Interpretive and critical approaches to health communication are often marked as alternative approaches to health communication.

Culture-Centered Approach/CCA to Health Communication

In recent years, there has been an increase in health communication research that employs interpretive and critical frameworks of knowledge, which are marked by social constructions of health meanings in everyday contexts and politics of health (Zoller & Dutta, 2008). Critical frameworks in health communication are also often committed to foregrounding the voices of cultural members residing in underserved communities to explore how those at the margins communicate about health and well-being (Mukherjee & Basu, 2023).

The culture-centered approach or CCA to health communication is a critical theoretical framework that has gained increased use in the past decade. Focusing on theorizing from below, this approach highlights the role of culture in shaping health behaviors/practices/logics and health experiences specifically in underrepresented communities (Dutta, 2008). The CCA's commitment to social and political change lies in articulating the violence embedded in dominant neoliberal or unjust power structures (creating/maintaining conditions of poor health) by engaging dialogically (characterized by dialogue and listening to the other's perspective) with the local cultural communities to understand the meanings of health (Dutta & Pal, 2010; Sastry, 2016). In other words, the CCA recognizes that human health is not simply a matter of individual behaviors and/or biomedical factors but is deeply embedded in broader social structures, cultural, and historical contexts (Dutta, 2008). Drawing its energy from critical theory, cultural studies, postcolonial theory and subaltern studies, the CCA focuses on the agency of local cultural agents/actors/co-participants and their ability to articulate health communication strategies (Dutta, 2008; Basu & Dutta, 2009).

The CCA also advances an interrogation of the ways in which knowledge on health and healing is articulated/talked and how that serves the interests of powerful and dominant organizational actors (such as local NGOs, international nonprofits, international funding agencies, international NGOs, international policy consultancy firms) who have access to knowledge and socio-cultural-economic platforms. Like many other critical theories, the CCA investigates how power and knowledge in the current system of extractive capitalism are used to control and manage underserved communities to secure profits. The CCA also engages with the ideas of ideology (taken-for-granted health assumptions around individual lifestyle serving

power structures) and hegemony, which refers to the "act of maintaining control without the use of coercive force" (Dutta, 2008, p. 111).

The CCA's positioning in postcolonial theory also offers pathways to re-organize dominant health knowledge and discourses that are circulated globally and serve colonial interests. Here the commitment is to investigate the binaries of First/Third world, developed/developing nations, Global North/ South, East/West, and civilized/primitive that are played out in the realm of who gets to choose health agendas, who participates in those agendas and who is left out[9].

Health interventions in the Global South have largely focused on effective health messages designed by health "experts" in West/North that would lead to desired behavioral outcomes of populations/communities/individuals in East/South. Dutta (2022) contends that Global South entails a position of marginalization in health interventions. This marginalization comes with epistemic erasures of the margins such that people at the margins lack access to mainstream communication platforms, such as media, governance, and policy making. The CCA investigates the dominant epistemic structures to make visible the erasures in dominant configuration of health knowledge. For the CCA, health communication research must engage

[9] The politics of knowledge production from the Global South creates space for democratizing the theory-making space more inclusive and accessible to address the existing gap in spaces of theorizing (Dutta and Pal, 2020; Tian and Yu, 2022). Here, the Global South is not one specific region but constitutes the extractive zones or pockets marked by violence and oppressive effects of global capitalism or global North which also produces the South within North. The epistemologies of the Global South help to examine discourses developing from Global South at the intersections of different history, politics and culture (Dutta & Pal, 2020; Pal & Nieto-Fernandez 2023). These dichotomous terms are important for my dissertation because this project brings into conversation the local stories emerging from Global South vis-a-vis narratives circulated by organizational actors situated in the Global North. The tensions between local contexts and the broader global dynamics offer insights into the dynamics of power between different stakeholders (such community members impacted by water insecurity, community health workers, NGO employees) that shapes narratives, issues of voice/representation, agency, and knowledge production and circulation.

with and listen to the "subaltern" or populations that have been historically disenfranchised and stripped off subjective agency (Dutta, 2008). Case in point, Kumar (2021) focuses on subaltern narratives of minoritized communities displaced from Burma and their meaning-making processes and rationalities surrounding health and how they negotiate structural healthcare barriers. The CCA rests upon three theoretical constructs: culture, structure, and agency (Dutta, 2008).

Culture, Structure and Agency

Culture refers to the ever-shifting daily practices of community members and how these practices constitute shared and constantly changing meanings of health that respond, "to statewide, national, and global shifts in politics, economics, and communication flow" (Dutta, 2007, p. 311). In the 1980s, the role of culture started to gain prominence in health communication scholarship with a noticeable shift in the demographics in the US. This shift led to recognizing that health communication efforts need to engage with these changes in the cultural landscape in order to be more effective. This focus on shifting demographics in the US was rooted in the criticism of various health promotion strategies in the Global South questioning the universalized assumptions of health in international health communication efforts that conceptualized cultural difference as barriers rather than being normal (Airhihenbuwa, 1995; Lupton, 1994). Since that acknowledgment, communication scholars have advocated taking into account the voices of cultural participants who are at the heart of the health efforts and whose health practices and rationalities are tied to cultural values (Dutta and Basu, 2007).

Critical to the notion of culture are the ideas of structure and agency. Structure refers to the rules, policies, and regulations that are created by dominant health institutions (i.e., government, public health departments). Structures also "refer to the processes of organizing

both material and communicative resources" (Dutta, 2014, p. 71) that contribute to the marginalization of subaltern communities perpetuating global health inequality and inequity. Culture-centered approaches to health communication privilege listening to the margins, promoting and documenting agency and possibilities of structural transformations that bring about health equity (Dutta et al., 2016, Dutta & Basu, 2017). (Dutta et al., 2016, Dutta & Basu, 2017). The CCA points to three levels of structures, including: micro, meso, and macro. Micro-level structures refer to health enhancing resources. For my project micro-level structures include tangible material resources such as nutritious food, clean and continual water, health centers etc. Meso-level structures refer to various media platforms, policy platforms, civil society organizations (such as NGOs, nonprofits, international NGOs) etc. For instance, in my project meso-level structures include local and global organizational actors such as Water Aid and India Aid, respectively. I also use the term glocal organizational actors (nested within meso-level structures) to indicate the entanglement of and simultaneous interaction between the global (India Aid, international nonprofit organization, anonymized) and local (elite) organizational actors (Water Aid, local NGO, anonymized) occupying different power locations and influencing the health and well-being of research participants at the margins of water security. In the context of this study, the global organizational actor/India Aid works with the local NGO/Water Aid, employees of which have some knowledge about rural lived experiences but are distant from the local communities and their needs (detailed in Chapter 4). Macro-level structures in health refer to national and international political actors, policy articulations, international policy consultancy firms, global health organizations (Dutta, 2008). For my project, macro-level structures refer to the dominant norms/values/believes that shapes health policies and interventions.

Finally, agency recognizes that the cultural members are experts about the cultural context or local settings in which they live and perform their health (Dutta, 2007). Solutions to change any individual actors' behavior, which dominates the theoretical landscape of public health and health communication research, often overlooks what cultural group members are presently doing to address their health concerns (Dutta, 2008). Individuals residing in marginalized communities have agency or the capacity to act by challenging and navigating oppressive structures (Tan & Dutta, 2019). This line of thinking centers the importance of engaging with participant voices and amplifying these voices of the cultural other imagining transformative alternatives. In sum, the CCA explores how culture mediates dialectical tensions between structure and agency (Sastry et al., 2019) to understand and document how health is communicated at the margins of civil society.

The notion of localocentricity is tied to the three fulcra of CCA (culture, structure and agency) discussed in the preceding paragraph as localocentric stories of health emerging from marginalized spaces are located at the intersection of this triad (Basu, 2010). Marginalized communities navigating local-global structures and narrating their living contexts employ local or culturally-situated frames to make sense of health that runs parallel to mainstream health discourses (Basu & Dutta, 2011). For instance, Basu (2010), showed that the localocentric vocalizations on health in stigmatized subaltern sex worker spaces question the dominant health logic that is based on the assumption that "it is rational to protect oneself from the risk of HIV by refusing to have unprotected sex, but that view fails to account for context-based meanings made in subaltern sex worker spaces, whereby working and providing for their children are prioritized over sex worker–mothers exposing themselves to the risk of HIV infection" (p. 426). This demonstrates the agency of sex workers trying to take care of their children and how via this

provider orientation they discursively construct the dialectical tension between individual-level agency (their health behaviors), structure (resources preventing them from achieving health) and culture or shared meaning systems. The notion of localocentricity has been used in research with subaltern sex workers, in the context of HIV/AIDS risk in African American and Latino populations and in the context of opioid addiction context (Basu 2010; Dillon & Basu, 2014; Stanley & Basu, 2023). By foregrounding the voices and lived experiences of cultural participants residing in marginalized communities, the CCA makes visible how such health programs and campaigns have led to invisibilizing the voices of marginalized cultural communities who experience poor health (Dutta, 2008). The CCA centers the idea of dialogue with cultural members from the margins who have been traditionally erased from the dominant or mainstream health communication discourse. The CCA envisions a "critical change of direction in the published research in an area that has traditionally adopted a top-down transmission-based model (Dutta & Basu, 2008, p. 560)" to amplify minoritized voices to understand their cultural meanings of health and well-being. My dissertation entails listening to and recording local emergent voices to document factors that influence ways in which individuals residing in water insecure rural areas communicate about and address their contextual health needs.

Environmental Health, Community Participation, and CCA

Critiques of traditional approaches to environmental risk mitigation point out that a technocratic model prioritizes technical expertise and centralized decision-making, often neglecting public involvement and participation in environmental health decision-making. In traditional approaches, there is a tendency to prioritize reductionist and value-neutral scientific perspectives over the social and political values-based arguments put forth by communities (Berry, 2016;

Depoe, 2004). This bias towards positivist notions of science undermines the inclusion of diverse values/concerns/perspectives and limits the understanding of complex environmental issues. Moreover, policy decisions derived from technocratic models "often fail to achieve sustained support of affected communities as traditional scientific risk models arrogantly assume a certain superiority of knowledge of technocrats or "experts" over lived experiences" (Mukherjee & Sastry, 2020; p. 718). In other words, the technocratic models of public participation often ignore input of communities as the citizenry advance non-scientific/social/political/value-based arguments as opposed to the traditionally reductionist/value-neutral/positivist notions of science. Thus, there is a need for reconceptualization of public participation that recognizes and values local expertise (Fischer, 2000; Kinsella, 2004). For instance, in comparing the structures and discursive practices of two citizen advisory groups for addressing environmental and human health issues associated with the Fernald Environmental Management Project, a former Department of Energy nuclear weapons production installation in Ohio, Depoe (2004) assessed why the Fernald Health Effects Subcommittee (FHES) was less "successful in producing robust and meaningful public participation in the area of health research" (p. 172) than the Fernald Citizens Task Force (FCTF). FCTF was characterized by demographically diverse stakeholders including residents, businesspersons, academics, local government officials, health officials, labor representatives, and members of local citizens activist groups which transcended traditional technical discussions. In articles on environmental health issues and citizen research, Brown (1992, 1997) noted how local medical expertise made some credible explanations regarding an extraordinarily high prevalence of childhood leukemia in Woburn, Massachusetts. As the local community members were not satisfied with the professional accounts of their plight, the citizenry countered the official accounts by initiating an alternative study supported by the public

health researchers at Harvard University (Brown and Mikkelsen, 1997). The results from the study found a relation between water contamination and cancer susceptibility in the community. This corroborates the fact that technocratic decision-making often does not consider the community's sensory understanding of the world, which needs to be at the center of research design in order to remediate problems the community faces.

Participation of the local community in defining health problems and solutions is one of the key elements of CCA. While there is a growing recognition of the efficacy of community-partnered, or community-based participatory research approaches in shaping community-level health outcomes, theoretical, methodological and ethical questions still remain about how to engage communities, especially marginalized communities, in the service of such interventions. As evidenced by the popularity of community-based participatory research designs, community participation has emerged as the best practice in health programs and interventions (Minkler, 2010; Wallerstein et al., 2017). This is particularly true in the Global South (Sastry & Dutta, 2013). Moreover, the advent of participation in rural development "is conventionally represented as emerging out of the recognition of the shortcomings of top-down development approaches" (Cooke and Kothari, 2007, p. 5). However, Cobbinah (2011) notes that power and power dynamics or the hierarchy in participation are among some of the issues that regulate and outline participatory practice and hide the top-down nature of participation. The approaches to participatory health communication have faced a lot of scrutiny from critics who explain that most health interventions that are deemed "participatory" are monolithic top-down in its nature of participation (Dutta & Basnyat, 2008). Several participatory health interventions limit the audience's role "of readers/viewers/receivers of a program and configure participatory platforms as tools that diffuse the intervention as conceptualized by the campaign planners" (Basu & Dutta,

2009, p. 90). The culture-centered approach to health communication foregrounds the localocentric story-driven community participation as the foundation for developing interpretive frameworks and health communication applications (Basu & Dutta, 2009, p. 86). In this community-participatory approach, cultural contexts or local settings/everyday living contexts are placed at the center of dialogically co-constructed - by cultural members and researchers – shared meanings on health problems and solutions, often with the goal of highlighting struggle and attempting to initiate structural transformations that can benefit the marginalized.

Local Context and Struggle for Justice

Context refers to the cultural settings. It is a part of daily lived experiences of the cultural member. It is within this local context that cultural community members enact agency. In the CCA, the emphasis is on the cultural members residing in marginalized communities and their contexts or local surroundings/cultural settings that are typically invisiblilized or made non-existent in creating and sustaining mainstream health discourse (Dutta & Basu, 2017). It is important to note here that the CCA does not advocate giving voice to the marginalized cultural members but argues that the cultural members at the margins already have a voice which needs to be amplified and heard. In other words, the "main objective of the CCA is to introduce an exact locus for health communication theory and practice by focusing on the absences of voices and paving way to presenting the voice of the "other" via a dialogic engagement" (Mukherjee, 2019, p. 33). The CCA turns toward dialogue acknowledging "that the "otherness" that serves as an anchor to dialogic activity is ensconced within a larger politics of power and domination" (Dutta & Elers, 2020, p. 6). Dutta (2012) alluded that within the broader context of uneven power relations, control and domination, the struggle for political and environmental justice is also a struggle for finding the communicative space to represent and make visible the voices of resistance against

the global politics of the environment. This opens up spaces for "disrupting the monolithic narratives of global policies that are dictated by the powerful influences of transnational corporations (TNCs) in shaping global, national, and local environmental policies" (Dutta, 2012, p. 138). Shiva and Shiva (2019) wrote about how rural Indigenous women activists involved in the Chipko movement (which began in 1973) taught the first author (Vandana Shiva) about the interconnectedness between forest, soil, water and women's sustenance economies. These discourses of interconnectedness decolonize the Western construction of nature-human binary and highlight the importance of preservation of nature (Pal & Nieto-Fernandez, 2023).

In the face of structural oppression, marginalized communities have launched several non-cooperation resistance movements similar to the Chipko movement. *Jal Satyagraha* (non-violent/passive-resistance or water protest, non-cooperation movement) against Coca Cola in Kerala and Doon Valley, the Water Democracy Movement against privatization of Ganga water in Delhi, and protests against industrial aquaculture in several parts of India (including Tamil Nadu, Andhra Pradesh and Odisha) have been successful in protecting people's right to safe drinking water. Some of these movements (such as the Water Democracy Movement) were initiated by women (Shiva, 2021).

The social and political oppression around environmental health hazards produced by neoliberal capitalism has also led to various transformative openings or resistance and environmental justice movements (Pellow, 2017). Zoller (2012) mentioned that the environmental health and justice movements interrogate the social and political inequalities that result in racial and class-based disparities in chemical/toxic exposure level. Thirty-four years ago, the Great Louisiana Toxics March by the local residents of the Chemical Corridor/Petrochemical Corridor/Industrial Corridor/Cancer Alley, the entire 85-mile stretch of

the Mississippi River, from New Orleans to Baton Rouge, US, marked the fight against poisoning and further marginalizing the already marginalized communities (Allen, 2006). Responding to the toxic violence of racial capitalism, in order to communicate the presence of chemical contaminants, "toxic tours" or non-commercial tours were organized and facilitated by individuals residing in sites/spaces polluted by hazardous chemicals. Bullard (2011) has termed these physical spaces as "human sacrifice zones", comprising low-income communities that disproportionately bear the burden of industrial pollution/toxic culture of modernity, capitalist consumerism, and greed to maximize profits. Pezzullo (2003) alluded that this cultural performance-laden practice of tourism enables the residents residing in polluted sites to enact active agency by building "communities of resistance through acts of politicizing memory" (p. 228).

Álvareza and Coolsaet (2018) mentioned that within academia, while first-generation studies around environmental justice were concerned primarily with exploring environmental injustices prevalent in the US, subsequent work or second-generation environmental justice work has increasingly focused on specific regions such as Latin America, or countries like South Africa and India (Carruthers, 2008; McDonald 2004; Williams and Mawdsley 2006). Moreover, with the mobilizing role of the Internet and the local-global communication linkages, there has been an emergence of various forms of resistance, collective action, and translocal solidarity networks such as International Campaign for Justice in Bhopal or ICJB, World Social Forum, and La Via Campesina (counter-hegemonic network of farmers' organizations) resisting neoliberal politics/practices (Juris, 2005; Dutta and Pal, 2020) and creative destruction/necrocapitalism. The creation of neoliberal systems and practices has resulted in destruction of social relations, "welfare provisions, technological mixes, ways of life,

attachments to the land, habits of the heart, ways of thought and the like" (Harvey, 2006, p. 146). Similar to neoliberal practices of global capitalism, the practices of necrocapitalism that perpetuate structural violence in contemporary society result in destruction of lives and livelihoods (Banerjee, 2008).

Necrocapitalism/Death Capitalism as an Analytical Approach

In the context of global capitalism, necrocapitalism can be defined as an economic system and the "practices of organizational accumulation that involve violence, *dispossession*" (Banerjee, 2008, p. 1543) and (re)creation and management of death and disaster in colonial contexts. In my dissertation, I argue individual-level health interventions by global-local organizational structures often result in harm and creative destruction of human health and environment (such as homes, neighborhoods, land and water). In other words, water insecurity and its unequal disease burden in low-income minoritized communities is a result of necrocapitalism and neoliberal health policies which creates a divide between who can live and who may die as power and profit are prioritized over health of certain disposable bodies. The framework of necrocapitalism is rooted in theoretical insights from colonialism and imperialism. Banerjee also draws from the notion of states of exception, where violence was/is acceptable and normative. Colonialism is characterized by the domination and control of physical space, "reformation of the natives' minds (particularly in terms of knowledge systems and culture), and incorporation of local economic histories into a western perspective" (Banerjee, 2008, p. 1543). Imperialism is a specific stage of capitalism where resources from "periphery" nations to the "core" nations are critical to the process of accumulation (Banerjee, 2008).

In the present day, imperialism is operationalized via neoliberal policies and global/international institutional power agencies such as World Health Organization/WHO,

World Trade Organization/WTO and International Monetary Fund/IMF (Banerjee, 2008). Structural adjustment policies (SAPs) of the 1980s, for example, allowed Western donors (such as World Bank/WB, IMF) to persuade several Third World nations to take international loans thereby intensifying global dependency (Pal & Dutta, 2013). These transnational financial institutions aided establishing neoliberalism "as a hegemonic set of political-economic practices that work to realign national governments in the Third World with an international market-driven economy" (Pal, 2015, p. 2). Thus, neoliberalism, which is both a political and economic project, (Ganesh et al., 2005) has played a key role in establishing both systemic/institutional and organizational forms of power to maintain the colonial ways of development in Third World nations. This is to establish behavioral and economic "norms" which widen the disparity gap in global economic, social, and cultural contexts (Banerjee, 2011).

Moreover, the imperialistic pattern of neoliberalism foregrounds a rhetoric of benevolence of the developed West by/thus obscuring the imperial setting and asymmetries in power (Pal and Buzzanell, 2013). For instance, in contemporary political discourse the US is deemed as a benevolent savior due to the framing of its international policies and overseas military actions as beneficial for the so-called underdeveloped East. Thus, the state of exception "creates a zone where the application of law is suspended but the law remains in force (Banerjee, 2008, p.8). A state of exception "excludes bare life from political life while making the production of bare life an imperative of politics" (Banerjee, 2006, p. not found). In other words, the state of exception involves suspension of normal legal protections and is marked by the exclusion of individuals from the realm of political life, reducing them to a state of bare life or biological/physical existence devoid of political agency.

In his discussion of "bare life," Agamben (1998) used the ancient Roman legal concept of *homo sacer* or sacred man (whose experience is relegated) as someone "who may be killed but not sacrificed" (p. 8). In ancient Rome, the law of *homo sacer* was established for people whose deaths had no value to the gods and so they could not be sacrificed. However, these bodies, which added no value to the society, could be killed with impunity. The *homo sacer* for Agamben (1998) are passive objects of sovereign power/state occupying both an inside and outside space of divine and juridical law and are reduced to bare life exposed to violence and deprived of human rights. Thus, bare lives are created or generated by the sovereign power by suppressing constitutional rights of the passive *homo sacer*. The assumed passivity of subaltern (Pal & Dutta, 2013) (meaning: the global "other" who cannot speak because the speech act is incomplete as their voices go unheard) class in the East can also be understood as a variant or modified version of those figures of *homo sacer* occupying positions of marginality and invisibility/exclusion in contemporary society envisioned by the powerful political actors or the global elites.

In case of remediation efforts related to water insecurity, behavior change communication is used to reform the native minds around safe water consumption and imperialism is operationalized via hegemonic transnational institutions (shaping resource distribution) such as international funding agencies, who work through a network of local and international non-governmental organizations and non-profits. Extrapolating from Agamben's notion of *homo sacer* who is an outlaw in the mighty Roman Empire and can be killed by anyone without legal consequences, in the context of remedial health interventions, the minoritized bodies from this project's research sites become the new *homo sacer* in the hand of contemporary local global

necrocapitalism. The new *homo sacer* is important for securing funds to continue creation of disposable lives.

As a key feature of this contemporary systemic condition of necrocapitalism, dispossession and "the subjugation of life to the power of death" (Banerjee, 2008, p. 1541) occur in sovereign spaces (marked by who is disposable and who is not) that are often immune from political, juridical and legal intervention operating through state of exception where laws and rights are suspended/overridden. Harvey (2007) refers to the accumulation by dispossession as a process that is a form of capital accumulation under neoliberalism. According to Harvey (2007), accumulation by dispossession operates through various mechanisms and practices of privatization, deregulation, financialization, the commodification of previously non-commodified aspects of life, and other forms of violence. For instance, in Brazil hydroelectric plants usually generate electricity. Thus, the source of power is water which is a natural asset. This natural asset becomes or gets converted into a natural resource when it is used and appropriated as a commodity by ignoring their use value and highlighting their exchange value (Traldi, 2021). Thus, dispossession is the process:

> by which the state, usually backed by the international financial and other powerful institutions, strips the public of their land and property. Accumulation by dispossession comes in many forms, like the transfer of common, collective and state property into exclusive property rights. For example, colonial, semi-colonial, neocolonial and imperial appropriation of assets and natural resources and the suppression of alternatives to the capitalistic use of human and natural resources. (Ring, 2018, p. 15)

While dispossession is the process of accumulating power and profit over people, displacement is the act of forceful movement of people at the margins. For instance,

displacement of people due to large-scale dam projects leading to loss of traditional lands, displacement of people due to development of beaches for tourists etc. (Banerjee, 2008). This means that dispossession and displacement have different implications for individuals residing in marginalized communities. Dispossession may often take place without physically displacing the already marginalized populations as they continue to reside in communities marked by inaccess to resources. On the other hand, a key feature of displacement is the physical movement of underserved communities from their homes, neighborhood, and communities, often to unfamiliar/unsafe places.

The history of capitalism shows that "it has always fed off, and taken advantage of, crises" (Broune et al., 2022, p. 2) and water insecurity is not an exception to that rule. In the neoliberal context of capitalism and risk management, Broune et al., (2022) mentions two kinds of events namely black swans and grey rhinos impacting global markets, economies and societies. While a grey rhino metaphor is "a highly probable, high impact, yet neglected threat. A black swan worldview presumes continuity as the default condition; a grey rhino worldview takes change and discontinuity as the norm" (Broune et al., 2022, p. 2). My point here is that in the context of my dissertation, water insecurity (groundwater contamination, flood, and droughts) that has severe consequences for individuals, can be deemed as a grey rhino crisis often overlooked because it impacts certain bodies from certain communities who often bear the brunt of the impacts of water insecurity. In other words, minoritized communities are often marked by limited health resources, political agency, or access to decision-making platforms and processes, which can contribute to their concerns and experiences around water insecurity being neglected or downplayed. In the context of water insecurity, glocal organizational actors can act as appendages to necro-neoliberal capitalism as various national and transnational institutions

"use [of] catastrophe (both so-called "natural" and human-mediated disasters, including postconflict situations) to promote and empower a range of private, neoliberal capitalist interests" (Schuller & Maldonado, 2016, p 62). Dutta and Pal (2020) mention that the local global networks "are intertwined in a complex web of power relations" and are tensional and has the potential to challenge or "rupture the framing of neocolonial-capitalism as the universal appeal to reason" (p. 357).

In relation to capitalism, class inequality, racial discrimination, and structural violence, organizational actors such as NGOs become sites where problems and solutions are identified and communicatively constructed. They rest upon "layers of communicative labor operating within a broader economy of meaning-making. They adopt—self appoint in some cases—the role of advocates on the behalf of "others" and are always bound up in relations of power" (Atouba et al., 2021, p.7). Atouba et al. also noted that in relation to global capitalism and the role of powerful stakeholders/actors/donors in nonprofit advocacy, "we know much less about how nonprofit networks evolve/adapt/operate in various contexts" (p. 12). Hence studying communication in multiple stakeholder sites (see Stohl & Ganesh, 2014) might be helpful in understanding and how communication is practiced in such contexts. With regards to globalization, the primary issue around communication is related to interdependence, coordination, control, and collaboration at the nexus of a variety of "macro contexts (e.g., regulatory rules, institutional norms, national values, cultural variability) and the micro context of the organizing unit (e.g., worker values, group attitudes, organizational stereotypes, communication climate)" (Stohl & Ganesh, 2014, p. 9). As multistakeholder networks/arrangements emerged (involving local-global and private-public partnerships) as a unique way of addressing global/transnational issues, global organizational linkages (such as

NGOs, funding agencies and other stakeholders) complicate issues of representation or voice or accountability (Dempsey, 2007; Ganesh, 2018; Stolh & Ganesh, 2014). In such a scenario, theorizing from below has the potential to challenge the epistemic status quo (by including the view from the margin for theoretical explanations and practical solutions) and the status quo of inequality impacting marginalized bodies in water insecure social, political, and physical spaces.

Pal and Dutta (2013) noted that the subaltern communities across the globe are increasingly getting involved in conflicts with multinational corporations and governments since most often development projects developed by ruling elites have resulted in "dispossession, displacement, hunger, death, and loss of livelihoods" (p. 204). In this context, it becomes important to understand and record narratives of the margins on how global (necro)capital creates dispossession, hunger, poverty, and death at the margins and how such forces are challenged and transformed. My dissertation presents localocentric narratives of individuals living in water insecurity as they engage with, negotiate, and often challenge the goals, plans, and initiatives by local and global organizations (such as NGOs, international nonprofit organization) to address health and water insecurity. I also present narratives of various organizational actors employed with institutions (NGOs, government health units) that design/plan/implement interventions related to water insecurity and health in these spaces.

The notion of localocentricity and necrocapitalism in my dissertation a) adds to our understanding of how local communities participate in creating alternative practices and discourses or organize alternative localocentric narratives around issues of water insecurity, health problems and solutions, b)highlights narratives on how local communities communicate violence, dispossession, and erasures and negotiate agendas that are brought forth by local global structures that have a presence in these water insecure sites, and c) helps to document how local

global structures (re)create and impose discourses of health and health organizing in a global South context, which in turn affects marginalized bodies and health.

By including the theoretical insights around health and organizing practices of the disenfranchised group, I also focus on globalization from below and how communities/local stakeholders at the margins resist globalization from above (or the policies that dominant stakeholders put in place). While the concept of localocentricity helps to document the local stories emerging from communities who navigate local global structure around water insecurity, necrocapitalism helps to understand how local global structures participate in the accumulation of power. The localized stories create space for globalization from below by amplifying local voices to advocate for equitable water infrastructure and governance. In other words, the localocentric articulations critical to this dissertation project have the potential to counter-call the contemporary and dominant language of health organizing perpetuated by glocal organizational actors around water insecurity. Localocentric articulations foreground the local spaces to investigate "how macro–meso–microstructures cause violence to the margins and the simultaneous storying–repulsion–negotiation–transformation of this violence" (Basu, 2022, p. 247). In this framework of localocentricity, the local emerges into the spotlight and becomes celebrated in the face of oppressive politics of the dominant social configurations that erases the margins. The localized vocalizations of dispossession/dislocation, resistance, and survival is connected to the politics of representation/voice "in the everyday, and it becomes even more and acutely political when related to the everyday of the margins" (p. 248). The politics of localocentricity is located in an "ongoing project of recognizing the agentic capacities of peoples, communities, societies" in the pockets of "extractive spaces of the (Global) South" (Dutta & Pal, 2020, p. 349; Basu, 2021). These extractive spaces are characterized by processes of

accumulation and dispossession that are organized by market actors and state agencies (Banerjee, 2011).

In the context of arsenic and fluoride contamination of groundwater at my dissertation research sites, the local actors-residents of these sites-- are consumers of health technologies, products and services funded, developed and marketed by outside agencies in a way that suggests that the local communities are incapable of designing their own solutions to the health problems they face so the local community needs other agencies to design solutions for them. This assumed passivity of the margins helps in constructing the extractive zones for violence through the selling and imposition of neoliberal ideas and ideologies.

In my project, I use the term violence as a structural idea that not only interrogates access to material or natural resources such as water and food but also the discursive and epistemic erasure of the cultural other that underlies such violence. Similarly, I use the terms dispossession and displacement that Banerjee (2008) used to develop his concept of necrocapitalism (by discussing various forms of organizational accumulation in contemporary society) to emphasize the dispossession of the marginalized communities from safe water sources and from their own knowledge systems via the imposition of behavior change communication developed by the West. This entanglement between the violence and dispossession results in premature death at the margins (Kodali, 2006).

In summary, by using the frameworks of localocentricity and necrocapitalism, I explore how local meaning-making processes can shed light on understanding the communicative interconnections between culture, structural violence, dispossession and dislocation and death. In other words, integrating CCA and necrocapitalism has the potential to generate a rich understanding of the necrocapitalist factors that (re)produces health inequality and inequity in the

context of groundwater contamination in the marginalized communities that serve as my dissertation project research sites.

Water Contamination and Health Affecting Minoritized Communities

The UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water or GLAAS report mentions that the lack of water supply and service is often based on income levels. Governments often do not prioritize investment in water infrastructure in low-income minoritized communities, which entraps the cultural members residing in slums or remote rural areas in a vicious cycle of poverty and poor health (Avila-García, 2017). Most often, vulnerable members of society tend to be disproportionately impacted by contaminated water. Case in point, in the US, residents of Flint, Michigan have been navigating an ongoing crisis when lead began leaching into the water supply in 2014; elevated lead levels were especially a concern for children and pregnant women; 40% of Flint residents live below the poverty line, and this is a primarily Black community (Kennedy, 2016; Benz, 2019).

Similarly, the 2019 Canadian documentary film *There's Something in the Water* (based on the book *There's Something in the Water: Environmental Racism in Indigenous and Black Communities* by Ingrid Waldron) explores how toxic landfills and contaminated water leads to elevated rates of cancer and disproportionately affects Indigenous and Black communities in Nova Scotia, Canada. The film highlights the physical manifestations/toll of the toxins/pollutants on the minoritized body and makes visible the intergenerational effects of environmental racism. In one of the interviews from the documentary film, the granddaughter of a former Pictou Landing First Nation chief, Michelle Francis-Denny, explained how the local government officials lied to her grandfather (when he was in charge) to secure the rights of an estuary called Boat Harbor which was a valuable

resource for fishing and hunting for the Indigenous community. Later Boat Harbor became a toxic site as it was used for dumping toxic waste from a nearby mill. In a painful account, Francis-Denny shared how her grandfather's guilt over the rights of the estuary was inherited by various members of their family, most of whom died prematurely by suicide, cancer, alcoholism, or drug addiction.

In the case of West Bengal, according to the West Bengal Social Inclusion report (World Bank document), while access to drinking water in most households in rural West Bengal has been poor, the minoritized castes are worse off than others. A recent news report in *The Indian Express* stated that while the *Har Ghar Jal* (or Water for Every Household) program initiated by the Government of India promises access to drinking water in every rural household, such "universal" schemes do not account for the overlap between who gets access to safe water and the social structure of the caste system in India (Waghre, 2023). A study released by the National Campaign on Dalit Human Rights (2020) stated that "climate apartheid" is likely to hit minoritized castes (such as Dalits and Adivasis/Indigenous communities) the hardest with systemic neglect and disregard for intersectional groups such as women and senior citizens. Bhimraj (2020) noted that the structure of caste in India often plays a significant role in the distribution and deprivation of environmental risks and pollution. For instance, though positive changes were reported around access to drinking water in both urban and rural India, such progress was slowest in minority caste communities (Smiley & Stoler, 2020).

Health Programs and Health Inequality

Regardless of billions of dollars being invested in health promotion efforts across the globe, health disparities continue to exist not only in the West (comprising first world countries i.e. the US and its capitalist allies such as the Canada, Japan, and Australia) but also in the East

(comprising Third world countries) such as Bangladesh, China, Nepal and India (Angdembe et al., 2019; Chin et al., 2018; Islam et al., 2020; Shah, 2019; Natakani, 2019; Guo, 2020, Hall & Crosby, 2020; Ronquillo, 2020, Dutta, 2020). Here, East and West, as stated earlier, are not only specific geographical locations but also comprise discursive spaces defined by asymmetrical power relations. Similarly, the First world/Third world dichotomy (which includes "non-aligned" countries from Asia, Africa, and Latin America) is mostly used a blanket term for non-aligned low and low middle-income countries that are less advanced technologically, in comparison to so-called First world nations (Andrews, 2018). These simplistic binaries fail to take into account the fact that there is a Third world or oppressed group within the "First world" countries and elite groups within the so-called Third world country (Pal & Dutta, 2013; Dutta & Pal, 2020). In contemporary times, pro-market neoliberal health policies perpetuate a widening gap between the wealthy and poor as transnational agencies often get to or are "allowed to pursue their own (profiteering) interests essentially unfettered by national or international state institutions" (Ganesh et al., 2005, p. 170). Case in point, the Bill and Melinda Gates's Foundation project (website accessed on 2/25/2022) on Water Sanitation and Hygiene/WASH projects in countries including India and Bangladesh employ technocratic and technological logics such as "getting new sanitation products" and selling "low-cost solutions" to the target population who are already caught in broader structures of poverty. In one editorial in the Lancet, *What has the Gates Foundation done for global health?*, the author(s) indicated that, despite the well-established transnational actor's massive funding of a variety of health projects across the globe (since its inception in 1994), the wealthy private philanthropic organization does little investing in healthy systems in low-income contexts. In other words, the essay highlights the budget allocation and funding priorities of the transnational organizational actors in relation to

global health and health systems (such as infrastructure, policies, and resources enabling healthcare service delivery). Powerful organizational actors such as Bill and Melinda Gates Foundation have significant impact on health and health interventions in the Global South as they play crucial roles in shaping global health policies, funding initiatives, and implementing programs aimed at improving health outcomes in marginalized communities. Hence it becomes important to investigate how power and agency is played out in terms of the aid organizations' activities and health interventions in Global South contexts.

Convergence of Health and Organizational Communication

Communication scholars have often approached health communication from an organizational perspective (Lammers et al., 2003). In the context of communication health and wellness in organizational settings, Geist-Martin and Scarduzio (2011) indicated how topics studied under organizational communication research have the potential to offer a nuanced understanding of health communication in organizational and work settings. Organizational communication helps to address the organization of voice and participation in health contexts. For creating a safer and healthier workplace, Zoller et al. (2022) proposed an employee-centered framework as opposed to traditional workplace health promotion approaches through a multi-stakeholder Equitable Food Initiative/EFI. This organizational health management strategy takes a holistically integrated (specifically in the context of low-income farm work), participatory (in decision-making processes), and structural approach (improving health management systems) such that workplaces can promote health equity. In another study, highlighting health inequity in the workplace, Dempsey et al., (2022) detailed how the meatpacking industries in the US increased their profitability by securing special rights during COVID-19 at the expense of minoritized meatpacking workers. Meatpacking plants involved high rates of transmission of

COVID-19, with at least 250 deaths and an estimated 50,000 COVID-19 positive cases. Corporate necropolitics maintained racialized logics of meatpacking worker disposability within the US's late capitalist food systems and economic growth (Dempsey et al., 2022).

In the context of my dissertation, this convergence of health and organizational communication means interrogating health communication processes, practices, logics and effects in global-local organizational connections (or transnational linkages) between local NGOs, international NGOs, international nonprofits, international policy consultancy firms, international funding agencies etc. For my project, the coming together of health communication and organizational communication advances theorizing from the margins and adds to the extant body of critical communication scholarship in three ways. First, by theorizing from below about community participation in context of health disparities and necrocapitalism by recording narratives that are often missing from dominant discourses of health and participation. By amplifying the views from the margins this project helps to shed light on the structural causes of health disparities in water insecure areas, challenge oppressive structures and inform a more equitable approach to health and well-being. Second, the localocententric articulations centering local context of water insecurity, health problems and solutions amplifies narratives and perspectives that collide with the dominant forces under necrocapitalist organizational accumulation or concentration of power and profit (where organizing of capital happens via health interventions and maintaining specific discourses to organize a specific kind of capital) over minoritized bodies from marginal (social, political and physical) spaces. This helps to mark the local politics and knowledge generation around health and well-being at the intersection of local global forces (Dutta & Pal, 2020; Basu, 2022). In a larger scheme of themes, health, health issues and water insecurity become a platform and a

playground on which this discursive struggle on how capital and power is organized is played out. Third, the integration of health and organizational communication helps in understanding how access to safe water and health interventions is organized in marginal spaces by dominant forces and how those forces are resisted. In other words, by investigating the interplay between health and organizational communication, I analyze the ways in which access to safe water and health is organized in marginal spaces and how communities at margins advocate for water and health rights. The alternative epistemology from specific ontological location has the potential to open up space for health interventions that are more inclusive, equitable and effective by challenging the existing power structures. The alternative epistemology from specific ontological location has the potential to open up space for health interventions that are more inclusive, equitable and effective by challenging the existing power structures. Subsequently, the three research questions situated guiding this study are:

RQ 1: How do international funding agencies, local NGOs and International NGOs communicate about ground water toxicity in two water- insecure rural communities in West Bengal?

RQ 2: How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?

RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

These three research questions will help in centering the alternative articulations around health experiences and health interventions organized in marginalized rural communities affected

by water insecurity. In Chapter 3, I outline how I conducted a field study to engage with the three research questions articulated above.

CHAPTER THREE: METHOD

In this chapter, I first write about the CCA methodology (focused on self-reflexivity, dialogue and listening, and solidarity). In the methods section that follows, I begin with a detailed description of the field sites, followed by an explication of the processes that were involved in data collection, sampling, data recording and confidentiality, and data analysis.

Methodology

Strauss and Corbin (1998) define the term methodology as a "way of thinking about and studying social reality" providing a sense of vision and methods as a "set of procedures and techniques for gathering and analyzing data" (p. 3). Methods (such as interviews, focus groups) turn the methodological (e.g.: qualitative, ethnography, quantitative, mixed methods etc.) approaches and vision into reality.

Methodology is value laden. It is not ahistorical or acultural. It is a product of the political process of constructing knowledge and "it is also a framework that undergirds and reinforces the politics of the knowledge process that it is a product of" (Basu, 2008, p. 54). Specific methodologies lead to specific knowledge that emphasize particular ways of knowing. For instance, my project employs the CCA methodology that creates knowledge about alternative ways (ways that are usually othered) of knowing what counts as health in local marginalized spaces. The CCA is concerned with asymmetrical power relations and its influences on the cultural constructions of health meanings and human illness. As a methodology, CCA is invested in the political and ethical goal of promoting transformative social justice by unmasking the larger structural forces that further marginalizes the already

marginalized individuals residing in resource-constrained areas. Thus, CCA offers new insights in conceptualizing communicative phenomena around human health and illness and also has the potential to bridge the growing gap between the health rich and health poor in contemporary neoliberal society. In its deconstructive turn i.e using deconstruction as a method and research tool, CCA asks these questions regarding the basic assumption of what constitutes knowledge:

> Who creates knowledge? For what purposes? What are the assumptions that go into the creation of knowledge? What are the values embedded in the assumptions of knowledge made by the dominant paradigm? What remains silent and untold in the articulations of knowledge? How does power play out in the construction of knowledge?
>
> (Dutta, 2008, p. 259)

In the next few sections of this chapter, I situate my dissertation project within the larger framework of the CCA methodology to explore the methodological tools of reflexivity, listening, voice, dialogue, and solidarity. I end this section by explaining why this methodology is suited for my dissertation project. As I write this section, I frequently revisit my previous field work experience for a qualitative study around arsenic poisoning in West Bengal. This is because my dissertation project is a continuation of the work that I started years back. In 2018, I interviewed five public health officials working around arsenic remediation and conducted a group interview with three community health workers (CHWs) and five individuals living with arsenicosis (see Mukherjee, 2019).

Reflexivity, Listening, Dialogue

My dissertation employs ethnographic research methods to center local voices by eschewing the universalized assumptions of health and health organizing efforts. The concepts of listening, dialogue, reflexivity, and solidarity are central to this methodological paradigm I employ.

Dialogue, Listening, and Solidarity

In this section, I explore dialogue and listening as a methodology based on cultural humility. Here cultural humility recognizes "the pervasiveness of culture in every encounter" (Wallerstein et al., 2017, p. 357). To add depth to the sample and avoid hasty generalizations, my ethnographic study design is directed by the processes of listening and dialogue (Ellis et al., 1997) which are two core elements of the CCA. As explained in Chapter 2, the CCA helps to study and document the narrativized experiences of underserved communities through a listening-focused approach to communication. The CCA suggests that the role of a researcher shifts from an expert to a listener (based on cultural humility that takes into account the fluidity of culture) and a co-participant who engages in dialogue with the communities at the margins.

In CCA methodology, research participants actively interpret their own lived experiences, cultural norms, and social structures. As researcher/co-participant and the research participants engage in dialogue they create space for co-constructing health meanings that challenge the dominant universalized assumptions about health. For instance, during my MA field work, one recurring conversation was about how the arsenicosis-affected research participants who work as landless agricultural labor -- a section of farmers who are often referred to as the "the poorest of the poor" and "do most of the production work" (fao.org, p. not available) -- not only not have access to safe water but also to nutritious food, which adversely affects their health. This discourse challenges the dominant assumption of public health officials in my study, who note that the health of the arsenic-affected impoverished rural communities is due to a lack of technological interventions and a lack of funding around it (Mukherjee, 2019). The CCA's inclination to advance localocentric articulation via dialogue spotlights local epistemologies and promotes solidarity as an essential tool to overcoming social, political, and economic inequality.

Solidarity as a CCA methodological imperative advocates recognizing agency of the cultural other, serving their interests and co-constructing knowledge with research participants. Drawing from subaltern studies, CCA emphasizes the ethics of solidarity between the academics/scholars/researchers occupying a privileged position and the marginalized community as a methodological necessity in the plan for conducting research. By engaging with the margins and building solidarity, openings are created for developing theories from below, rooted in the ontologies and epistemologies of communities in Global South (Dutta & Basu, 2007). Dutta (2008) mentions: "It is this solidarity that forms the basis of a dialogical platform, where the researcher engages in conversations with members of the community. These conversations bring forth conceptual maps for understanding health communication processes and for the development of solutions that make sense to the community." (p. 59). The voices at the margins help creates a framework for comprehending the "everyday lived experiences of negotiating the policies constituted amid structures" (Falnikar & Dutta, 2019, p. 435). For my dissertation project, localocentricity is essential in building solidarity with the margins. The goal of my dissertation project is to create researcher-research co-participant solidarity through collaboration and self-reflexivity, to document how communities at the margins organize localocentric narratives on their own to navigate and negotiate health and health interventions.

Self-reflexivity

As a methodological construct nested within in the CCA, self-reflexivity helps in the sensemaking process via self-referencing, inculcating hope and offering the possibility to transform cultures of systemic oppression (Sastry, 2016; Sastry & Basu, 2020). It begins with an understanding of the researcher's location in relation to the research population.

My lived experience is based on my complicated intersectional identity markers that socially locates me as an "upper caste" woman, urban-educated, and English-speaking Bengali/Indian. As a research co-participant, I reflect on my caste and class background or my identity capital in various cross-class social interactions and communication fieldwork while speaking with communities that are often hidden from mainstream knowledge making processes. My experience of physical border crossing from India to the U.S. and the journey of becoming a minority in the latter has made me more aware and empathetic towards issues around race/caste. I reflect on the blank spots/knowledges that I do not have likely due to my caste position; these blank spots certainly influence the way I see/perceive the world around me.

My lived experience shapes how I perceive and make sense of the diverse social world around me. I gained new insights around the fluidity of being an insider where my Bengali identity allowed me to obtain access to the community whereas differences in class identities made me an outsider to the lives of some of the research participants and co-investigators in ways I did not expect. My first research encounter with those affected by arsenicosis and are on the wrong side of the poverty line was a moment that made me acutely aware of class and exclusion. It made me consider my privileges. I wrote in my: I was brought up in a protected and sheltered way not having to worry about a lot of things/material resources (such as access to nutritious food, and electricity that ensures the supply of regular clean water). Contrary to my lived experience, a group of arsenicosis-affected participants told me (during my MA thesis fieldwork) about daily struggles of accessing clean water and nutritious food, and other basic things. Several arsenicosis-affected participants unbuttoned their shirts to show me skin lesions on their chest, shoulders, and abdomen. After I left the site and sat in the backseat of my mom's car, I realized I had a terrible headache. I felt emotionally drained and exhausted and realized

how unprepared (where my unpreparedness is rooted in my privilege) I was for my encounter with my participants and listening to their messy material realities and their unique challenges. It felt different when I listened to them in-person than reading about their life situations in newspapers or watching them on TV. It made me angry and frustrated and then made me think how I could channelize these emotions in constructive ways. There were also feelings of helplessness as I realized the constraints of the researcher role I perform. As a researcher, I realized I would not be able to put an end to their plight as they spoke of the need for long-term sustainable solutions around rural water infrastructure and maintenance of those infrastructures.

Years later, in a graduate seminar while reading about the notion of sensorium (Ellingson, 2017), I realized the need to decenter positivist assumptions about objectivity in favor of realistic positioning of scholars as an embodied social actor who is imperfect, hence, perhaps normalizing that imperfection (such as being unprepared) and trying to work through it. Ellingson (2017) mentioned that our identities are connected to our sense of self that are constructed within a sticky web of cultures, adding that embodied identities are marked by power which devalues certain identities. And the identity categories do not occur in isolation rather they occur within the intersection of marginalization and privilege. So, for instance, I have caste/race and class privileges but simultaneously I become part of the minoritized group when I am in the US and in my workspaces. I used the term caste and race interchangeably because "both caste and race are similar in their approach and practices although they may overtly differ in the history of their ideologies; yet the outcome is the same and the sufferings identical. Both can be understood as human rights violations for the denial of dignity and a complete human identity for a section of society." (Mitra Channa & Mencher, 2013, p. 263).

Thus, self-reflexivity is the careful process of analyzing how each one of us is situated in the power hierarchy and being accountable for the role we play in enabling oppression and thus hindering the process of social change. As an "upper caste" woman (which is linked with the class position I occupy), I did not participate in creating the bramhinical social system; I was rather born into it and thus have lots of unearned privileges. But that does not mean I cannot take account of and be responsible for the unearned oppression I see around me, how I think of what I see and what my course of action-solidarity-would look like.

To summarize, in this first section of this Chapter, I outlined how the methodological tools of self-reflexivity, dialogue, and solidarity are important for this CCA project. In the next section, I present the methods or techniques I employed to collect data. I begin with a detailed description of the physical context/proposed site of research, followed by the various processes involved in data collection, sampling, data recording and confidentiality, and data analysis.

Methods

Research Context and Gaining Access

For my dissertation project, I received a letter of support (see Appendix A) on April 3, 2021, from a local NGO, Water Aid (anonymized)[10] who helped me to recruit participants for this project in rural West Bengal. I conducted fieldwork for seven weeks between June and July 2022 in the city of Kolkata and various areas of rural North 24 Parganas and Purulia in West Bengal. Within the city of Kolkata, I went to Salt Lake Sector 2 where the Water Aid office is located. In North 24 Parganas, I collected data from two locations: Adivasi para & Parui para. In Purulia, I collected data from four villages: Bhandar Puara, Manera, Lagda, and Dimdiha. The distance in

[10] Over the years, I have maintained a cordial relationship (via email, WhatsApp, phone calls, and in-person/F2F catching up/meetings for relationship building every time I travelled to India (between June 2019 and December 2019) for visiting family/leisure) with few of the research participants I interviewed in 2018 for my MA thesis fieldwork including one of the founder members of Water Aid.

time from Kolkata (parent's home) to the NGO office in Kolkata was 45 minutes one-way by car. The distance in time from Kolkata (parent's home) to North 24 Parganas was 3.5 hours one-way by car. And the distance in time from Kolkata (parent's home) to Purulia was 8 hours one-way by car. It was not conducive for me to travel to Purulia on a daily basis. So, I stayed back in the NGO field office in Purulia when I visited my research sites. While in the NGO field office, I was able to observe and take field notes on various aspects of this NGO's operations in the field, such as:

1. How does a work week look like for the NGO employees?
2. How do NGO employees talk about the problem of groundwater contamination between themselves?
3. How do they talk about the communities (with whom they work directly) amongst themselves?
4. What kind of problems and solutions do they speak about in their daily meetings?
5. What kind of information do they reveal and hide from the NGO founders?
6. How do they manage intergroup conflict?

I have been in touch with one of the founding member of Water Aid for few years via informal communication (phone calls, text messages) with who I have discussed if they would be able to help me recruit participants for the project. My contact in Water Aid sent a letter vouching to support my dissertation project.

On their website, Water Aid mentions that its mission is "sustainable inclusion of socially and economically excluded sections through people appropriate solutions" (p. not found). Water Aid, along with other organizational stakeholders (such as international policy firms, international NGOs and non-profits, international funding agencies, Public Health and

Engineering Department/PHED funded by Asian Development Bank) facilitates various improvement projects in the water insecure areas. Important to my dissertation project are three health interventions that Water Aid is involved in. These are a kitchen garden project, a water plant installation project, and the Behavior Change Communication via Information, Education and Communication/IEC project.

Projects

Kitchen Garden Project: As a part of a Town Twinning project that started around 1995 between the gram panchayat/village council of Chatra in North 24 Parganas and a charitable non-

Figure 1. Kitchen Garden Project

profit [Aid India: anonymized] in Herrshing, Germany, the kitchen garden project is aimed at boosting food production by growing vegetables in household yards and unused land (see Figure 1). The charitable non-profit was founded by two medical students who came to Kolkata to work with Mother Teresa around the 1980s. According to a summary document on their website, Aid India (updated in March 2018) has 230 employees with a turnover around 450,000 Euro and works mainly in addressing poverty in India via social projects, fair trade, and "direct dialogue with local people" (p. not found). As Joydeb (Water Aid employee) mentions, "Aid India believe a lot in cultural exchange. As a part of their town twinning project or sister cities project between Herrsching and Chatra, they invite their local collaborators from India to visit Herrsching, Germany, to create opportunities to join the conversation around development. For example, the NGO's Chatra project coordinator and a municipal engineer from West Bengal

Figure 2. Vermicompost Starter Pack for the Kitchen Garden Project

were invited to their water quality laboratory in Herrsching. They also organize cultural events in India."

The kitchen garden project aims to diversify the diet of community members (by growing different kinds of vegetables in available lands of those participating in this project) residing in water insecure areas marked by inaccess to nutritious food. Another goal of this project is to help increase the income of the people who participate in the kitchen garden project by selling their excess produce. The community members/families who joined this project were trained about the cultivation process around preparing the soil, plot, sowing etc. and received a kit from the Water Aid employees which contained a variety of seeds to be sowed in the kitchen garden. The Water Aid employees also distributed and helped the community members prepare a vermicompost pit for producing organic fertilizers (see Figure 2). The founder member of Water Aid (my point of contact/gatekeeper) mentioned in an informal text conversation (in Sept 2021) that the reason for the kitchen garden project in local communities stems from research that has shown there is a link between malnutrition and disease susceptibility due to groundwater contamination. Chronic exposure to water toxicity can often occur in parallel with malnutrition in areas marked by inaccess to water and nutritious food (Dable-Tupas et al., 2023; Maharjan et al., 2007; Wimalawansa & Dissanayake, 2019). Also, Chadwick (2016) writes that the wider phenomenon of climate change influencing weather patterns affects food security due to a decrease in crop yields which also negatively impact human health.

Water Plant Project: Aid India also works with Water Aid around installing water treatment plants in North 24 Parganas. Water Aid specifically works with the local farmers and fisherfolk to create awareness around reducing pressure on the water. Jaya (Water Aid employee)

mentioned, “There are six partners working in this space. There is the non-profit from Germany responsible for funding, an international policy consultancy firm who proposed and set up the

Figure 3. Water Testing Kit for the Water Treatment Plant

Figure 4. Water Treatment Plant

project, us [the local NGO] for problem identification and proposing solution, Panchayat [village council] for land suggestion and initial land approval, PHED for final land approval, and an Indian construction company for constructing the water project". When I started my fieldwork, the test operations for the water treatment plant started as well (see Figure 3). The Water Plant Installation project in North 24 Parganas also aims to provide residents in rural areas access to safe water. This project is funded and developed by Aid India for the community. Water Aid employees, who collaborate with the Aid India, for on-the-ground implementation of the project, mentioned that the operation started in February 2023. The local NGO employees added that for one year Aid India will be responsible for operation cost and maintenance of the water treatment plant (see Figure 4) and after that it is either the local community or the village council who will be responsible for the operation cost and maintenance work.

According to the Aid India website, the water plant project will benefit approximately 160 households (with household income between 25 and 125 €) and around 600 people from Dalit, Muslims and OBC families from this project with "free" clean drinking water every day. Reflecting on this idea of "free" drinking water, I noted in my journal, "The water is framed as "free". But how is it free if the village council or the local community has to bear the operation and maintenance cost!"

Information, Education and Communication/IEC Project: According to Water Aid's website, under the Government of India's Jal Jeevan Mission (started in 2019), Water Aid works with an international funding agency, Water United [anonymized], in fluoride-affected drought-prone areas in Purulia. Its main aims are:

1. Diverting rural communities from unsafe to safe water sources.

2. Encouraging community members to include food rich in Vitamin C to flush out fluoride via urine.

3. Encouraging community members to include protein-rich food in their diet.

4. Disseminating health information around dental fluorosis.

5. Awareness generation around wasting water.

6. Awareness generation around hand washing and personal hygiene.

During my fieldwork, I attended four IEC planning sessions (see Figure 5) focused on the above-mentioned topics of public health information dissemination usually via

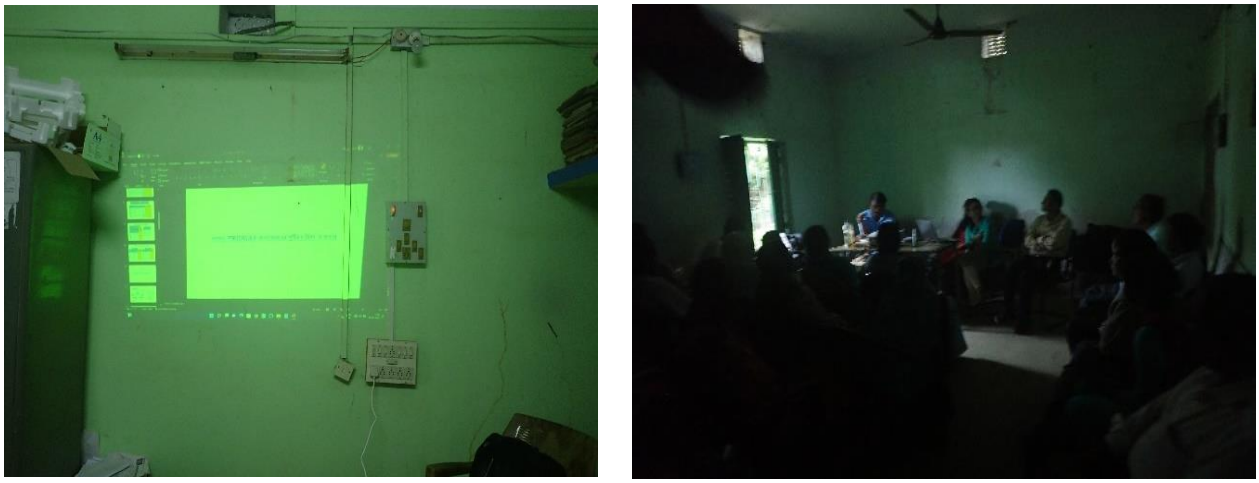

Figure 5. Information, Education and Communication/IEC Meetings

PowerPoint slides during the absence of any power cut. In case of power cuts (see Figure 5), the health information dissemination sessions would continue with the NGO employees reading out the health information from their laptops. Usually, the health information sessions would vary in length between 20 and 60 minutes, depending on how many people (CHWs, individuals working with the respective village councils in Purulia, individuals residing in water insecure areas) attended the session, how engaged they were etc. In total there were around 80 people who attended these four sessions that I attended. This number excluded the NGO employee, me and the Panchayat Pradhan or the head of the village council who was also present during these

sessions. I sat at the back and introduced myself as a student and not associated with the NGO to avoid any confusion regarding my identity in that space.

Obregon and Mosquera (2005) mention that in the context of health-related development projects in the Global South, strategies designed and developed by practitioners are implemented via NGOs. These strategies include: Information and education, Information, education and communication (IEC), Communication for behavior change (CBC), Context-based approaches, and Communication for social change. In the context of my dissertation, IEC and behavior change communication are two strategies employed by NGOs to influence individual and/or collective health. For instance, IEC focuses on communication activities and awareness around hand washing and promoting health and hygiene among my research participants.

Participants and Data Collection

I interviewed and conducted focus group sessions with 53 research participants. These include individuals residing in rural communities affected by toxic groundwater in North 24 Parganas and Purulia, and NGO employees in their Kolkata office. A breakdown of these 53 participants are as follows:

- Individuals residing in rural communities affected by toxic groundwater (*N*= 35)
- Community health workers (*N*=4)
- Local NGO workers affiliated with Water Aid (*N*= 14)

The 4 community health workers (CHWs) I interviewed were accredited social health activists instituted by the Ministry of Health and Family Welfare as part of India's National Rural Health Mission. These CHWs work directly with toxin-affected community members to improve health care services in the rural research sites. According to WHO (see https://www.think-asia.org/bitstream/handle/11540/13005/guidelines-drinking-water-safety-planning-west-

bengal.pdf?sequence=1) these CHWs are responsible for participating in resource mapping sessions, collecting data, and disseminating health information to generate awareness related to water and sanitation. (WHO, 2020, p. 60). While the individuals residing in water insecure areas are from rural West Bengal, the CHWs and the NGO employees are from urban and semi-urban areas.

Data collection entailed:

- 3 Focus group discussions, one with 3 CHWs in N 24 Parganas, another one with 7 NGO employees in Kolkata, and a third one with 7 NGO employees in Purulia
- 10 in-depth interviews, one with a CHW in Purulia, and 9 with community members residing in water toxin-affected areas
- 8 group interviews with community members living in water toxin-affected areas.

Additional details regarding the participants are as follows:

Table 1. List of Participants

Name	**Age**	**Years of Staying in Groundwater Contaminated Zones**	**Employment**	**Type of Interview**	**Place of Interview**	**Access to Drinking Water and Toilet within home**
Mira	35	NA	CHW	Focus group #1	N 24 Parganas	
Manju	27	NA	CHW	Focus group #1	N 24 Parganas	
Meena	24	NA	CHW	Focus group #1	N 24 Parganas	
Samir	51	NA	NGO Employee	Focus group #2	Purulia	
Sandhya	26	NA	NGO Employee	Focus group #2	Purulia	

Table 1. (Continued)

Shampa	25	NA	NGO Employee	Focus group #2	Purulia	
Sita	25	NA	NGO Employee	Focus group #2	Purulia	
Shaheb	28	NA	NGO Employee	Focus group #2	Purulia	
Saqib	48	NA	NGO Employee	Focus group #2	Purulia	
Suman	55	NA	NGO Employee	Focus group #2	Purulia	
Jadav	53	NA	NGO Employee	Focus group #3	Kolkata	
Jaya	64	NA	NGO Employee	Focus group #3	Kolkata	
Jadu	55	NA	NGO Employee	Focus group #3	Kolkata	
Jamini	52	NA	NGO Employee	Focus group #3	Kolkata	
Jibon	50	NA	NGO Employee	Focus group #3	Kolkata	
Jyoti	25	NA	NGO Employee	Focus group #3	Kolkata	
Joydeb	36	NA	NGO Employee	Focus group #3	Kolkata	
Alo	37	NA	CHW	In-depth interview	Purulia	
Asha	Late-30s	20 years approx.	Landless seasonal farmer and temporary sewing worker	In-depth interview	Purulia	No
Anju	Early-20s	5 years approx.	Landless seasonal farmer and temporary sewing worker	In-depth interview	Purulia	No

Table 1. (Continued)

Arul	Early-20s	5 years approx.	Landless seasonal farmer and temporary sewing worker	In-depth interview	Purulia	No
Arsal	Late-50s	50 years approx.	Unemployed at the time of interview	In-depth interview	Purulia	No
Amol	Mid-30s	30 years approx.	Landless seasonal farmer	In-depth interview	N 24 Parganas	No
Asan	Late-50s	50 years approx.	Unemployed at the time of interview	In-depth interview	N 24 Parganas	No
Asif	Late-50s	50 years approx.	Unemployed at the time of interview	In-depth interview	N 24 Parganas	No
Ali	Mid-30s	30 years approx.	Landless seasonal farmer	In-depth interview	N 24 Parganas	No
Atmaram	Mid-40s	45 years approx.	Landless seasonal farmer	In-depth interview	N 24 Parganas	No
Shibu	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #1	N 24 Parganas	No
Sudam	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #1	N 24 Parganas	No
Sarojini	Mid-40s	30 years approx.	Landless seasonal farmer	Group Interview #1	N 24 Parganas	No
Sadhu	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #1	N 24 Parganas	No
Sitaram	Late-50s	58 years approx.	Unemployed at the time of interview	Group Interview #1	N 24 Parganas	No

Table 1. (Continued)

Majhi	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #2	Purulia	No
Moina	Mid-30s	20 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #2	Purulia	No
Jamuna	Mid-20s	5 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #3	Purulia	No
Jaba	Mid-20s	10 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #3	Purulia	No
Durga	Mid-30s	15 years approx.	Landless seasonal farmer	Group Interview #4	Purulia	No
Dilip	Mid-30s	10 years approx.	Landless seasonal farmer	Group Interview #4	Purulia	No
Dayaram	Mid-50s	55 years approx.	Unemployed at the time of interview	Group Interview #4	Purulia	No
Tulasi	Mid-30s	10 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #5	N 24 Parganas	No
Togor	Mid-30s	10 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #5	N 24 Parganas	No

Table 1. (Continued)

Tantia	Mid-30s	35 years approx.	Landless seasonal farmer	Group Interview #5	N 24 Parganas	No
Fulmoni	Early-40s	25 years approx.	Landless seasonal farmer	Group Interview #6	N 24 Parganas	No
Fakir	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #6	N 24 Parganas	No
Abdul	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #7	N 24 Parganas	No
Ahmad	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #7	N 24 Parganas	No
Aroti	Early-40s	25 years approx.	Landless seasonal farmer	Group Interview #7	N 24 Parganas	No
Amjad	Mid-40s	45 years approx.	Landless seasonal farmer	Group Interview #7	N 24 Parganas	No
Rani	Mid-30s	10 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #8	Purulia	No
Ratna	Mid-20s	5 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #8	Purulia	No
Radha	Early-40s	20 years approx.	Cleaning worker	Group Interview #8	Purulia	No

Table 1. (Continued)

Renu	Mid-20s	5 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #8	Purulia	No
Rakhi	Mid-20s	10 years approx.	Landless seasonal farmer and temporary sewing worker	Group Interview #8	Purulia	No

In summary, distribution of participants across research sites are as follows:

- North 24 Parganas: 22
- Purulia: 24
- Kolkata: 7

In-depth Interviews and Focus Groups

I conducted both semi-structured in-depth recorded interviews and facilitated focus group discussions. Semi-structured interviews enable cultural members to describe and convey information using their perspectives, terminologies and words to capture the complexities of their thought, emotions and lived experience (Lockwood et al., 2016; Mesmer et al., 2020; Elers et. At, 2021). I conducted semi-structured interviews for my dissertation project because it created space to listen to localocentric stories. An interviewer conducting semi-structured interviews has a structured set of questions but offers the interviewee a "great deal of leeway in terms of how to reply" (Lindlof & Taylor, 2017, p. 225). Semi-structured interviews also offer the flexibility of asking unplanned probes or additional follow-up questions throughout the interview process leading to richer data (Lindlof & Taylor, 2017; Ross & Bell, 2017). These in-depth "interviews were supplemented by journal entries documenting contextual and observational data" (Elers et al., 2021, p. 374). In the case of my project, journal entries and

photographs/videos as observational tools have the potential to provide supplemental data around the context within which marginalized communities receive the health services/programs. The list of my primary questions in the interview protocol is in Appendix B and C. After I received a verbal consent to participate from research participants, I started engaging and collaborating via dialogue and listening with them, foregrounding their worldviews in keeping with my CCA commitments. Aligned with the CCA methodology, my journaling helped me to document my position of privilege (such as class, caste) and power in these moments of dialogue and listening. After each interview, group interviews, focus group sessions, and participant observation, I summarized what my participants shared with me in my attempt to be more accountable and not accidentally co-opt the localocentric stories. Some of the questions guiding my interviews consisted of: 1. What are some of the problems you face in your daily lives? 2. When and how did you come to know that you are affected by groundwater pollution and other types of water issues? 3. Do you think you have enough resources such as nutritious food and safe drinking water to stay healthy? If not, what do you think is lacking? I revised my protocol based on some of the information that emerged during the interviews. For instance, participants regularly indicated that besides groundwater contamination the areas are also seasonally affected by flood and draught which leads to a variety of issues around water. This helped me to revise the question "When and how did you come to know that you are affected by groundwater pollution?" to draft a broader question: "*Tumi kokhun o kibhabe jante parle ei elakate joler shomoshya ache?*" or "When and how did you come to know that your locality has some kind of water issues?" In other words, I went to the rural research sites impacted by groundwater contamination to document and understand toxin exposure and this emerged as one of the concerns for the participants for many of whom seasonal water inaccess due to extreme weather

conditions, inaccess to irrigation water, inaccess to safe bathing water leading to skin problems etc. emerged as important issues to be considered.

In addition to in-depth interviews, I also conducted focus groups and group interviews. As a data collection technique, focus group sessions and group interviews have often been employed by various Communication scholars (Cao & Wang, 2021; Jamil & Kumar, 2021; Mukherjee & Sastry, 2020; Pal & Dutta, 2013; Pal & Buzzanell, 2013) to understand the interpretive frames through which cultural members make sense of their lived experiences. Emans (2002) explained:

> There is a small difference between group interview and focus group. Focus group aims to obtain enriching data on one topic. The advantage of a group interview is the opportunity to stimulate each other to think about the topic. It can be motivating to participate in a group interview.

Moreover, an interview that would start in an uncontrolled setting and then organically transform to a focus group has been indicated by Dutta et al. (2013). The authors wrote:

> An interview would start in an open space (such as under a tree), more community members would gather around to share their views, and the interview would gradually transform into a focus group, eventually turning into a spontaneous community-wide meeting involving a large majority of households from the village.

For my dissertation project, there were instances where an in-depth interview turned into a group interview making the recruitment spontaneous. For instance, I would begin my in-interview with a participant in a common courtyard where others would gather and join in the conversation.

I also employed focus group discussion in my data collecting process that typically focuses on a specific theme/topic that is investigated/studied/explored in (Bryman, 2001; Mekkonen, 2006). In the appendix (Appendix C), I have attached the questions that I asked the CHWs and

NGO employees in the three-focus group session (as mentioned in the list of participants table above) to understand how they communicate their experience working with or collaborating with local communities and the challenges and opportunities in such collaborations. The chief objectives for the focus groups included (a) an analysis of the problem of water insecurity from the NGO employee and CHW's perspective (b) documenting the NGO employee and CHW's working experience with the communities affected by water insecurity (c) investigating the commonalities or consensus and divergence between the stakeholders' perspectives around the issue of water insecurity in marginal spaces and working with the communities to remediate the problem.

Even though I have included a list of questions for guiding the interview process, the sequence of the questions as indicated in the protocol varied depending on the stories participants shared. The interviews, group interviews and focus group were conducted in Bengali. I was born and raised in West Bengal, which provides a contextual connection for this project. I also have social and linguistic connections (as I worked with the relevant stakeholders for groundwater contamination for an earlier research project) essential to conduct focus group sessions and in-depth interviews in Bengali in rural communities. By employing a purposive sampling (groups and individuals having specific knowledge about water insecurity and a variety of issues around it) and snowballing method via referrals, I ended interviewing a total of 53 participants for a total of 611 mins. For the interviews and group interviews with the CHWs and individuals residing in water insecure areas in North 24 Parganas and Purulia, most of the conversations took place in their common and shared courtyard, homes, veranda, village council office and shashtha kendra/rural health center. I tried to meet my research participants where they were comfortable

sharing their stories so that they did not have to bear the burden of traveling/walking to a place selected by me to share their stories.

Besides focus groups and in-depth interviews, I also employed the methods of participant observation and field notes to in part to inform methodological triangulation, and in part to deepen my analysis of how marginalized populations in water insecure areas talk about health and health services that they receive from external stakeholders.

Participant Observation, Field Notes and Journal

According to Guest et al., (2017), participant observation is a process that "connects the researcher to the most basic of human experiences, discovering through immersion and participation in the hows and whys of human behavior in a particular context" (p. 2). Dutta (2018) mentioned that the culture-centered method is marked by ethnographic participant observation where the researcher spends time to build trust/relationships in the community. Dutta wrote:

> The participant observations are complemented with in-depth interviews and informal focus groups to develop an initial understanding of the communicative spaces in the community, the resources that exist in the community in developing solutions, and the communicative and material resources needed for addressing the challenges (p. 248).

I employed the method of participant observation in the Kolkata NGO office while I was waiting for the additional fieldwork approval from the international funding agencies, in Purulia during the IEC sessions, and in North 24 Parganas when the research coparticipants residing in water insecure communities were communicating their problems and experiences around the kitchen garden project with the NGO employees. Employing the technique of participant observation for my project potentially helped me understand the following:

1. Organizational culture in the NGO office: How employees communicate with each other during their daily meetings, how they communicate problems around working with other stakeholders (such as local communities, funding agencies, what kind of strategies NGO employees discuss to address the needs of community members, how NGO employees interact with the funding agency officials during zoom meetings, how NGO employees interact with each other during lunch and tea breaks.
2. For the IEC sessions: Where IEC sessions take place, how IEC sessions are conducted, who participates in these sessions, how many community members participate in each session, the duration of each session, what kind of information is shared in these sessions, what kind of equipment is used during these sessions, what conversations happen between different groups during these sessions, and what questions community members impacted by water toxicity ask.

At the end of my participant observation sessions, I shared with the community members what I had observed and asked them if they thought I missed anything that needed to be included in my observations. For instance, in one of the IEC sessions after I shared my observations with the community members, one of the community members shared how they had to wait for a long period of time for the food packets that were always kept for attendees. In another instance, one of the community members pointed out reasons for low attendance during the IEC sessions. This helped me to understand the lived context of the toxin-affected community members who were attending these sessions and the barriers they encounter during the process of health message dissemination. These barriers included but were not limited to time required to travel to the

village council office where the IEC sessions took place, not getting paid at work because of missing work for attending the sessions, not able to leave home due to caregiving responsibilities for sick and/or disabled family members.

In North 24 Parganas, the participant observation method potentially helped me understand the following in the context of kitchen garden projects organized in arsenic-affected communities in North 24 Parganas:

1. Where does the kitchen garden project take place?
2. What is the condition of the garden now vs the pictures that were taken and shared with me?
3. Who participates in these kitchen garden projects?
4. How many community members participate in these?
5. What do they grow?
6. Take pictures of the garden to understand what constitutes a garden?
7. Take pictures of what kind of equipment is used for the kitchen garden?

At the end of my observation, I shared with the community members what I observed and asked them what they felt I had missed that needed to be included in the observation notes. Some mentioned how they put a hanging shoe in their garden to ward off evil eye while some explained how chickens entered their garden despite the suggestion of the NGO employees around creating a fence/barrier between animal and plants with their torn or discarded clothes.

My data is also comprised of field notes and reflexive journals. My field notes were around what are the kind of health messages, political slogans written/painted on the walls of the village research sites (eg: *Lal manei bipod, Dhamatala Cholo* etc.), the kinds of books kept in the NGO's Kolkata office (eg: Water and Sanitation in the New Millennium by K..J. Nath (Editor),

Vinod Prakash Sharma (Editor), Guidelines for Drinking Water Safety Planning for West Bengal by Asian Development Bank etc.). This helped me to understand the unique context of various stakeholders. I also wrote regularly (during field work) in my reflexive journal. For instance, one of the things I wrote about is what I expected vs what I encountered while doing my fieldwork.

For this multisensory culture-centered multiple-site ethnography, I also took photos of the spaces, artifacts, and sessions to include more senses and ways of knowing (Ellingson, 2017). Often, based on a relationship of solidarity, as a research co-participant, I asked the research participants which spaces and artifacts they thought were meaningful for photographing and why. Organizational communication scholars have talked about the increased use of photovoice (Dougherty et al., 2018; Peterson et al., 2012) in cross-class communication to mitigate the language burden on the community. Due to logistics, I did not specifically use the photovoice method for my study; I used my personal camera and used the photos and conversations around them as supplementary data points to enhance conversations and data analysis. For instance, Asif, one of the participants suggested I take a picture of his goats when I shared with him the photograph method, I was employing to document the everydayness of the participants lives and what was important to them. When I inquired why he suggested I take picture of his goats he shared stories about how for him and many of his neighbors' goats are important sources of emergency funds and taking care of them keeps him busy as he is unable to do any other work due to his health and restricted mobility.

Data Analysis

The interviews and focus group sessions were conducted in Bengali. Since I am conversant in both Bengali and English, I translated the transcribed interviews (in Bengali) into English for analysis. Also, for the ease of data analysis, all interviews and focus group

discussions were audio recorded (with the prior consent from the participants). Only the four CHWs, who are government employees, expressed hesitancy around getting their voices recorded so I requested them to speak slowly so that I can take as much as notes as possible. The translation/transcription was scrutinized by my doctoral committee chair who is equally conversant in Bengali and English (Basu, 2008). The transcription and audio files are stored in a secure cloud-based folder on a USF server, as recommended by IRB (see Appendix D for the IRB approval document).

For analyzing the data, given that the goal of my project is to explore the localocentric health narratives emerging from the communities at the margins as they navigate local-global structures to story their experiences, I employ Lawless and Chen's (2019) guidance on critical thematic analysis (CTA). The CTA method helps to connect "discourses to social practices set within unequal power relations" (Walker et al., 2021, p. 9). This analytical approach looks at "how "everyday discourses" can be enabled or constrained" (Walker et al., 2021, p. 9) and investigates how pervasive information patterns highlight certain salient themes while concealing others (Lawless & Chen, 2019; Schclarek Mulinari & Keskinen, 2022). In my project, I investigate how the framings of everyday local-global discourses on the overlaps between water and health serves the status quo of power relations between various stakeholders (such as international policy firms, international NGOs, local NGOs, CHWs, communities affected by groundwater contamination). A critical lens helps to question the universalized assumptions around health, health behaviors and health organizing.

By using a critical lens, CTA creates space to explore the individual and shared health and health organizing experiences of participants "while being acutely aware of external influences such as the economic, social, historical, and political contexts; social and hegemonic

structures; and institutional power" (Kett et al, 2022, p. 2). The two reasons why I employed CTA are: first, the problem of unsafe water disproportionally impacts bodies from marginalized communities (Mesmer et. al., 2020). Second, the public health interventions that are currently in place to remediate the problem of groundwater contamination involve different stakeholders with different power hierarchies. By engaging in a critical thematic analysis approach, practices and strategies that the participants living in water-stressed areas in rural West Bengal employ can be analyzed in the context of these power hierarchies, providing insight into how participants embedded in power relations carve out agency despite living with oppressive structures.

The CTA involves two phases (open and closed) or analytical processes to critically examine "how dominant ideologies are reinforced/resisted through everyday interactions" (Labador & Zhang, 2021, p. 6). As mentioned earlier, CTA teases out "economic, social, historical, and political contexts, social and hegemonic structures, institutional power, and ideological impact" (Lawless & Chen, 2019, p. 5) which is well-aligned with the political goal of the CCA engaging with marginalized communities situated within oppressive structures (Dutta, 2008). In this version of thematic analysis, the initial stage of coding begins by reading and rereading the field notes, reflexive journals (See Appendix F and G for a glimpse of few pages) and translated and transcribed data to identify the emergent patterns from the localocentric narratives that the participants shared. In this iterative process, reading and re-reading of data became a locus of critical interrogation to analyze the articulation of health experiences and the ideological tensions around water and the organization of water in the global South context. I maintained a secondary document for open coding (for a list of the open coding categories, see Appendix H) that involved identifying recurring (recurrence is same meaning threads even though different wording indicated such meanings) overarching ideas related to the organizing

on issues of water insecurity, health, and health programs (how participants communicate health interventions; how participants navigated/resisted health interventions). During the open coding phase, I stayed as close as possible to the data set/interview discourses. I then created a codebook summarizing these overarching ideas that emerged from the participants' interviews and discourses. This step helped to pay close attention to what the data set/interview discourses revealed or indicated as a discursive pattern important to the research participants either individually or in a group/collectively. For instance, almost all the interviewed research participants residing in water insecure areas repeatedly spoke about the importance of stable income, and about irrigation projects in ensuring food on the table and maintain good health. This led me to the emerging open code: job precarity, water, and health. At this stage, I prioritized centering and honoring what the research participants were articulating and revealing about their social worlds, and the similarities of these phenomenological experiences across research participants or community members impacted by groundwater contamination.

The second phase or closed coding "[begins] to interlink the interview discourses with larger societal ideologies" (Lawless & Chen, 2019, p. 98). During the process of closed/focused coding, I focused on to how participants' interview discourse reflects larger societal/ideological issues (see Appendix H). In this second phase of coding, the intersections between cultural gatekeeping and inclusion/exclusion were explored based on my understanding of the local-global structures in relation to: (a) the universalized assumptions around health and health behaviors that the health interventions are built on (re)producing health inequality; (b) the organization of water in marginal spaces involving violence, dispossession and death; and (c) how community members impacted by groundwater contamination challenge the dominant ideologies and work toward promoting social justice? To ensure qualitative rigor and research

validity, I met with my advisor for several coding meetings to substantiate and communicate the complex nature of the themes.

From the translated and transcribed data set, I developed 49 open codes. I looked across each data set and collapsed identical/similar codes in a secondary document. From this list of 49 codes, I generated a set of themes to address the three research questions:

RQ 1: How do international funding agencies, local NGOs and International NGOs communicate about ground water toxicity in two water- insecure rural communities in West Bengal?

RQ 2: How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?

RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

In the first theme: "Dispossessed Spaces and Displacement at the Margins", I examine localocentric stories around displacement and dispossession, responding to RQ 2: How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being? In the second theme, "Heterogeneous Communities and Structural Violence", I register the localocentric articulations of structural violence that (re)create conditions of marginality and resources inaccess and thus working towards answering RQ 1 (How do international funding agencies, local NGOs and INGOs communicate about ground water toxicity in two water- insecure rural communities in West Bengal?) and RQ 2 (How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?). In the

third theme namely, "Challenging the Dominant Ideas around Community Responsibility", I present the localocentric narratives around challenging the dominant frames of community responsibility; thus, seeking to respond to RQ 3: How do local community members residing in these water-insecure areas organize alternative discourses on water toxicity and remedial interventions by local-global structures in West Bengal?

The fourth theme: "Talking Back to Glocal Organizational Actors" foregrounds the discourses around challenging the glocal health interventions manufactured for the local communities and the competing values of natural resources important to maintain health; thus, responding to RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health and health interventions designed and deployed by local-global structures? In the last theme: "Localocentric Solutions", I present how research participants residing in water insecure areas communicate solutions to solve their problems and focus the broader structural support that would improve their health and healing; thus, responding to RQ 2 (How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?) and RQ 3 (How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?).

CHAPTER FOUR: RESULTS

Introduction

In this chapter, I present five themes that emerged from my critical thematic analysis of data I collected during my fieldwork (discussed in Chapter 3). These themes help me respond to the following research questions I articulated in Chapter 3:

RQ 1: How do international funding agencies, local NGOs and International NGOs communicate about ground water toxicity in two water- insecure rural communities in West Bengal?

RQ 2: How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?

RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

Within each of the five themes I present in this chapter, I offer my interpretations of localocentric narratives of lived experiences of community members residing in water insecure areas at the intersection of dispossession and displacement, the two key concepts in necrocapitalism. I also explain how participants actively shape their cultural practices and health meanings as they navigate the local-global health interventions that frame their everyday lives (Dutta, 2008).

The first theme: "Dispossessed Spaces and Displacement at the Margins" is focused on the nuances around displacement and dispossession as participants shared their stories around

health and well-being; thus, responding to RQ 2: How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?

The second theme: "Heterogeneous Communities and Structural Violence" deals with the localocentric articulations of glocal structural violence that (re)create a political divide between who is shielded from water toxicity and who is not; thus, seeking to answer RQ 1 (How do international funding agencies, local NGOs and INGOs communicate about ground water toxicity in two water- insecure rural communities in West Bengal?) and RQ 2 (How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?)

The third theme: "Challenging the Dominant Ideas around Community Engagement" focused on localocentric narratives around challenging the dominant frames of health information dissemination as a responsibility of community members residing in water insecure areas; thus, responding to RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

The fourth theme: "Talking Back to Glocal Organizational Actors" centered the discourses organized by the research participants impacted by water insecurity and challenging the glocal health interventions manufactured for the local communities and the divergent values of natural resources (such as land, garden and water) important to maintain health; thus, responding to RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

The last theme: "Localocentric Solutions" presented how individuals residing in water insecure areas configure solutions to solve their health issues and highlight the broader structural support that would promulgate their health and healing; thus, responding to RQ 2 (How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?) and RQ 3 (How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?).

Dispossessed Spaces and Displacement at the Margins

I begin this section foregrounding the localocentric narratives from my interviews, focus group, field notes, reflexive journal entries and participant observation activities to respond to RQ 2 as I mentioned in the introduction of this chapter.

The concept of accumulation by dispossession and displacement offers a critical lens to understand how neoliberalism has facilitated the concentration of capital and power in the hands of a few capitalist elites at the expense of the marginalized communities widening the social and economic inequality gap.

Research participants for my dissertation project often indicated how they are both dispossessed and/or displaced in multiple ways. For instance, Togor (living in Parui Para, North 24 Parganas) indicated:

> For cleaning purposes, I use the tap water nearby. But for drinking water I have to go near Mahato's house. It is around a 20 min one-way walk. There is so much land near our house it would be a lot easier for our people if a tap was installed here. The current water point is so far that I try to have only one trip. Sometimes if we need more drinking water and I am busy I would send my son or daughter. My father is old and is unable to walk so

> he is unable to help us with drawing drinking water. During the monsoon, we sometimes have to vacate this house. You won't be able to come or stay here, *didi*. The school becomes our shelter for days. This has become normal for us. When we return, the flood water destroys the *pushti bagan* [nutritional garden]. You also do not know if your house is still there.

Togor indicated how she is not only dispossessed of safe and continual water sources near her home on a daily basis but also seasonally displaced from her home, neighborhood and community during extreme weather conditions. Indicating how indigenous dispossession has been normalized, Togor made visible the cycle of violence of dispossession that precipitates disproportionate harms in absence of effective safe water access programs and flood risk mitigation initiatives. Togor also mentioned that there are many times she had thought of leaving her home and moving somewhere else that is free from environmental contamination and natural disaster, but she never got a chance because, "Who will buy this land?" Here she focused on environmental injustices that impact certain communities disproportionately as they might lack the resources to relocate and access alternative options. Sometimes people would be displaced due to lack of water as well. As Radha, who has been residing in a water-insecure area for a couple of decades mentioned:

> Purulia is hot; it comes to 50C when ponds dry out fully. Every village has faced water problems here for around six months. So, in half of the year most of the people in Purulia have water problems. There is no farming. For instance, we go to pond locations during winters, but it dries up during summer. Now, I have heard that it only flooded Purulia once in 1993 when the Kansabati river overflowed. But mostly, Purulia is drought prone.

> Often people in the villages migrate to nearby towns or if there is a village that has water, they would carry the water in their cycles/bikes.

Radha described the plight of the people in hot weather and drought-prone conditions where water sources dry up during the summer months, leading to severe water shortages and forced seasonal migration and displacement. Participants also indicated how they are dispossessed from water sources not only seasonally but on a daily basis as well. Asif, who has been living in a water insecure area for nearly 50 years explained:

> There is a tap near our house. So, on a daily basis we go out at 8 am to fetch water because that is the time the tap has running water supply. So, we tell others waiting in the line to not fetch more than one bucket at one time so that everyone in the locality gets their fair share. Sometimes there is a commotion when people would take out three-four buckets of water for their needs at one go.

Asif mentioned how dispossession from continual supply of water (despite having a tap near his house) due to scarce allocation of water infrastructure and resources often led to restrictions around drawing water to meet needs of the community. In other words, by focusing on water supply infrastructure, Asif made visible how intermittent water supply leads to disputes around the availability and distribution of water within the community. Research participants unceasingly highlighted how daily water drawing chores become a seasonal problem and more concerning during drier summer months due to limited water supply. For instance, Moina residing in a drought-prone village (also impacted by groundwater contamination by fluoride) in Purulia, mentioned how inadequate water infrastructure and an ineffective water governance in her community has remained a constant and long-standing problem that is aggravated during the summer months:

> Our problem worsens during the summer months. Most of the time, the taps are out of water for two to three days. During that time, we rely on the pond water. This kind of problem of water in this area lasts for two-three months in my community. Also, this is not a recent problem. But somehow the situation hasn't improved.

Similarly, Alo (residing in water insecure area in Purulia) indicated how a scarcity of water in her village in Purulia led to the implementation of the strategy of separating water sources (for human and non-human use and potable and non-potable [such as for bathing] use) needed for meeting basic daily requirements for maintaining health. This separation also made water drawing a time-consuming process with the burden of fetching water falling on those who already have limited time and have so many things on their plate.

> We use this tap water for drinking and cooking. For cleaning and bathing, we use pond water. We have goats in our houses. They need water too. The problem with water is that there are these separations between what kind of water one can use for a specific purpose. For drinking water go to this source, for bathing go there etc. It takes a lot of time. Also, how can you bathe in filthy water? Recently, there has been an increase in tube wells in our area because the village council gets a certain sum for sinking tube wells. So, people collect water from wherever is convenient and near despite toxin levels which change with seasons, and we sometimes do not know about the level of contamination as well. Survey results are not always shared with us. During summer, the problem of water availability starts. We get less water because of less water from underground. The line also increases, increasing the wait time.

Here, Alo also indicated the challenges she faces regarding water access and the various nuances, complexities and inconveniences involved in using different water sources for various

purposes. She also mentioned how marginalized communities are often dispossessed from access to accurate health information (such as knowledge around levels of contamination, locations of contaminated water sources), which exposes a population to contaminated water. For instance, research data that emerged from Purulia often indicated how the local communities residing in water insecure areas are dispossessed from knowledge about the toxins (such as groundwater contamination by fluoride) affecting their communities. Consider the following excerpt from a health message delivery/IEC session organized by the NGO:

> Community member attending the session: I am not able to locate some of the tube well and tap locations for fluoride contamination you mentioned. Is *Abhijaat Shangha* a club? Is it in Nadiara? Nadiara is a large village. Is it near the health center?
>
> Sumon [NGO Employee]: I think it is near someone's house. Is there someone else from that village? We got the data from *Jol Doptar* [Water Department]. I will keep the names of the places with the madam in the Panchayat office [village council office] for the location for your reference.
>
> Another community member attending the session: Also, where is Puja store in Nadiara? Is it near the shiv temple?
>
> Sumon: We do not have a hard copy of the list of contaminated water sources. We will leave the list at the panchayat office sometime soon so that you can all know about all the contaminated locations. Again, we got the data from the *Jol Doptar*. We do not stay here so we do not know where these places are. Okay? We will leave the data so that you know the names of the locations.

This dispossession from information around toxins reflected how the health interventions created and/or contributed to existing health information vacuums and became spaces of

exclusion. In other words, conversations like this show how communities that are disproportionately affected by groundwater toxins and health hazards were often marked by inaccess to the information and resources necessary to address these environmental health issues and advocate for just policies and interventions to address the environmental health issue. Also, in the context of the above excerpt, failure to share specific locations of toxins and contaminants not only highlighted the lack of expertise of the NGO workers employed by organizations sponsoring the health interventions, but also how it could further contribute to health information disparities.

Along with dispossession from health information, participants mentioned how they are often dispossessed from continual supply of water daily and seasonally significant implications for the community's well-being and daily life. For example, Asha, residing in a flood-prone and arsenic-affected area in North 24 Parganas provided the following account:

> There is only one tap in this locality. There is a minimum of fifteen minutes to wait to fetch water. So, a fifteen-minute wait after walking to the water points in the morning and evening at times when the tap has running water. Thus, you come to know that there is not enough drinking water in this area for everyone. Moreover, in the monsoon sometimes the tap goes underwater. Then you have to walk extra till Thakurtola to fetch water from there.

The account provided by Asha highlights the issue of water scarcity and the challenges faced by individuals residing in flood-prone and arsenic-affected areas, particularly in North 24 Parganas. The lack of access to a continuous and reliable water supply has significant implications for the community's well-being and daily life. Moreover, in many cases disruptions in water supply occurred via water plants that were installed to make safe water accessible to the community

members who went out-of-work due to voltage issues. Radha said, "Many a times the water plants that are installed for the communities are not in working conditions due to voltage issues in the area and regular load-shedding." Thus, interventions in water-insecure areas are simply not a matter of installing water plants, but also developing the necessary infrastructure and systems to support their continual operation.

Not only did research participants talk about dispossession from homes and safe water sources, but also from fair income that affects procurement of food required to maintain health. For instance, Mithila, a cleaning worker I encountered at a village council (for one of the IEC sessions) office said:

> I earn Rs. 2000 [approx. $25] per month. I have to walk to work. Because I do not have spare money to spend on travelling. So, I walk daily from home to work. Where will I get the money? The people in this office trust me a lot. They have given me the keys to the office as well. This also means that I must come every day. I am the first person to come to the office and the last person to leave, open the gates and then clean the whole two floors every day. I get such little money in return. With such little money you struggle with feeding your family and taking care of medical expenses.

Mithila highlighted how the systemic inequality (such as low wages, long hours) at her workplace dispossesses her from taking care of her and her family's health and well-being. While speaking about feeding her family in answering my question about what she likes to eat, Mithila mentioned, "We do not have any preference. We eat whatever we get. Most days we eat rice with salt and green chili, try to stay clean, try to keep the house clean and also the surroundings as we are told by *dadas* [NGO employees]." Here Mithila connects her low wage with barriers to access to nutritious food.

Indicating the structural failures around food insecurity, she added that she uses her ration card issued by the Government of India to access subsidized food grains but indicated its limitations. Mithila explained to me during our interview and also spoke about sharing this with the NGO workers: "On a monthly basis, we get 250 gms of rice which is not enough for a family of five. That is the reason we need better work and pay. That is the reason why I am ready to work and do any type of work that pays well." In fact, research participants who regularly mentioned job precarity also spoke about being dispossessed from stable job opportunities. For instance, Arul, who is a landless seasonal farmer and temporary sewing worker mentioned:

> We started working as tailors in April. This is the month of June now. We still have not got our salary. We still do not know how much we are going to get paid. We have to complete 8000 school dresses before we get paid. To do this job we took money from a local person to buy this sewing machine for stitching the school dresses. We can only repay him once we get our money.

Thus, Arul, I argue, articulated a perfect example of necrocapitalism, I noted in one journal entry:

> The sewing work is because of the partnership between the gram panchayat [Village Council] and an international nonprofit [for town twinning project]. The women sewing workers who also work as seasonal landless farmers mentioned that they started working in April and do not even know how much they are going to be paid for the labor they put into making school clothes for children (also, the children in these schools are already outside the system because these schools in low-income and minoritized communities are not affiliated to any board of education in India such as Madhyamik, Madrasah Education, ICSE, CBSC). Arul and others like her who are already caught in broader

> structures of poverty, are exploited for being poor (poverty exacerbates their need to take up any job that is available), they are dispossessed of her right to earn a sustainable living, while their bodies and labor serve as conduits of capital accumulation. Capital accumulation in this context thus comes at the cost of marginal bodies, via the death of marginal bodies, such as Arul's.

Caste as an Inherent Part of Dispossession and Displacement

The research participants for this study routinely indicated how minoritized castes with low-income backgrounds are often at the heart of the problem around human exposure to groundwater contamination with toxic elements. For instance, Joydeb, an NGO employee, who has been working around groundwater contamination remediation efforts for around nine years, gave a brief account of the communities he works with:

> I would say Parui Para [flood-prone neighborhood in Dakshin Chatra North 24 Parganas; affected by arsenic contamination of groundwater] has low income and minoritized caste families. Parui means fisher. There are also a lot of immigrants from Bangladesh. If we talk about health awareness around groundwater contamination, we have not reached out to a lot of people because we are doing awareness interventions in pockets.

Joydeb indicated how the social structure of caste and class are a given feature of who is exposed to toxic groundwater. He mentioned how limited intervention efforts in these minoritized communities causes inaccess to safe water information even though these communities might be situated at the core of this environmental health hazard. Joydeb's quote also indicated how those who are at the margins experience double dispossession. For instance, not only are those from minoritized castes dispossessed from safe water sources but also

dispossessed from pertinent health-promoting messages/information. Another NGO employee, Jibon, who has been working in the water sector for more than two decades noted:

> Most of the families here belong to ST [Scheduled Indian Tribes], followed by SC [Scheduled Castes] groups and Muslims. They are from low-income backgrounds working mostly as daily laborers in farmlands, construction workers, do fishing and work as tailors. We have collected a lot of data from Adivasi Para [neighborhood where adivasis/Indigenous people live]. Our data have indicated that the monthly income of these households' range between Rs 2000 [approx. $25] and Rs 10000 [approx. $130]. We have surveyed 47 households here; each household has eight people on average. Also, a lot of the people work as migrant workers in various construction sites in Kerala and Andaman to earn a living.

Jibon explains how even after so many years the problem of access to water persists in minoritized caste communities. I referred to my reflexive journal where I mentioned about the cycle of groundwater contamination continuing because of the population it affects. I wrote:

> After my Day 1 of fieldwork in Purulia today, in the evening as I was having *cha* [tea] at the NGO field office with other NGO employees. Suman, who is the most senior employee in the field office, asked me about my initial observations. When I mentioned that my initial observation is that groundwater contamination in Purulia mostly impacts minoritized castes, the NGO employees pushed back. One of them mentioned they also have problems accessing water in their home in Kolkata. So, access to water is not necessarily a caste problem. I mentioned the demographics that the NGO employees shared with me (including caste and income backgrounds) in the morning before going out to collect data/stories. I mentioned how caste backgrounds and poverty might be

affecting the communities more severely than people who are economically well off or have caste privileges. To this they mentioned that they have never looked at this problem from a caste perspective.

The above reflexive excerpt highlights an ideology that is embedded in the "I don't see caste" or "we are all equal" worldview. And what is problematic in this worldview is that it invisibilizes the problematic caste structure and how such structures continue to oppress the historically disenfranchised groups. It normalizes the displacement and dispossession of minoritized castes from safe water sources because access to water is a "universal" problem affecting all of us (even those living in a metropolis that has piped water systems).

Living precariously at the intersection of inclusion and exclusion, Amjad, who regularly participated in the health interventions designed for community members, spoke about his being doubly dispossessed. He said:

> One of my problems is that I need help with building my house. During the summer when it rains it doesn't cause any trouble as the water in the house dries up. But during the monsoon this house becomes unlivable. I have a lot of financial problems. If I get some financial help, it will be helpful to build a *paka bari* [proper house]. My elder son earned his diploma for which I had to shell out 2 lakh rupees [approx. $2500]. I work as a farm laborer and took advance from my *babu* [farmland owner]. I am yet to repay the full amount. The income that I have is very little. Last year during the rainy season, I had a serious health issue and was admitted to the hospital. My son who works in Kerala gave me the treatment money of Rs 15000 [approx. $183]. He has his own life and family. It is unfair that he had to bear that cost.

Amjad described his complex and difficult situation of how he is doubly dispossessed from financial security and safe housing as his current house is not suitable for living during the monsoons. The financial burden of paying for his son's education by taking up loans and his own medical expenses, while also working as a farm laborer with limited income, his problems get compounded in multiple ways. There were also times participants indicated their concerns with the intergenerational cycle of dispossession. For instance, Majhi mentioned, "Sometimes the rain here is below average, and we do not have any irrigation projects here which makes the life of a farmer difficult. My father and grandfathers were all farmers. We are a poor family. My son is in school. I hope my son does not end up becoming a farmer like me." Majhi gives us an idea about how generations have struggled with farming due to inconsistent rainfall and lack of irrigation projects and were thus dispossessed from fair income opportunities.

Narratives of research participants presented in this chapter thus far are a window into how minoritized caste and income backgrounds spoke about important structural issues leading to multiple forms of dispossession and displacement, thus creating a divide between which section of the society is dispossessed and displaced and which section is free from such systemic violence. Research participants for my dissertation project spoke about multiple forms of dispossession (from safe and continual water sources, work, information/health resources etc.) and displacement (from neighborhood, home, communities, safe emergency shelters etc.). This kind of dispossession and displacement is rooted in practices/rationalities of structural (e.g.: caste, class creating a divide between who is dispossessed and displaced and who is not) and discursive/epistemic violence where the group that is dispossessed and displaced is also decentered from knowledges around toxins and global-local spaces of designing/manufacturing health interventions. In the next section of this chapter, I discuss how the heterogeneous

communities at the heart of the problem of water insecurity also experience structural violence as a phenomenon.

Heterogeneous Communities and Structural Violence

> Every man who lives is born to die," wrote John Dryden, some three hundred years ago. That recognition is tragic enough, but the reality is sadder still. We try to pack in a few worthwhile things between birth and death, and quite often succeed. It is, however, hard to achieve anything significant if, as in sub-Saharan Africa, the median age at death is less than five years. That, I should explain, was the number in Africa in the early 1990s, before the AIDS epidemic hit hard, making the chances worse and worse. It is difficult to get reliable statistics, but the evidence is that the odds are continuing to fall from the already dismal numbers. Having made it beyond those early years, it may be difficult for us to imagine how restricted a life so many of our fellow human beings lead, what little living they manage to do. There is, of course, the wonder of birth (impossible to recollect), some mother's milk (sometimes not), the affection of relatives (often thoroughly disrupted), perhaps some schooling (mostly not), a bit of play (amid pestilence and panic), and then things end (with or without a rumble). The world goes on as if nothing much has happened. – Amartya Sen

Sen wrote this in his Foreword for *Pathologies of Power: Health, Human Rights, and the New War on the Poor*, by Paul Farmer. Sen situated Farmer's work within the larger context of social justice and human rights in addressing global health disparities. Indicating that human health is an important component of human development, Sen mentioned that the global health disparity situation might vary from one place to another but "unnecessary suffering, debilitation, and death from preventable or controllable illness characterize every country and every society,

to varying extents" (Farmer, 1999, p. xi). Sen argued that to understand the complex realities of global health disparities that are situated at the intersections of power and health, we need to understand the social and economic conditions that leads to extreme human suffering and decides "who will suffer abuse and who will be shielded from harm" (Farmer, 1999, xiii).Structural violence is built-into social, political, and economic systems which makes the marginalized sections more susceptible to avoidable illness, suffer and death (Farmer, 2004).

In this section of Chapter 4, I foreground the localocentric articulations, field notes (written, and visual/photographs) and reflexive journals around the heterogeneous nature of communities impacted by groundwater contamination in Purulia and North 24 Parganas and how structural violence is central to determining who has the higher chance of getting affected by exposure to groundwater contamination and who is shielded from toxicity.

While collecting localocentric stories highlighting local lived experiences, I often reflected on the heterogeneity of the research participants who live in water-insecure and environmentally sensitive areas I covered as research sites. For instance, I took extensive notes and wrote journals on how the communities are different in terms of family structure (number of people within each family, roles and relationships etc.), various minoritized caste and religious backgrounds (Indigenous, Muslims etc.), and class (size of garden and land, number of rooms, roof type, ability to maintain domesticated cows, goats, pigs, chickens, ducks etc, ability to work). For instance, one of excerpts from my reflexive journal read:

> Sitting in her courtyard, Asha mentioned that there were 17 people in her house including her, her husband, their three children, father-in law, mother-in law, two brothers-in-law and their wives and their six children. She mentioned how they lost one of the children to an unknown disease. She also mentioned purchasing water is often framed as a suitable

choice for those "at risk" and how it is not possible for her to buy packaged water for her large family despite the non-packaged water that is available being contaminated and insufficient. Many research participants shared their objective truth around difficulty in buying water for consumption because of the number of family members. For example, Jaba, who has been living in the water-insecure area for around 10 years now, mentioned that they initially started to buy water from private vendors so that they do not get any serious health problems but had to stop due to high prices. Jaba mentioned that buying water was causing economic hardships as they were spending a significant portion of their family income on purchasing water for drinking. She also mentioned how people in her community depend on the nearby pond for drinking water, which puts them at risk of serious diseases. She mentioned people there often have high fever, vomiting and diarrhea due to drinking dirty water.

Most often when participants were sharing their stories with me there used to be an NGO employee always present while the conversations were going on. Initially I thought of ways in which I might ask them to leave while we (me and research participants) were speaking. Then I thought I might come across as rude if I asked them to leave. Then I started to see how the NGO employees (who are ideologically very different) were adding to the interviews by asking all sorts of probing questions that was making the data more nuanced as the community member talked back to some of the problematic things that they were being told. I think the best interview questions came from the NGO employees who have worked with the communities for years.

During one such conversation, Fulmoni, a research participant residing in a water insecure area, mentioned that boiling large amounts of water is not always possible for her as she has no gas. To this, Jibon, an NGO employee present during the interview, probed, "Why don't

you boil water? Gas is free now for women from below poverty line families under the *Pradhan Mantri Ujjwala Yojana* scheme." Fulmoni corrected Jibon and said:

> We got only one free cylinder. You will have to shell out around Rs 600 [approx. $7] per month to refill those cylinders. Our household income is Rs 5000 [approx. $ 61] per month. How can you afford to refill? Even though you know you cough all the time and know you are exposed to arsenic through burning cow dung for cooking, what can you do?

As Jibon focused on individual responsibility of boiling water obfuscating the need for investments in water infrastructure (piped water, water treatment plants etc.), Fulmoni explained how policies and program implementation around access to clean cooking fuel are not always helpful in the long run for people with lower economic status. Fulmoni spoke about the larger issues around a population getting excluded from such schemes due to lack of sustainability and long-term support which causes financial burden and forces them to revert to cooking fuels that have negative consequence on her health. Fulmoni also mentioned that since she has a cow from the cow for poor scheme, it is an additional headache around getting water for the cow. To which the Jibon (NGO employee) replied, "Why did you enroll in the program then?" rather than questioning the problems with access. When I expressed my concerns with the enrolling comment, Jibon answered what I heard so many times from various NGO employees so many times, "They have so many problems. It is best to give them a questionnaire or deliver your message and leave the site." My probes around how leaving the sites eases the communities' plight were at times met with toxic aggression such as, *"Apnake bhoi dekhachhina kintu oder joto ghataben toto apnake pagol kore debe"* which translates to "I am not trying to scare you but the more you get involved it becomes more complicated." While I was going to another person's

house for my interviews, Jibon who was accompanying me, also mentioned how people who can afford to have domesticated animals could not afford to drink safe water. Jadu, an NGO employee who has been working in the water sector for two decades now mentioned:

> During the implementation of the kitchen garden project, we encouraged people who already have ready land available around their house to participate in the kitchen garden project. A lot of people were left out because most of them do not have the land required for the garden.

Here, Jadu highlighted how the one-size fits all interventions fail to address the local (and multiple) needs of community members. Based on my conversations with Jadu, who suggested I ask how much extra money community members make by selling the vegetables they grow from their garden, I understood that since most of the gardens are small in size (see Figure 6), it was not possible for the participants to earn profits as claimed by Jadu. Sarojini, who could participate in the kitchen garden project said: Sarojini, who could participate in the kitchen garden project said:

> In my small patch of land, I could grow bitter gourd and bottle gourd and they are healthier because we use organic fertilizers from the compost pit that the NGO workers have shown create. But I do not have extra produce that I can sell in the market. Some of those participating in the kitchen garden project mentioned that they preferred to share the extra produce with others in the community who do not have the land to grow vegetables. Many of them also mentioned how not having a proper storage facility forces them to share their produce with others. They also would sometimes exchange/barter the vegetable for some milk, eggs etc. Thus, though the communities might be heterogenous with heterogeneous needs, the nature of violence that they faced was similar. In other

words, owning or not owning a patch of land does not guarantee who will be shielded from the harms of water toxicity in communities that are embedded in broader structures of poverty. Also, though the communities are not monoliths, the violence of not having a safe drinking water source in their homes, which forces them to rely on unsafe water, is a common thread that binds them.

Several research participants residing in water insecure communities wanted to know about my experiences with water. In one of the entries, I noted:

> One of my participants took me to the backdoor of their sewing office as she was giving me a tour of their workplace. Pointing outside she asked, "*Didi* [meaning elder sister], is your city this beautiful?" I replied, "Well, I haven't seen red earth in my city. Nor have I seen so many trees everywhere I go. Purulia is beautiful. I feel so connected to nature here.

Figure 6. Sarojini's Kitchen Garden

here." She continued, "Yes, it is beautiful. But there are droughts here. I also wish we all had work here so that we did not have to worry about what our children would eat. Do you have problems like that where you live?"

> From the moment I was in Purulia, as a cultural outsider who speaks a variation of the same language and is from the same state, I have been romanticizing Purulia. Rakhi *di* made me think about what beautiful places might hide? The importance of thinking about what lies beneath the apparent surface. The importance of speaking about the need to shift the attention from the surface-level to the core…

This returned gaze ("Yes, it is beautiful… Do you have problem like that where you live?") enabled me to see the violence around how resources are not evenly shared and there isn't an equitable or just understanding of history and culture. The research participants residing in water insecure areas often mentioned that they were sharing their stories because, as Rakhi mentioned, "People will listen to you because you have money. People do not listen to us because we do not have the money." Reflecting on my positionality, the point is then in telling me that with your unearned privilege comes the responsibility to draw attention to unearned oppression.

Another commonality among the research participants is that none of them residing in water-insecure communities had a basic toilet and safe water source inside their homes. Atmaram mentioned that one has to be lucky enough to have access to water:

> We get water from the tap. The water quality is good. That is the reason why everyone in this locality uses that tap. So, the problem is sometimes we do not get enough water from the tap. We try to buy water that we use for drinking. Each barrel of 20 liters costs Rs 15 [.18$]. We are a family of two now since our sons work in Kerala. So, we use one barrel

> for two weeks. That is enough for two people. But there are a lot of people in this locality who cannot afford to buy water. Not everyone is lucky to have a son working. Water is life. It's like oil to an engine. We draw our water from the tap. The problem with water here is that there is only one tap. So, a lot of people are forced to buy water because of no other sources. A lot of people also do not have money to buy water, so they drink whatever is available without thinking much about the quality. I mean people have to drink water, right?

Again, though Atmaram is among those who have the financial resources and can afford to buy water, he is also caught in the structural violence of not having "enough" water to drink.

Structural Violence Perpetuating Negative Morality

Research participants such as NGO employees often employed a moralizing discourse pathologizing the community at the heart of the problem of water insecurity and inadvertently positioned them as morally inferior and themselves as morally superior to the community.

In my field notes I wrote:

> Jibon said that people who do not have any domesticated animals are usually the poorest of the poor. Then come people who have pigs. Some of the participants I interviewed in Adivasi Para have pigs. Usually the Indigenous people who raise pigs in a common farm for income. Then there are people with chickens, ducks, and goats [see Figure 7 and 8].

According to Jibon, the relatively rich villagers could afford to maintain cows, ducks, chickens but lie about not having enough so they can earn instant help. This labeling of negative morality can be harmful as it further alienates and marginalizes the already. Jibon shared:

> You saw some of them have ducks in their homes. They often lie saying that they sell the eggs when in reality they eat the eggs themselves twice a day. They lie saying that they

> don't get to eat so that they get instant help. Some of them are a little richer and will have a couple of cows as well. They have money to maintain the cows. Then they say they do not have the money to drink the milk!

Like Jibon, Meena [NGO employee] mentioned:

> They misuse government funds so much. The Modi government has done and is doing so much good for this country and for the poor especially. He set up the Animal Husbandry Infrastructure Development Fund for economic development and jobs. Some farmers would take that loan and use it for non-animal husbandry purposes. They will use it for marriage, medical expenses, clear other loans etc. When someone from outside suddenly comes to inspect, they would deceive that person. Point at a nearby field, at someone else's cow and say that their cows are grazing in the field.

Using animal husbandry funds for non-animal husbandry uses might be perceived as unacceptable and deceitful by external actors but might serve a meaningful purpose within the local context. Understanding that local context might lead to effective community engagement by shunning a top-down approach to development by which external organizational actors impose their own values/worldviews/beliefs onto the community. In a more collaborative space, recognizing and respecting the choices exercised by the community is an important step in understanding that every community is different and has their own unique cultural practices, beliefs, norms, and values, and that needs to be supported in achieving the community's goals and priorities. In another example, Sumon articulated:

> The community members abuse government funding. The *Deen Dayal Antyodaya Yojana* is a huge scheme. A part of this scheme is targeted towards getting the local women from SC and ST [so-called low caste] households out of the poverty line by providing them

training to earn a livelihood and save money. This poverty reduction plan is there so that they do not have to depend on agricultural work. They take the loans and use them for non-economic activities and then blame the government for their situation not improving.

Figure 7. Domesticated Pigs in Adivasi Para

In one journal entry. I wrote:

> This clashing of worldviews is interesting because of multiple reasons. First, the women who take out the loan use them depending on their needs. They don't receive the loan passively. In fact, they prioritize what is important to them. For instance, using the fund for health emergencies is not misusing the fund. Second, people who face food insecurity issues on a day-to-day basis would have a hard time saving money for future use as many of my participants already mention that when one is poor, they think of the next day and

how they will get through the next day. Third, we all have some kind of knowledge. For instance, the women have the knowledge around where to spend the loan money. The NGO employees have the knowledge around the goal and purpose of the *Deen Dayal Antyodaya Yojana.* If that goal is not met it is important to listen to the "why" from those for whom the scheme was designed. Last, I am glad I get to speak with the community members as well as the NGO employees. It helps me to understand some of the discursive tensions.

Figure 8. Research Participants Raising Birds for Income Generation

Commonality of Violence of Local-Global Health Interventions Reproducing Health Inequities

I received my letter of support from the NGO who helped me to recruit participants in April 2021 and it was logistically possible for me to travel for my fieldwork in June 2022. After I reached Kolkata to finally begin my fieldwork, it was communicated to me that I needed

additional approvals from the international funding agencies working in these spaces. Through various phone calls and email messages it was made clear to me that my work should not harm their projects in any way and that I needed to share my interview protocol with them. I noted this in my journal:

> My fieldwork has been frustrating, creative and an on-going process of learning. I had to get additional approvals from an international funding agency and an international nonprofit for speaking with the community members. I encountered a variety of gatekeeping though I already had a letter of support (via email) from a local NGO. This was an interesting process as I was trying to proceed. This approval process helped me in arranging time to conduct participant observation in the local NGO office and a couple of focus groups with local NGO workers. The observation helped me to understand how they talk about the problem of groundwater contamination in their weekly meetings and what kind of solutions they propose for the community.
>
> Regarding gatekeeping, a commonality between different agencies/organizations was a request that my fieldwork must not harm their respective projects in under-resourced communities. They were centering/highlighting the projects and the work that they do in these communities. I did not record my phone conversations with the gatekeepers because I thought they might feel odd and might not give me access to the project sites. However, I have email chains that somewhat helped me to document and understand the 'why' question. I plan to interview the gatekeepers at the end of my fieldwork (if I have the time) to try to dig in deeper regarding what kind of risks they perceive from research that might impact their projects/interests.

In one of the email conversations, the local project manager for an international funding agency clearly mentioned that the various projects that they have in these water-insecure communities "must not suffer." There were numerous emails that I had to craft in order to get approval so that I have access to the community members. A sample of an email is added below:

Thanks for taking the time out to read my previous (long) email and raising important questions. I have responded to your questions/comments below. I would be grateful if you let me know if they make sense to you.

Comment: I would like to have more clarity on purpose/objective of your visit to the XYZ [anonymized for privacy] supported project areas.

Response: The objective of my visit to the XYZ supported project areas is to document how multiple stakeholders (such as individuals residing in areas affected by groundwater contamination, CHWs, NGO workers) talk about the overlap between health, water contamination and health programs/remedial interventions. The health narratives that emerge from my fieldwork will be helpful in centering how local communities talk about the environmental health issue of groundwater contamination affecting their daily lives.

Comment: What specific activities would you be taking up in the field.

Response: While in the field, I would be taking up specific activities including participant observation approx. 100 hrs. (such as how does the participatory mapping session begin? How many community members participate in these sessions? Group interactions.) focus group discussions or in-depth interviews (depending on which method the participants prefer) with

approx. 40 participants (depends on data saturation) and collecting inexpensive or free artifacts (health flyers or any item that is deemed locally relevant).

Comment: Your role vs a vs that of the project team.
Response:Regarding my role, I will be entering the field as an academic and PhD scholar conducting fieldwork and the data collected during my fieldwork will be used to complete my PhD dissertation.

Comment: How would you be reflecting your field activities in thesis documentation. I ask as we have strict rules regarding citing XYZ in any documentation/report work without permission.
Response: Pseudonyms will be used instead of real names in order to keep data confidential and local
participants (CHWs, community members) and agencies (such as XYZ, Water Aid) anonymous.
Please let me know if you have additional questions.
Best,
Parameswari
--

As these conversations were going on, I spent most of my time in the NGO office in Kolkata. I mentioned that since I came for my fieldwork, I feel less productive sitting in my home and so being in the field office helps me to conduct participant observation and also get a few interviews with the NGO employees. It is during this time that some of the NGO employees shared their frustration around collaborating with international stakeholders. For instance, Jaya mentioned:

> There are a lot of delays at work. There are six partners working in this space. There is the international NGO responsible for funding, this local NGO for problem identification and proposing solution, Panchayat for land suggestion and initial land approval, PHED for final land approval, an Indian construction company for constructing the water project and an international policy consultancy firm.

Interestingly, the problem identification and solution proposal are left on the shoulders of the NGO and not the community. Jadu, another NGO employee, added to what Jaya said:

> While in the field we are always trying to identify what are the problems the community is facing and map out a solution accordingly. So, you need the support of the people to do this kind of work and people do come and talk to us about their problems, which helps us to identify the gaps and solutions in the report that we prepare and send to the funding agencies. For example, in most cases the community members affected by water contamination have a tendency to eat large portions of rice and not include a sufficient number of vegetables, meats, and fruits. So, we do a lot of awareness generation programs. We share information on what kind of food they need to have in order to boost immunity and stay healthy.

The violence inherent in the awareness generation health program is that even when a community has the knowledge of what food to eat, they can't access it because they don't have enough financial resources to procure healthy food. As Mira, a community health worker, mentioned, "People don't take us seriously sometimes. This is because we ask them to eat pomegranate and fruits when in reality, they are too poor to afford them." Manju, another community health worker, highlighting the gap between health programs and local realities added:

> We have organized health camps in the past. Usually, doctors would come from Kolkata to see patients in the villages. The doctors would examine the patients, write prescriptions, advise some patients to undergo some medical tests, and even share information of the test centers and addresses of hospitals they could go to. But people have stopped coming to these health camps. I would say the health camps are sometimes not welcomed because it is not possible for the people residing in villages to travel to big government hospitals in Kolkata. They have mentioned that they want medicines in the camp. How will you provide medicines without any proper medical examination? They prefer to go to a quack because they don't give you a list of medical examinations the patients need to undergo for a proper diagnosis of the health problem.

Health information dissemination sites also often became a site of erasing local lived experiences. For instance, Suman, who was the most senior and experienced person in the Purulia field office, mentioned this during one health message dissemination session:

> In our survey, we have found that you decide if water is contaminated based on how it looks and tastes, but the PHED does it in a more scientific way. Our presentation that we will show you is based on scientific findings. Now there are long-term, and short-term remedies to the problem of groundwater contamination in your area. We want to talk about the short-term remedies via the kind of food you will need to eat and certain changes that you need to make. You say the water comes out red from a tube well. You say there is earthworm in the water from the tube well. Sometimes what you see can be wrong. Maybe the earthworm came from another source and not the tube well. Maybe it came from another bucket. Or the worms were already in your bucket and did not come from the tap. Perhaps it came from the dirty and muddy surroundings. And you are

saying that the earthworm has come from the tube well. Also, you stand in lines to draw water, maybe the worms come from other buckets that are lined up. So, we need to scientifically assess the water in the lab before making any conclusion and trust the report. That is the reason why we are here. Our presentation is based on the PHED report.

This excerpt highlights how structural oppression is played out in marginal spaces and how it harms certain sections of people by silencing them. First, it creates an artificial separation between scientific knowledge and lived experiences that are scientific and objective as well. It dismisses the scientific truths put forth by the community members. Second, it reinforces the neoliberal idea of individual responsibility, promoted by international funders such as the one Suman works for, in taking care of one's health obscuring the structural injustices that maintain health inequality. Speaking about international collaborators and funders, Jaya added:

> India Aid [anonymized] which is an international NGO, has been working with the Chatra Panchayat for more than 25 years now. They are involved in the Self-Help-Groups of Women for sewing/stitching and tailoring work which enables them to stand on their feet. They are also installing a drinking water treatment plant in Chatra. The operation date is not yet decided. Perhaps the plant will be inaugurated around the end of July or August. This plant will bring water to so many community members. For one year, the international NGO is responsible for the maintenance work and then it will hand over the maintenance responsibility to either the Panchayat or the local community. It has not yet been decided who will be responsible, but the responsible party will also bear the operation cost. It has been estimated that around 500 people will have access to clean drinking water free of cost.

Jaya indicated how India Aid has been committed and involved in Chatra in various developmental projects such as empowering women programs and drinking water treatment plant installation via which 500 people will have access to clean water once the plant becomes operational. But it was not clear who would be responsible and who would ultimately be responsible for the maintenance work and bearing the operational cost ensuring the long-term viability of the project designed for the community's health and well-being. There appears to be a shifting of responsibility from the international non-profit to the local community members to bear the operation cost and maintain the water technology. This shifting of responsibility can be a complex problem because on one hand it might continue to bring significant benefits to the community (as Jaya mentioned in the last sentence) including increased access to clean drinking water; on the other hand the sustainability of the water technology can be challenging in the long run due to availability of funding for operation cost, maintenance expertise and access to spare parts when needed. In other words, it becomes important to acknowledge that systemic inequalities and barriers that can often hinder the ability of marginalized communities to access resources and opportunities for maintaining technological interventions important for the well-being of the community impacted by water insecurity.

Technological solutions when not paired with the structural support to maintain them do not account for the sustainable aspect of the remediation efforts. In the context of India Aid's collaboration work, Jaya added how India Aid is not only invested in the water sector but also in cultural exchange between Herrsching (in Germany) and Chatra (in North 24 Parganas) as a part of their (i.e., the international nonprofit) town twinning project or sister cities project. She added, "They invite their local collaborators from India to visit Herrsching, Germany, to create opportunities to join the conversation around development. They also organize cultural events."

In this case, it appears that the cultural exchange might be more of a symbolic gesture between the Global North and Global South rather than a sustainable investment in transforming real and deeper structural disparities and thus promoting solidarity networks.

As part of its intervention to address water insecurity, Water Aid promotes a kitchen garden project and offers support to residents of water-insecure areas to make vermicompost and sell it for profit in the market. Joydeb, an NGO employee working with Water Aid, stated:

> We go to the community and after visiting different households for three months building relationships and trying to convince them to make vermicompost when they finally participate in making vermicompost so that they can use it themselves and also start to sell it, it makes this work meaningful.

Joydeb presents only half the story here. While making vermicompost might be beneficial for the communities by turning organic waste into a valuable resource and creating job opportunities (see below, the quote by Asif), the process of making vermicompost can become burdensome (for a population marked by scarcity of time) due to the lack of knowledge, guidance and support around how to sell the product. For instance, Atmaram said:

> As a part of the kitchen garden program, I received raw materials for vermicompost production. It is a difficult, time-consuming, and complicated process. Also, you need space for the production process. Initially I thought I would not be able to participate in this program because I was not sure where I would have the space for the vermicompost pit. But I decided on having the pit in the backyard. Now I have so much vermicompost. I am having difficulty selling vermicompost and getting an adequate price. It is not possible for me to travel to distant markets to sell vermicompost. So, I am dependent on the local market. I also do not know where I need to go to find assistance to sell the

vermicompost and earn a profit. If I am not able to sell them in the market, where will I store them?

Asif too says that he does not know what he will do with so much vermicompost [see Figure 9].

Figure 9. Vermicompost Produced by Asif

Research participants such as Atmaram and Asif focused on the potential unintended harm caused by the health interventions designed for marginalized communities. Well-meaning health interventions promote activities such as production of vermicompost or organic fertilizer for kitchen gardens and selling the excess in the market for a profit. But this becomes problematic due to lack of information about the market and access to the market. Labor, time, and money

spent on these efforts then only add to the barriers these research participants face to earn a decent living to stay healthy. Consider the following excerpt:

> Jibon: You can start your compost pit on your veranda. You do not need a lot of space for composting. It is low-cost and will be effective in increasing soil fertility. You can soon start selling compost in the bazaar and have an additional income.
>
> Amol: I can start the pit on the veranda, but my family has not agreed to the idea due to the smell and bugs. Also, vermicompost is a time-consuming process. If my family agrees and I start it, would it be possible for you to come and check or track the moisture levels of the vermicomposting bin even when I am not in the house?

Amol points at the importance of approaching community health development projects (which might have good intentions, such as increasing soil fertility and earning income by selling the fertilizer in the market, as indicated by Jibon) by recognizing that individuals residing in marginalized communities have their own (immediate) needs, priorities, and different ways of cultural life. Here, Amol questions the imposition of an agenda developed by external interventionists (with a persuasive goal) that are not aligned with their living conditions. Research participants in this dissertation project routinely made visible the violence of behavior change health interventions in marginal water-insecure spaces. While the local organizations encourage adopting health behaviors such as making healthy eating choices, and drinking safe water, they inadvertently perpetuate violence as the health interventions are divorced from the living context in which the health messages are being delivered. Often local knowledge is collected to have NGO workers (alone) design the health interventions. Jyoti, an NGO employee, said:

> We drew a social map of the village consisting of important landmarks such as temple, haat bazaar etc. Then identify the water points in the maps. The villagers helped us to identify the various water locations or locations of taps, ponds, water plants. We try to map the economic, social, and food habits. Try to understand what water problems they talk about, for example some said the water level drops during summer which makes drawing water problematic, people mentioned that the level of iron in water during summer months increases with the drop in water table, water quality makes it difficult to cook food. Then we did a KAP or knowledge attitude practice to make people aware of the health problems. We met with the community members and sat with them to talk about the changes/alternatives in habit they need to make to stay healthy.

Here, the local knowledge was taken into account for mapping important locations and important aspects of their cultural lives. But the goal of the mapping session, as Meena said (below) was not aimed at changing broader structural factors (such as ensuring continual supply of safe water, water treatment and filtration); instead, it was aimed at only changing individual habits important to stay healthy. Meena (NGO employee working in Purulia) explained:

> Our goal was to change people's behavior around drinking and cooking water drawing behavior and also not to discard contaminated sources. They can use the contaminated sources for household work. Because changing every water source is expensive, that is why we were told to go into the villages and talk to the people about how they can change their water usage. After this awareness, we did a testing, we stood at the fluoride contaminated sources for three to four hours to see if people were drawing drinking water and then did a survey on people who came to draw water from that source. There were many people who took the survey and mentioned that they are drawing the water for their

> domesticated animals, cleaning purposes etc. This was to gauge the success of the awareness program.

Meena mentions the project's success based on individual water drawing behavior. The health of the community members was clearly not the primary metric to evaluate the project. Below is another excerpt from the public health message dissemination session where Meena spoke about the importance of cleaning hands, utensils, and surroundings with clean water. These are undoubtedly important health information but when delivered to a population struggling with access to clean drinking water, they become meaningless and a waste of their time.

> Wash hands, take water and use soap. Wash in clean water and use clean cloth to wipe your hands. When do you wash your hands? Before eating, after eating, after cleaning utensils, bathing animals, after cooking. Keep your surroundings clean. Cover the cooked food, water. Make sure you wash the bucket for carrying water and cover the water when you carry it from the source to your homes to avoid contamination. Use stale water the next day for other household chores. Try to keep these in mind for your benefit.

Promoting handwashing and other hygiene practices without a sustainable source of clean water might be ineffective. In order to promote good hygiene practices, it might be important to consider sustainable solutions that address water insecurity in marginalized communities (such as access to clean water sources).

In summary, this theme addressed RQ 1: How do international funding agencies, NGOs and INGOs actors communicate about ground water toxicity in two water- insecure rural communities in West Bengal? and RQ 2: How do local community members residing in communities affected by groundwater contamination in West Bengal communicate about their health and overall well-being? The narratives that emerged from my conversations with the

research participants highlighted the human-made structural violence endured by communities that are at the heart of water insecurity. The next theme highlights the localocentric articulations underscoring community responsibility in maintaining good health.

Challenging the Dominant Ideas around Community Responsibility

In this section, I analyze localocentric articulations to present an alternative understanding of community responsibility through challenging and critically comparing the dominant conceptualization of collective obligation. In doing so the local narratives of health and health organizing (by NGOs such as Water Aid) offer a transformative space that challenges ideas of community responsibility and duty prevalent in top-down health interventions. The discursive tensions around how community responsibility is conceptualized illuminated the different worldviews of different stakeholders.

This section is divided into two subsections. First, I foreground narratives that challenge the framing of health as a responsibility of community members. Second, I highlight narratives whereby community members walk away from sites of top-down interventions.

Challenging the Monolithic Frames of Health as Community Responsibility

Research participants routinely spoke about community responsibility in two ways. One, actors from Water Aid spoke about community responsibility in maintaining the health of the community members in terms of disseminating and sharing health information to generate health awareness. In an alternative way, localocentric narratives point to a more complex understanding of community responsibility indicating the need for more nuanced health solutions that transcend health information sharing to create a culture of good health and well-being.

Narratives of recipients of the water interventions often disrupted attempts by NGO workers to make communities responsible for keeping bodies free of arsenic and fluoride. For

instance, Sandhya, an NGO employee, while disseminating an individual responsibility-oriented health messages in a fluoride-affected village in Purulia, urged:

> Please do not leave. This presentation is for you. Your participation is important here. You said you have to travel far to draw water. If you take the contaminated water and use certain measures, you will save a lot of time. These measures are better than falling sick. We are giving you so many options to choose from. Just because we are sharing these methods doesn't mean you will have to follow them. It's up to you. But please stay back so that you know what measures you can take to keep yourself healthy. You can spread the word in your neighborhood as well.

This focus on being able to choose from options reflects the diffusion of neoliberal ideology that celebrates self-help and assumes good health outcomes are a product of individual-level rationalizing (Dutta, 2015). Also interestingly, central to the concept of community responsibility here is that the community members who already bear unequal disease burden and in need of care and institutional support/assistance are seen as responsible for disseminating health information that might be useful for others residing in water contaminated areas. Here, the individuals present in this specific IEC session were seen as actors playing vital roles in sharing information around the various ways to purify water at home. The subaltern groups are "given a voice" (creating a superficial sense of inclusion) within the system as they are assimilated to the existing power structures and expected to disseminate health messages that are created from them by expert outsiders. For example, in the above excerpt "spread the word" is an opportunity to fully and actively participate in the health message delivery programs reinforcing status quo of dominant values and practices often at the expense of true social transformation by addressing the root causes of health disparities and promoting the well-being of marginalized communities.

In my reflexive journal, I wrote about my conversation with Sandhya after one of the health information dissemination/IEC sessions where she mentioned how this sense of inclusion in the form of the number of people attending the IEC sessions become a deciding factor in securing funding from international funding agencies that are often located in Global North.

> "Securing funds is a difficult process. It is time-consuming and frustrating. Our international partners are very slow. But over time you realize that the more people you can show in the photographs, the easier this process becomes," she mentioned. Thus, for the local organizational actor (Water Aid), central to "showing" community-NGO collaboration becomes inherently linked with funding opportunities, ensuring their job continuity within the program, and also maintaining macrostructural status quo.

The community was also often considered responsible for encouraging other community members to make healthy decisions such as accessing available health services. Shampa showed a picture of a bow-legged person and asked the local community members during one of the IEC sessions:

> Do you have people in your neighborhoods who are bow-legged? This kind of deformity can happen due to a number of reasons. It can happen due to calcium deficiency, fluorosis and also polio disease. Now if we do not know what caused the deformity, how can we treat this health issue? In that case, when you encounter people in your village with such deformity, encourage them to go to the health center.

Here the community members residing in water insecure areas were encouraged to reach out to and support vulnerable populations specific needs and without ensuring the community members have access to necessary resources. In other words, encouraging people to visit health centers might lead to better health outcomes but participants also mentioned that structural

factors impact their visit to health centers. For instance, Ali who has been residing in a water insecure area for nearly 30 years said:

> Most days we eat rice and potatoes. We try to eat leafy vegetables. I would say fish and meat are special occasion foods. Eggs have become expensive too. It's Rs 9 per egg. There are seven of us in the family. On a daily basis, people here have a problem eating proper food to stay healthy. Proper food such as leafy greens, fish, meat, egg, milk, fruits. Then there is also the problem of water. You can see these scars from bathing in pond water. Often children here develop itchy patches from bathing in pond water. The health center is far from where I am staying and is always crowded. People fall sick very often here.

Amol mentioned, "You will see there are so many taps in this locality, but where is the water? Most of them don't work." Thus, without institutional support, such discourses of community responsibility might circulate health information, which will be difficult to act on in the absence of needed resources being made available. Shampa continued:

> For the fluorosis part of the problem, when you meet your neighbors talk about the two mitigation processes. One, using alternative water sources for drinking and cooking. For cleaning purposes, you do not need to walk a distance. Use fluoride laced water for cleaning purposes. Two, if you eat nutritious food on a regular basis then these skeletal problems as you see in the pictures won't happen to you.

This helpful information can often lead to exclude the already marginalized who are marked by inaccess to health resources such as nutritious food (that impacts skeletal health), and alternative safe water sources for cooking and drinking. The above excerpt backgrounds the issues around marginalized communities' access to nutritious food that might be helpful in preventing skeletal

problems. It also discounts the fact that many community members in water insecure areas might not have alternative safe water sources for consumption purposes as indicated by participants (see the preceding results section).

In another health information delivery session, Sandhya mentioned similar ideas around what kind of foods the community members present during the public health message delivery program need to encourage others to have:

> Try to include tamarind, black pepper, mint, cilantro, and lemon in your diet. One piece of lemon is Rs. 12 [approx. $.15]. So, if you cannot afford to buy lemon, buy tamarind. Tamarind helps us to get rid of the toxin via urine. We found in our survey that you eat puffed rice often. Add tamarind chutney to your snack. We can prevent this disease by making small changes. Eat protein. Our survey showed you eat mostly rice. You have dal only a few times a week. Try to eat dal every day. You do not have to eat a lot of dal. Just two tablespoons are enough. You grow so much dal here. Try to include them in your diet too. Encourage your neighbors to have a healthy diet as well.

It might be challenging for marginalized communities to make "small changes" as indicated in the above excerpt due to a number of factors, including limited access to healthy food options and financial constraints. Participants of this study routinely shared their experiences around food insecurity (see the preceding sections) which might contribute to creating barriers to making dietary changes. The burden of community responsibility and the obligation of individuals within marginalized communities to work towards promoting and maintaining good health practices, and disseminating health messages can be challenging. Research participants affected by water scarcity often mentioned living in hunger and not having enough to eat three proper meals per day. As Asha indicated:

> We eat whatever we get. Most days we eat rice. When I fall sick in winter and cannot come to work, I do not get paid, which adds to my problems. If I do not get paid, how do I buy food and medicine when I am sick? I have neighbors who often help me when I fall sick. But they have problems in their families as well. They stretch themselves to help me. Is it their job to help me? You can't be fit and come to work every 365 days. Sometimes your body gives up.

Given this context, the responsibility of having and also encouraging others to have healthy diets seems far-fetched. Excerpts like this show how IEC sessions are often out of touch with those who are caught in systemic poverty. Also, most of the research participants in this project are seasonal landless farmers. Participants regularly indicated how the risk of diseases are situated between their socio-economic position in society and the struggle they feel to procure nutritious food that they know is important for maintaining good health. The claim of adequate nutrition affecting both arsenic and fluoride-related disease susceptibility has been corroborated by clinical research. The irony here is that the landless farmers who work to produce food grains often could not access enough food for their and their family's daily consumption needs. Here, the health organizing efforts (via IEC sessions) largely remain silent about the material inequities and structural violence of inaccess to health resources (such as food and water) in the two water insecure research sites. The localocentric narratives highlight the importance of addressing these underlying issues to ensure holistic/comprehensive/effective health interventions by recognizing the complex entanglement of health, access to safe water access, nutritious food, and systemic poverty that create compounded vulnerabilities. Thus, dominant discourses of community responsibility were routinely challenged by alternative articulations.

Most often research participants adversely affected by water contamination spoke about community responsibility as it materialized through collective support for each other in times of crisis. Sarojini who has been residing in a water-insecure area for nearly 30 years mentioned:

> Some of our husbands work as farmers. But most of them are out of work during summer. Or they take care of the cow or goats whatever we have. Goats are important for any kind of emergency. We can sell them for a price, so we have to take care of goats. Last week there was an accident on the main road when a motorcycle hit a child. The child had to be taken to the hospital. Now from where his family get the money for treatment? We all contributed as much as we could. They also sold one of their goats. If one is able to take good care of their goats the weight of the goats would be around 20 kgs per goat and you would sell it for between Rs 800 [approx. $10]to Rs 500 [approx. $6] per kg.

While Sarojini explained how everybody in the community collectively contributes when an emergency situation arises, Ali, a landless rural farmer in North 24 Parganas, indicated help for his family when his daughter was sick came from the community school. “The school she goes to collected funds from other students and the teachers also contributed. My daughter is lucky not everybody has people who are ready to help the poor.” Asan added:

> In general, in this area you will hear from people that there is fever, vomiting, diarrhea, and skin issues. My father was seriously ill last month. He was admitted to the hospital and was on saline solution. In total we had to arrange for Rs 2500 [approx. $31] for his treatment. It was a difficult time for us. Also, my son had an accident at his work site. Other workers at the site arranged for his treatment. Now he is better and working again.

Among a large section of my research participants, collective responsibility also materializes via sharing of resources. As Shibu, a landless farmer in North 24 Parganas said, "Last time I grew pumpkin, tomato, and bitter melon. The pumpkins we grew were big. We shared with our neighbors whose garden died due to their soil quality. They also have to eat."

Shibu's narrative indicated how he tries to include others by sharing harvest ensuring access to nutritious food. Here, by sharing the produce with his neighbors, Shibu not only helps them to eat fresh, values their well-being but also creates a sense of community, commitment, and support by demonstrating empathy and care towards his neighbors who are unable to grow their own food due to soil fertility issues. Here the act of sharing health resources (such as food) becomes a decision for solidarity to alleviate and address systemic issues and common challenges and build an equitable community. The communal sense-making of the urgency to have one's neighbors eat – they also have to eat - is how several research participants inverted the dominant paradigm of locating individual level health behaviors change as community responsibility. Instead, community responsibility was turned towards a more basic structural necessity – the need to eat – in order to stay healthy.

In this sub-theme, I presented the localocentric stories that identified the divergent values in how "community responsibility" is discussed by various research participants in this study. In the next sub-theme, I focus on how community members exercise agency by disengagement and choosing to abandon sites of top-down health agendas.

Agency and Disengagement

A common event in the health information dissemination sessions was community members who were attending these sessions getting up and leaving the site. Shampa who has been working in Purulia since January 2021, mentioned that the health information dissemination

would usually be around one hour but mentioned that sometimes there would be a lot of "hecklers" and "disruptors" in the crowd which made the health message delivery sessions go longer than usual. Sita, who previously worked with arsenic-affected community member before joining the Purulia project, shared that sometimes they would wrap things up in 20 minutes because participants would start to leave and not listen to them. For instance, in one of the sessions Sita spoke about the importance of handwashing and how they would come back again the subsequent week with their handwashing program. As a few of the community members started to leave, Sita urged them to stay back, to which a community member answered, "I do not have a toilet in my house. Could you help me with that?" To which Suman replied, "You will have to understand that are not here to build toilet. We are not PHED. We are the NGO responsible for creating awareness around health." Here, the community members demand that mainstream health interventions engage with them more effectively by speaking with them about the issues that matter was completely silenced. Here the community members demand that mainstream health interventions engage with them more effectively by speaking with them about the issues that matter. Having a toilet at home is perhaps more important than learning how to wash hands to maintain proper hygiene and health. The problem here is around who gets to decide which health and hygiene practices are appropriate to prioritize over the other. In another instance, when Sumon started to share information around the importance of boiling water before drinking, a few of the attendees started to walk out. When he requested them to stay back one of them answered, "It is not possible for us to boil so much water all the time. We have mud stoves. Another group of people who invited us last year gave us similar information and left. Your information is not helpful for us. Why should I be here?." While Sumon's effort was directed towards educating and spreading awareness around the importance of safe drinking water,

community members attending such sessions expressed their frustrations and the underlying practical constraints causing such a response.

Saqib, a Water Aid employee, offered his take on these walkouts during the information sessions. He explained:

> There are many times people have told us that you do surveys but nothing changes. This is because perhaps there were people who came there before us and gave them false hope that after doing surveys, they would have clean water in their homes. But the people who did the survey never came back. So, with us people usually are unwelcoming.

Saqib's assertion alludes to the fact that traditional health campaign messages are often designed by those outside of the community and so-called "experts" and do not take into account the expert knowledge of those who have a very sophisticated understanding of their lived experiences. Lupton (1994) wrote:

> largely regarded as a "top-down" and somewhat paternalistic exercise, in which those with the medical or public health knowledge, whether they be physicians, other health care professionals, or health educators, perceive their role as disseminating the "right" message to the masses for their own good. Members of the general public are often regarded in the health communication literature as apathetic and ignorant, needful of persuasion to change their behavior, resistant to change, obstinate, recalcitrant, lacking self-efficacy, chronically uninformed, and "hard to reach" (p. 56).

I wrote in my journal:

> Every public health information dissemination session feels like a lecturing session with representatives of these health organizations (NGOs, INGOs, government health departments) dictating what local problems are and how to tackle them. This

> conceptualization of engagement and participation in the remediation plans developed for marginalized communities is so patriarchal (not considering diverse knowledge production and various forms of expertise) as it seems to ignore the complexity of the lived experiences of those at the margins. It is also perhaps one of the most interesting characteristic features of neoliberalism, where the focus is not on the unequal distribution of resources (or the polarization of resources due to neoliberal policies), society or institutions, but it is about an individual actor whose lack of a sense of responsibility determines whether her family members will be able to live a life free from fluoride poisoning. This is because the logic of individualism remains largely silent about addressing the socio-economic roadblocks or barriers the community members in toxin-affected communities face.

Health communication messages and interventions should be aligned with or be sensitive to the cultural framework of the targeted cultural members (Dutta, 2008). In the paternalistic exercise of health programs, the power dynamic at play makes visible that those who have a certain kind of knowledge (such as public health knowledge) assume a position of authority over those who are perceived as passive, lacking knowledge or agency, and are erased from mainstream discursive spaces. The post-colonial roots of CCA critiques this imposition of "universal," Eurocentric and Western values, culture and epistemic orientation on marginalized communities erasing their cultural practices and knowledge (Basu and Dutta, 2009). Postcolonial theory interrogates epistemic erasures in dominant configurations of knowledge. What is missing from the mainstream knowledge webs then serves as an entry point for challenging mainstream narratives through engaging with voices at the margins (Dutta, 2008). Consider, for example, the following conversations:

Suman, an NGO employee: You need to take small steps to solve your problem. There are so many people in the village if everyone stores rainwater just imagine how you can take care of your needs. Every drop of water counts. Plus, a lot of you discard stale water. Why do you do that? Don't throw that water away. You spend so much time standing in line. Use it for housework.

Villager attending the health information dissemination session: The problem is storing so much water leads to mosquito breeding.

Suman: How about covering the bucket to prevent mosquito breeding? Also, if you use up that water the problem will not be there as mosquito breeding happens in standstill water. To prevent the stillness of water, sometimes shake the bucket.

Meena, another NGO employee: Also, to prevent mosquitoes you can also do a lot of things such as spreading bleaching powder around the house. Keep your houses and the areas outside your houses clean.

Suman: Everything is in your hands. You need to follow these steps to solve your problem.

Villager attending the health information dissemination session: It is easier for you to say all these. You come and leave. Our plight remains the same.

The above narrative is indicative of the social, cultural, political/power differentials that mark interactions between the villagers and the NGO authorities. Here, "You come…and leave" indicated that the villager felt that local and global actors did not care for their health and well-being. Additionally, the local articulation of, "Our plight remains the same" is essential to understand the importance of creating long-term, structural, and sustainable solutions that are in sync with the needs and experiences of local communities in community-driven development

projects. This means listening to local voices talk back about creating culturally appropriate, and local knowledge-based solutions. Because these projects affect local lives.

In the next theme, I look at how communities at the margins talk back in different ways to local-global structural violence.

Talking Back to Glocal Organizational Actors

This theme: "Talking Back to Glocal Organizational Actors" looks at the localocentric narratives on talking back to dominant articulations of health interventions, questioning the health information dissemination sessions, and problematizing the linear commodification of natural resources. It thus responds to RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

Talking Back to Dominant Health Interventions

A defining premise of my dissertation is that health interventions are more humane, effective, and ethical when they take into account or include how members of the (intervention) recipient community communicate their lived realities. Research participants residing in water insecure areas where I conducted my field study routinely indicated how well-meaning health interventions are often divorced from their local cultural lives. For instance, Togor, a woman from minoritized background, mentioned, "Some of the plant seeds that I received from *Water Aid* [NGO: anonymized] for the kitchen garden project got eaten by rats." To this Jyoti, an NGO employee who was present while the group interview was going on, probed, "Why didn't you buy rat poison from the bazaar?" To this, Togor talked back and said, "They also exist. Why should I poison them?" I wrote in my journal:

Some of the research participants invited me inside their homes which consist of only one room. Some of them use mats as their beds. Also, these houses are often infested by rats as participants indicated. For the conversation between Togor and Jyoti, I sensed some kind of tension. But is it about the rats? Perhaps this was not about the rats at all. Perhaps it was about highlighting the importance of engaging with what is considered "different" and about challenging the patriarchy/interventionist stance that assumes certain health interventions would work best for certain spaces and people. People and spaces are not passive. "Why should I poison them?" seem like a protest against the normal interventionist stance based on unequal relations and domination. "They also exist" statement means that Togor is not a passive victim here. By acknowledging the coexistence of humans and non-humans she teaches that others must learn to listen as she has things to say regardless of whether it is perceived as ambiguous, or contradictory. This also made me think about Spivak's mentioning that the subaltern (which is a structural position) can speak but cannot be heard. Our inability to listen to the subaltern signifies the institutional denial of the subaltern's agency. This specific rat story also made me think of Chimamanda Adichie's, Ted Talk on *The Danger of a Single Story* - how can we be more open to multiple ways of being and doing? In other words, how should our commitment to the democratizing of the mind as a form of emancipation look like in the context of these non-dominant discourses from Global South?

Interestingly, a lot of the NGO employees mentioned how villagers (who receive the seeds for nutritional support in water insecure areas) also sometimes never use them for creating a kitchen garden. For instance, Jamini, an NGO employee articulated:

> For our kitchen garden project, often a few community members will show a lot of interest in our project. Then they will take the seeds from us which we give them free of cost and sell them in the market. During inspection, they will lie that the seeds were damaged due to storing problems, eaten by animals, or the seeds were bad. Later we found from others in the locality that they had taken the seed and sold it for some instant cash and not thought about the future.

Countering Jamini's articulation, Asan (who used to work as a landless labor but was unemployed during the time of interview due to mobility issues) mentioned that "When you are poor you think of instant cash and how you can spend your next day." Asan spoke of sustainability as a daily concern for minoritized communities living in toxin-affected communities, challenging the dominant understanding of sustainability where resources need to be managed to mitigate the future or long-term risks. He also added: "It is true that sometimes the chickens and goats will damage your garden…It is not possible to sit and chase away the animals and birds because we have other responsibilities." Asif mentioned, "Sometimes you cannot maintain the garden because the cows, pigs and goats eat, uproot, and damage the plants while searching for grazing areas. Also, due to storage issues some seeds are eaten by bugs and worms." It is telling how the kitchen garden project for nutritional support in water insecure areas is helpful to address food insecurity and malnutrition by offering communities a way of diversifying their meals/diet (of a population that heavily depends on rice for sustenance due to lack of choice and access). However, research participants state that establishing a successful kitchen garden becomes challenging due to complex rural ecology and the interaction between plants, humans and non-human animals.

Not only for the kitchen garden project, participant narratives also critically examined or problematized the well-meaning water plant project. During a focus group discussion with NGO employees, Jadu, an NGO employee who has been working with the local communities for three years, shared a story about how the Adivasi/Indigenous community protested the installation of a water plant on their lands. He said: "We initially faced a lot of resistance from the Adivasi community in Adivasi Para. They did not want the water plant to be in their crematorium. We had to leave." The sociological and spiritual importance of the crematorium in this Adivasi community was likely not accounted for while mapping the water project by workers employed by a local NGO, which in turn, was likely sponsored by international health promoters.

In other instances, NGO employees routinely stated that community members would often damage some of the newly installed water pipelines, divert that water to collect irrigation water for their fields. Jadav said, "In this region there is an issue of water theft from canals and installed water pipelines. The farmers would install illegal pipes and various other ways to divert the water. There are not enough people in the irrigation department to investigate." Jadav foregrounds the "unauthorized" diversion of a material resource that is an important part of the farmers' lives that backgrounded the structural issue with evenly allocating irrigation water. Amol, who has been residing in a water-insecure community for nearly 30 years, explained: "They divert the water because without water, crops don't grow. We have jute and paddy fields here. Irrigation water is important here for our lives here."

Participant narratives also focused on opposing the violence of behavior change interventions in village action plan strategies that are directed towards a population that are embedded in broader structures of poverty. For instance, the following conversation between Anju, an NGO employee working for the village action project in Purulia, and a woman from

minoritized caste background highlighted how Indigenous people organize alternative discourses at the margins:

> Anju: In addition to fluoride, for the problem of water contamination due to bacteria, please boil the water before drinking. To kill the harmful bacteria, you have no choice but to boil water. While boiling the water you can add lemon or tamarind to speed up the boiling process. This will save you the gas as well. You will see the water tastes much better. Please don't leave [as people started to leave]. We have come here to share information that is important for you. Please stay for five more minutes.
>
> Woman from the minoritized caste group: *Didi* [elder sister], I come from an extremely poor family. It is not always possible for us to boil water before drinking it. We do not have gas in our homes. We have traditional mud stoves.
>
> Anju: Did you not take the free LPG connections under *Pradhan Mantri Ujjwala Yojana*?
>
> Woman from the minoritized caste group: That was not a free connection, *Didi*. The connection was subsidized. After getting the connection, it was not possible for me to buy gas for cooking. Also, a lot of people do not have identification documents. So, a lot of people did not get the connection. What is the use of your information if I am unable to use it?

This excerpt is a testament to how minoritized communities questioned linear health messages that are divorced from the real-life experiences of the communities. By leaving the site of health message dissemination (as detailed in the preceding theme), minoritized communities often questioned the benefit of projects such as IEC sessions that would not directly benefit them or contribute to their collective health and wellbeing. Also, by staying back some of the community members with minoritized caste backgrounds talked back to the ideologies that

justify structural and political violence normalizing inequity. Here is an excerpt from such an exchange between the NGO employees and a woman from minoritized caste background during one of the IEC sessions:

> Sandhya [NGO employee]: It will never happen that our life will be without problems. The solution to our problems is in our hands. You are telling me about sinking tube wells. This takes time. It would be easier to save rainwater, which many of you said you don't. It's not that hard. We won't use it for drinking or cooking, we will use it for housework. You can save a lot of time if you save water rather than standing in line and then using it for housework. Is it a bad solution?
>
> Shampa [NGO employee]: If we can store rainwater in 2-4 buckets it would be an effective solution.
>
> Sandhya [NGO employee]: We can agree that rainfall occurs all the time irrespective of the season. During monsoon it rains more so you will be able to store more water. Is the amount of rainfall not increasing?
>
> Jonaki [villager]: This year the rain has been a little more, but it is not the same every year [in Purulia]. How is this a solution?

Here Jonaki talks back to dominant health interventions by critically engaging and challenging the information around rainfall presented in this IEC session. When Jonaki talked back ("How is this a solution?"), she questioned the effectiveness of the suggested solutions and challenged the monolithic narratives imposed by dominant organizational actors. By doing so she opens up space for a deeper and more nuanced conversation around dominant interventions and potential reevaluation of the proposed solution.

In another IEC session when this similar solution was offered to the community members around saving water, they opposed, saying, "Storing water in the house breeds mosquitoes and other bugs and is not an effective solution." Clearly, a one-size-fits-all approach is not effective in this case. Also, interesting to note in the above expert is that the NGO employees indicated the increase in rainfall pattern in a drought-prone region. In my reflexive journal I wrote, "If such is the case, it would perhaps be more useful for the local-global organizational actors (such as Water Aid, India Aid) to prepare and invest in rainwater harvesting rather than burdening the individual." Consider another instance of resisting neoliberal health messages:

> Meena: If the tap water is red in color. Tie a cloth around the tap so that it acts as a filter. Add alum to your water and always boil water for drinking and cooking. For cooking, boil the water before adding rice or vegetables. Add a little bit of tamarind or two drops of lemon juice as you boil the water for cooking. Did you see it is so easy? It all depends on awareness. Now that you know, try these home remedies. Try to drink amla juice. Anything sour such as lemon, tamarind, Indian gooseberry helps to eliminate excessive fluoride from the body. Use tamarind because they are inexpensive and easy to store. Add lemon to your tea. You do not need to add the whole lemon, just a few drops.
>
> Community member: We drink tea every day and it is not possible to buy lemon every day. You are asking us to add tamarind while cooking food. You can't add tamarind to your tea, can you? All this would not be necessary if you just fixed the safe water sources.
>
> Meena: Fixing the taps is a time-consuming process. That is why we are discussing what you can do to get short-term relief. The taps would be fixed but, in the meantime, it is your choice if you want to follow these steps to stay healthy.

Participants interviewed for this project often questioned the idea of what a healthy choice means. While speaking about their problems related to access to water, food, proper housing, and stable income, they often indicated how health choices are complex and multi-layered. Atmaram explained:

> On a daily basis, I have a lot of problems. My home is a problem. I want to have a proper home with a proper cemented roof. Healthwise, I have high pressure. I take two tablets for gas and pressure. I spend Rs 7 [approx. $.086] plus 10 [approx. $.12] per day. Rs 7 on medicine and Rs 10 on biri. Biri is my medicine. It helps me to release stress and tension. I have loans to repay, feed my family, and my son is unemployed. Are these not a cause of tension?

For Atmaram, biri, which is a form of tobacco, is used to address his mental health issues. By situating himself in the context of his lived experience, Atmaram highlights how an "unhealthy" behavior becomes a coping mechanism for dealing with numerous life struggles and indicates what constitutes a healthy choice is complex and often influenced by a range of cultural, economic, and social factors. These factors were routinely absent in health message delivery sessions and were also routinely brought to the forefront by the community members. Consider the following excerpt:

> Shampa: According to our survey reports, in this village you grow various kinds of pulses such as urad, biuli, kheshari, moong. What do you do with these pulses? Do you sell everything? They are such great sources of protein. Eat pulses two times a day for your health…If you eat healthy you will stay healthy.
>
> Community member: I do not have my own farmland, so it is not possible for me to have pulses every day.

To this Shampa replied, “Eat them every alternative day.”

Shampa’s response erases how accessing nutritious food is a significant challenge in certain communities (who might be involved in food production) due to a range of structural and systemic factors, such as discriminatory health policies and practices marked by limited access to healthy food options. The community member indicated how the focus needs to be on the efforts to address these nutritional challenges which require a multifaceted approach and are not dependent on individual-level behavior change. In the next sub theme, these cultural, economic, and social factors get more nuanced, displaying the divergent values that different stakeholders are embedded in.

Divergent Values on Water and Land

The divergent values on natural resources such as water and land were apparent in the data as stakeholders embedded in different worldviews and knowledge systems tried to make sense of issues around water, non-human animals, and gardens differently. In other words, these divergent values on nature and natural resources were often driven by diverse cultural, economic, and political locations and perspectives. In many cases, these divergent worldviews brought to light a conflict between stakeholders who view water and land as economic resources to be used for the generation of profit and to maintain/sustain local-global organizations, and those stakeholders who view natural resources as essential components of the environment that need to be protected and preserved and shared by humans and non-humans alike. Asan said: “The problem here is there are different water sources for various kinds of needs. Now, people, plants, and animals- everyone needs water. How can you drink clean water and give the animal water that is filthy?

Asan shares a sophisticated understanding of the interconnectedness between the environment and the well-being of all living beings. In a completely unique way, water was also often seen as an economic commodity. The neoliberal commodification of water meant valuing water as a commodity that can be bought/sold for profit rather than as a public good essential for human and environmental health. This ideology stems from neoliberal economic policies emphasizing market-based approaches to water resource management (Banerjee, 2003). As Joydeb mentioned, "We have mobilized a lot of people into buying safe water. But there will always be a section who will not pay for the water they drink. It is extremely hard to change them!" Joydeb articulates a market orientation that means that water is to be bought and sold in the marketplace for a profit. What is more interesting is the focus on the individual attitude and how difficult it is to change rather than trying to change or improve the water system. Thus, Joydeb sheds light on two problems (i.e., individual behavior and structural) that makes visible which problem is prioritized and deemed important to solve and who prioritizes them. Clearly people who are "hard to change" have not prioritized buying water to maintain health.

NGO workers also highlighted a belief system that technology is the cure all for the water issues faced by a section of people. Like Jibon mentioned, "Water technology is the present and future. It does not matter if the villagers believe it or not. It is a fact. If you need drinking water, you need the technology." Here, the statement, "It does not matter…" erases the epistemic orientation of the community members (in this study) around water technology being more important for irrigating lands than for drinking and handwashing. This is interesting because community members in water insecure areas routinely asked why they needed drinking water technology before technology that brought water to their fields. This highlighted the divergence in what kind of water is important to which stakeholder.

Moreover, there were divergent opinions on what kind of contamination (such as fluoride or iron) was present in the groundwater because results from frequent testing were frequently changed and the results were not always shared with the local communities. As one of the community members attending the health message delivery session articulated, "We do not have fluoride contamination here. The water comes out red. This means we have iron. It takes hours to cook our vegetables and rice! We do not believe in your survey reports."

There are also divergent worldviews about how the garden is multi-faceted and important for forging deeper connections with the natural world with other community members, and for managing their food systems versus looking at it as an economic resource for increasing productivity and profit. Sarojini mentioned:

> I am learning a lot from this garden. Last summer I got long bean seeds. But beans grow in winter. The seeds got wasted. Now I have started to preserve seeds so that the garden remains viable for a long time. I am also learning how to preserve seeds.

This idea of garden as a teacher is in deep contrast with garden as a health project that must be carried out without often thinking about the negative consequences due to faulty planting schedules that constrain the plants' possible chance of thriving. Sarojini had to invest much of her time in order to self-teach. In another example, Ali stated:

> This season I have not bought any vegetables from the market yet. The only things I have bought so far are salt, spices, and rice. The garden teaches you a lot. For example, just because you are growing one vegetable this season does not mean that the plant will be alive for all 12 months. If the next season is not for growing eggplants, the eggplant plant will die. Also, the kind of sunlight your land gets decides if your garden grows or not. My neighbors also have a little bit of land where they thought they would do the kitchen

garden. The seeds are free, so it is helpful that one does not have to shell out money to create their garden. But their land doesn't receive sunlight at all. You need different kinds of seed for land that does not receive enough sunlight, right?

Ali elucidated the plight of the people who are left out of planning for the kitchen garden project. He rightly indicated how growing and maintaining a kitchen garden depends on complex mechanisms and an array of social, economic, and environmental factors including access to land, amount of sunlight, type of seed available for free in marginalized communities etc. Ali problematizes the one size fits all kitchen garden intervention that becomes ineffective because program planners assume that individuals residing in marginalized communities have similar kinds of resources. He indicated that more people could be included in the health interventions by centering the needs of community members who are left out of project.

In this theme, I looked at specific ways in which research participants in this study problematized dominant discourses articulated by local-global organizational actors that increases their marginalization. In doing so the alternative discourses opened up spaces for taking about transformative change by focusing on the importance of interventions that better meet the needs of marginalized communities. In the next theme, I look at how community members residing in water insecure areas communicate about solutions at both individual and community levels and speak about the broader structural solutions that are also needed to address the root causes of water insecurity. They thus advocate for equity and justice by recognizing solutions that go beyond short-term fixes and highlighting the importance of engaging and addressing the systemic issues related to access, resource distribution and power dynamics surrounding water insecurity and their plight.

Localocentric Solutions

In this theme, I present narratives that explain how community members residing in water insecure areas configure solutions and exercise agency (navigating and negotiating social, cultural, and institutional structures) at individual and community level and highlight some of the structural solutions that would promote health and well-being. The framework of CCA focuses on the importance of marginalized community members actively participating in defining the problems they face in their daily lives and the kind of solutions they articulate (Basu & Dutta, 2007; Carter & Alexander, 2020; Dutta, 2008; Kumar & Jamil, 2020). For understanding health disparities in marginalized spaces, the CCA calls for centering the lived experiences and perspectives of marginal actors at the center of research, policy planning and practice. An important feature of CCA is problem definition, which revolves around how marginal actors identify and communicate about issues and concerns that are most important to them. Another important feature of CCA is solution configuration, which is about creating and developing interventions and policies that are aligned with the cultural context, available resources, and needs of the community. I analyze the localocentric articulations emerging from precariously positioned community members to offer an epistemic shift around problem definition and solution configuration. Narratives of research participants residing in two research sites in North 24 Parganas and Purulia revealed that they are already invested in individual-level solutions that are relevant to their lives utilizing resources that are available to them. Members from the water-insecure research sites also mentioned the community-level solutions that they configure when problems and emergencies arise. Last and most importantly, community members who participated in this dissertation project also spoke about structural solutions they would need to support their health and overall well-being.

Individual-level Solutions

During visual note taking, I asked participants which spaces/objects/subjects are most important to them currently so that I can take a picture of them. In one story shared, Sitaram suggested I take a picture of his two goats. He mentioned that they had five goats and they decided to sell three to cope with medical emergency bills. The loss of goats puts a burden on his family. I wrote the following reflexive note in my journal:

> Sitaram mentioned that the short-term solution of selling domesticated animals for health emergencies is a common practice in his village. He mentioned that goats are like family to him. So, when he has to sell one for cash, he is in immense pain. I had encountered other participants in my fieldwork who often sell goats, chickens, cows, and pigs due to the high cost associated with medical treatments. Community members are already fighting unjust structures in their own way. But what happens when Sitaram is left with no more goats? What happens to the medical expenses then? Sitaram also mentioned that he is lucky that he can maintain goats but due to a lack of financial support many families can't afford to maintain goats.

During my interview with Asan, I asked, "How do you address your health concerns?" Asan said, "I do not do anything. That is how I solve my problem. I avoid seeking healthcare because I can't afford to pay or bear the medical expenses." Some of the other participants mentioned either the hospitals are too far or that transportation cost is too much for them to afford to go to the doctor. Asan participates in the kitchen garden, so he is included in participatory spaces designed by powerful actors. But he is also excluded from accessing the health care sector. In another example, Dayaram shared:

> My daughter was sick last year. We were saving money for our daughter's marriage. But when your daughter is sick do you think about marriage, or do you think about how to save her with that fund? I also know that everyone has problems but if you do not have money that problem gets intensified.

Dayaram indicated how he already configured a solution (by re-allocating funds and leveraging resources) in the midst of his daughter's illness and financial difficulties. In his solution, he shifted his focus towards the health and well-being of his daughter with the fund that he was saving for her marriage. Individuals like Dayaram, Asan, and Sitaram, residing in the marginalized communities I worked with enact agency by making use of their own assets and knowledge. They exercise agency despite systemic barriers and limited resources by finding ways to address their needs and challenges.

Community-level Solutions

At the community-level, the research participants indicated how they configure solutions when problems arise. Dilip mentioned, "When my son was sick and couldn't go to school for days. The teacher came home to see what was wrong. He then collected funds for his medical expenses." In this narrative, the role of community support in lessening the overall burden of healthcare expenses is highlighted. Ali mentioned that since he has a bigger plot of land for the kitchen garden, he shares his produce with his neighbor who is unwell and unemployed. Also, interestingly, often the community-level solutions stemmed from lack of structural support. For instance, Atmaram explained, "When there is excess produce, we give it to our neighbors who can't participate in the kitchen garden due to lack of land. Now, I do not have a refrigerator. It is better to share. You do not want to waste your vegetables." Atmaram provided an example of how communities address or lessen the burden of food insecurity and access by sharing and

helping in reducing food waste and offering access to organic produce to someone who might not have access otherwise.

Similarly, Sarojini, who suggested I click pictures (see Figure 10) of the figurines her neighbors' children have made, explained that on a daily basis she faces a lot of struggles around accessing resources to maintain a healthy life but the art that the children in her community creates also acts as a therapeutic solution when she feels constrained in life.

Figure 10. Art Created by Children in Sarojini's Community

Sarojini added, "If they were in a good school, they would grow up to be artists that the world will know about." Thus, while the artwork has positive effects on her overall well-being, she

also indicated how access to a "good" school is related to access to opportunities. These structural components are fleshed out in detail in my next section.

Structural-level Solutions

Research co-participants residing in water-insecure and environmentally sensitive low-income areas routinely proposed solutions that are aligned with their cultural lives. For instance, during one of the public health message delivery sessions, one of the community members indicated what kind of water is important for their day-to-day life, "Why do we need your drinking water technology here? We are telling you we need jobs. We need water for our fields which brings food to our table." Ideally, people should not have to choose between what kind of water is important. This quote indicated that the goal of the local-global organizational actors needs to be around finding solutions that can address multiple challenges facing the communities at the margins including safe drinking water and sustainable agriculture leading to stable incomes.

In an in-depth interview Arsal shared his motivation around participating in health interventions designed by local-global organizational actors. He mentioned:

> I am cooperating in the kitchen garden so the NGO might also think of helping me with seeds for large scale farming. That would be helpful. I try to save the seeds from vegetables for future use. There are many steps to preserve a good seed. But for large-scale farming you need different kinds of support.

Here Arsal highlighted how he is invested in seed saving as a way of promoting sustainability but also advocated for resources and different kinds of institutional support he will need for large-scale farming. After the interview, Arsal requested the NGO employees if they could connect him with other NGOs and networks that can offer him the required support.

In one of the group interviews, the participants indicated how having more irrigation projects might be helpful in addressing the problem of alcoholism in their community. See the conversation below:

> Jamuna: I can say another problem in our family is the problem of alcoholism in men in our Bhandar Puara village. The police aren't helpful in solving this issue. They know where the men are purchasing the alcohol from, and they get drunk and that creates a lot of problems in the family. The problem of alcoholism has increased with the increase in the number of liquor stores. The men do not have work, but they have so many liquor stores that make alcohol easily available. The men go out and come back drunk.
>
> Jadav [NGO employee]: Blame the men. Why blame the liquor stores?
>
> Jaba: If we had irrigation water, these men would be busy working. We need irrigation projects, not liquor stores. Without work, the liquor stores are a problem. We blame the liquor store because we know it is the problem. And this is the problem of the whole village and not only in my own family.

Jamuna and Jaba spoke about their concern around the issue of alcoholism and how that affects the village. They also highlighted the need to address the structural issue of lack of job opportunities in their village that leads to alcoholism. Like Jamuna and Jaba, Durga mentioned, "This is a drought-prone region and so if we have a supply of irrigation water throughout the year that solves a lot of our problems regarding income, health and food." Regarding income, Jaba (who also works as a sewing worker) shared:

> Everyone knows the income problems in this village, but nothing happens. This sewing machine is very costly. We had to manage really hard to buy this.
>
> Jadav: Why don't you take loans?

Jaba: How will we repay loans? We started working in May and still haven't got any income.

In my journal I write:

The sewing groups comprising women are also labelled as a 'self-help' group. These self-help groups were created by an international nonprofit that works with the village council. The way I understood self-help groups during my fieldwork is how women participate in poverty alleviation. This is problematic and a regressive approach as it ignores the systems that (re)produces poverty. How does one repay their current loans if they are not getting paid at work? This is such an important question that the community members ask. One that goes unanswered.

With regards to income, Dilip shared, "We need jobs so that we have money. We are open to doing any kind of work. When you have money people listen to you." Dilip perceives access to jobs as being critical for a thriving community. Dilip added, "Poverty also makes you think about how you can adapt to circumstances with whatever you have." This is Dilip's conversation with Jadav:

Jadav: Sometimes, the locals would damage the new water pipelines for drinking water to collect irrigation water for their fields.

Dilip: Sometimes the rain here is below average, and we do not have any irrigation projects here which makes the life of a farmer difficult.

In the above excerpt, Dilip tries to highlight the difference between the terms damaging and adapting. What is perceived as damaging to Jadav might also be indicative of how individuals attempt/strategize to adapt to their circumstances when faced with limited means and resources. Also, interesting to note here is how Dilip shifts the focus on the need for supportive

systemic efforts (such as irrigation projects) as a counter to the discourse on how locals damage water pipelines.

A good section of my research participants went beyond irrigation water; They also stressed the importance of clean bathing water for community members in water-insecure areas to maintain health. Tantia mentioned, "The problem is that there are separate taps for safe drinking water and cooking water. We should have a central tap with safe water for drinking, cooking, and bathing. The itching and skin problems are worrisome." Here Tantia focused on the importance of having a centralized water source that is safe for all kinds of uses and purposes and is critical for the health and wellbeing of the community.

There were other individual vs systemic discourses around solutions that were configured by the community members during the public health message delivery sessions. For instance, one community member said:

> You [referring to an NGO employee during a health message dissemination session] ask to put a bucket underneath all the roof cracks that I have in my home and collect the water to use for washing clothes and cleaning utensils. Instead, help us build a roof so that people don't get sick.

The overlap between health risks and not having a proper roof/shelter is made clear here. Here the notion of individual-level behavior change (by putting buckets under roof cracks) is met with advocating for a more apt structural solution around assistance in repairing roofs (which is the root cause of the problem here) to ensure a safer environment.

In another public health message delivery session, a community member said:

> You are asking me to drink milk tea instead of black tea [without milk]. Milk is expensive. You are asking me to not eat *chanachur* [snacks] because it contains rock salt

triggering fluoride absorption in the body. Why can't you just fix the tap with safe water near my house that is not working?

Here this community member highlights what health interventions need to focus on (such as repair work) to improve access to safe water. In many cases research participants mentioned how lack of stable electricity supply often hinders accessing safe water. As Asan shared, "The water plant near my house was installed is out-of-service. We need a steady supply of electricity here." Thus, in addition to identifying the problems that are pertinent in the lives of individuals residing in water-stress areas, individuals residing in two research sites in North 24 Parganas and Purulia also identified the structural solutions (eg: installing more taps, irrigation projects, government assistance in building roofs, electricity etc.) that would help them address their health needs.

In this theme, I outlined how research participants residing in water-stressed areas articulated the solutions they configure at individual and community level and advocated for structural changes via material improvements. In the next Chapter of the dissertation, I discuss the connections between these narratives and the theoretical frameworks I used in this dissertation project.

CHAPTER FIVE: DISCUSSION

Introduction

The goal of this dissertation project is to record knowledge from below (as a discursive point of praxis[11]) around how individuals residing in two water-insecure areas in rural West Bengal communicate about health and the health interventions they are subject to. These interventions are sponsored by international funding agencies, INGOs and nonprofit organizations and are implemented on the ground by affiliated local non-governmental apparatus. Research participants in these two water insecure areas narrate meanings of health, identify pressing health issues, articulate potential solutions to their health issues, and advocate for structural changes they believe are required to address their unique health needs in ways that bridge disparities related to health and safe water access. This dissertation project also documents how the research participants (in two research sites) resist/navigate the remedial health interventions and health discourses that are organized in these water-insecure communities by local and global organizational actors (such as Water Aid, India Aid). An integration of the culture-centered approach and necrocapitalism afford theoretical and methodological guidance in this project to help document these localocentric narratives emerging from the two communities affected by water-insecurity (Banerjee, 2008; Basu, 2022; Dutta, 2008).

The localocentric narratives demonstrate that the research participants continually challenge the dominant power structures and discourses of health (health as an individual

[11] As one of the salient features of communication research, praxis refers to "the ways in which communication scholarship comes to be enacted in the world" (Zoller & Dutta, 2008, p. 4)

imperative), water (what kind of water is important) and health interventions (promoting individualism) and organize alternative practices/rationalities (selling goats to meet medical expenses; diverting water sources to meet their needs) within available social structures. We see here a subaltern autonomous consciousness materialize, a consciousness that exists on its own and outside the realm of elite expert discourse or "were never integrated into elite expert discourse" (Basu, 2011, p. 404). In the case of my project, the notion of localocentricity helps to record autonomous subaltern activity as research participants engages with resources available to them, and their social, historical, and cultural contexts while navigating health systems and re-organizing prevalent discourses on water and health. These culturally located health narratives emerging from marginalized spaces allow for a deeper understanding of the inherent mutifacetedness of the health issues that research participants at the margins face. These narratives also offer an opening for health planners/scholars to recalibrate health initiatives aimed at the margins by making them contextually relevant, and hence, likely more effective. By highlighting marginalized voices, this project also tries to contribute to the broader goal of promoting social justice and equity around health and water by challenging dominant narratives circulated by local and global organizational actors (Dutta & Pal, 2020).

In my dissertation project, I also highlight material and discursive tensions by bringing into conversation local narratives emerging from the two water-insecure rural communities that served as my research sites in relation to the narratives propagated by local and global organizational actors that fund, design, implement health/water interventions in these water-insecure areas. While material and phenomenological differences emerge due to the differences in accessing material resources (social class difference between local NGO employee and local communities at the margins/unequal distribution of water/living in water secure urban areas vs

living in water insecure research sites), discursive tensions manifest from competing worldviews or conflicting perspectives around health and health interventions (such as health as an individual choice vs health as an amalgamation of having access to safe and continual water supply, nutritious food, and stable income; water as an individual choice vs water or access to water linked with privilege, inequitable power relations, inequitable social structures and a justice issue) as local communities at the margins speak from their lived experiences and the Water Aid employees are informed by institutional agendas. Articulations such as, "Can you bathe in filthy water?" or "How can I give my goats contaminated water?" indicate the counter narratives stemming from participants who are often made to live like and feel like less like humans, and are often relegated to an inanimate resemblance (echoing human-non-human animal hierarchical divide). Articulations such as, "Goats are our family members so when you sell one in the market [in a market-oriented system] there is a sense of profound loss", indicate how the research participants organize within a system that is inherently othering and excludes/marginalizes various aspects of (human and non-human animals who are part of family structures) existence. In summary, I situate my dissertation in critical health and organizational communication scholarship centering marginal health narratives while including insights on health-related organizing practices of the disenfranchised group (Basu, 2011; Cruz & Sodeke, 2021; Elers et al., 2021; Ganesh et al., 2005) in an attempt to "uncover the politics of the local embroiled in the global" (Dutta & Pal, 2020, p. 357). Drawing from Dutta and Pal's (2020) essay, I aimed to present the intricate relationship between the local and global (local health stories are impacted by local-global interventions) by exploring how culturally located health stories intersect with global organizational/health discourses.

The three research questions guiding the study were:

RQ 1: How do international funding agencies, local NGOs and International NGOs communicate about ground water toxicity in two water- insecure rural communities in West Bengal?

RQ 2: How do local community members residing in communities affected by water insecurity in West Bengal communicate about their health and overall well-being?

RQ 3: How do local community members residing in water-insecure areas in West Bengal organize alternative discourses on health interventions designed and deployed via local-global health organizations?

To respond to these two research questions, I conducted a seven-week field study in the summer of 2022 in Kolkata, North 24 Parganas and Purulia. A reflexive approach in my data collection process enabled me to engage in dialogue and co-construction of knowledge on the complex interactions between water insecurity and health as perceived by those who are directly impacted by the problems. For data analysis, I employed critical thematic analysis (CTA) of interview discourses (Lawless & Chen, 2019). The two analytical steps of open and closed coding helped me thematize my data and allowed me to address the RQs. The CTA aligned with the focus of the CCA and a necrocapitalist lens as I focused on how the systematic creation of death worlds and conditions and the deadly consequences of capitalist systems in minoritized spaces are both normalized and challenged by the research participants (Dutta, 2008; Labador & Zhang, 2021). Thus, a CCA/necrocapitalism-oriented CTA helped me underscore stories around the structural violences of accumulation by dispossession, and the processes of homo sacarization and creation of bare lives as a non-linear/non-reductive process (as forces of

dispossession are routinely challenged by research participants who are relegated to the status of the living dead).

Five themes emerged from my data analysis. The first theme, "Dispossessed Spaces and Displacement at the Margins" presented narratives around how dispossession and displacement happen via interconnected social, economic, and political processes. The second theme: "Heterogeneous Communities and Structural Violence" examined localocentric articulations of structural violence that are often perpetuated by local and global organizational actors. The third theme: "Challenging the Dominant Ideas around Community Responsibility" highlighted stories that challenge dominant discourses around community responsibility to promote health and well-being. The fourth theme: "Talking Back to Glocal Organizational Actors" centered articulations around resisting health interventions manufactured by powerful actors for the local communities and the clash of divergent values stemming from radically different cultures. The last theme: "Localocentric Solutions" explored how individuals residing in water insecure areas communicated solutions to solve their health issues.

Theoretical Implication

Within communication studies, the CCA as a theoretical framework highlights the role of culture in shaping people's values, beliefs, and practices, and recognizes that communication processes are deeply embedded within cultural contexts. This approach highlights the need for scholars, researchers, and practitioners to adopt a reflexive stance while collaborating with the communities at the margins and co-construct knowledge. By centering the voices emerging from Global South and de-westernizing research, policy, and practice, the CCA emphasizes the agency of individuals residing in marginalized communities in shaping health interventions or solutions (despite oppressive structures and structural violence) to address/eliminate social

inequalities or health disparities and promote transformation and social justice by improving health and well-being. In other words, theorizing from below/Global South "seeks to bring forth frameworks and practices from the perspectives of those who have always been spoken for, anchoring the politics of knowledge production amidst the lived struggles for dignity, voice, political and economic justice" (Dutta & Pal, 2020, p. 354; Dutta, 2008).

Necrocapitalism accounts for the contemporary economic system of death capitalism that operates through the accumulation of capital and power, which is intertwined with global and state-sanctioned visible (such as resource distribution, unfair wages, precarious housing conditions/shelters) and invisible (invisibilizing voices) violence, and the commodification of human life and body producing death and living dead or existence in the borderlands of life and death. Swaths of the population, specifically marginalized groups or those deemed disposable/ expendable, are subjected to conditions of extreme marginalization, precarity and vulnerability, often leading to conditions of death. Under necrocapitalism, sustained forms of power and capital accumulation take precedence over the well-being and dignity of individuals and communities.

Thus, the common thread that binds CCA and necrocapitalism are the contemporary realities of structural violence and global capitalism leading to dispossession, displacement, and the subjugation of life in marginalized spaces. Additionally, the CCA, via its focus on localocentric articulations emerging from marginal spaces, affords possibilities of recording how necrocapitalism (as a condition) materializes in day-to-day lives at the margins. It also makes visible the fragility of necrocapitalism, which is both invasive (such as water installation plants on Indigenous lands, imposing gardening and vermicomposting ideas) and violent (individual-level health interventions organized by glocal organizational actors), as local actors routinely

challenge forces of displacement and dispossession. The frameworks of CCA and necrocapitalism help to take a deep dive into how death and dispossession at the margins are organized (as the logics of capital transcend labor and resource exploitation and encompass exploitation and suffering of bare life/vulnerable population). At the same time the theoretical frameworks help to highlight how agency at the margins (agency being one of the central tenets of the CCA) plays out as research participants talk back to the glocal management of violence and neoliberal agenda setting, which is aimed at market-oriented production and individual-level behavior change. Thus, CCA and necrocapitalism help to understand experiences of suffering and dispossession at the margins as well as the experiences of navigating, and challenging forces that dispossess. In my dissertation project, nesting Banerjee's concept of necrocapitalism within the CCA stands as a contribution to CCA literature as it explores how global capitalist system (and the glocal organizational actors embedded within the system) creates conditions of death/death-like situations and violence, conditions that, at the same time, are unceasingly challenged and re-articulated, in two water insecure and poor communities in rural West Bengal. In the next few paragraphs, I summarize how participant narratives (presented in Chapter 4) illustrate this nesting of necrocapitalism and the CCA.

Accumulation by Dispossession and Displacement

The localocentric articulations emerging from the research sites overwhelmingly highlight how marginalized communities are often not only physically displaced from their homes and neighborhoods but are also often dispossessed (such as deprived from health resources including water, nutritious food, stable income) in multiple ways. While sharing their stories, research participants indicated several kinds of dispossession and displacements including economic, social, and political.

Research participants did not have access to clean and adequate water, meaning that they were dispossessed from safe water sources. In addition, extreme weather events such as flooding and droughts in North 24 Parganas and Purulia resulted in displacement from their homes and lands, living in precarious shelters and not having any income. Participants also mentioned how the commodification of water or promoting water as a marketable good rather than a public good and inadequate water infrastructure and distribution networks led to water disparity. While some research participants could "afford" to buy safe water others could not because of their income, family/household size etc. Lack of access to irrigation water systems often contributed to economic dispossession (loss of livelihoods/being out of farm work during summer months due to extreme heat conditions), specifically in terms of income instability and maintaining health (hardships in putting food on the table, taking care of health emergencies).

Research participants also indicated how social dispossession occurs when certain communities or social groups (such as minoritized caste and Indigenous people, minoritized Muslims residing in low-income areas) face systemic barriers that limit their access to safe and reliable/continual water sources. Specifically, the research participants working with Water Aid indicated how communities with minoritized caste backgrounds often are marked by inaccess to clean and continual water. These displacements and dispossessions are structural, and call for policy changes.

Necrocapitalism, as a theoretical lens, pays close attention to accumulation by dispossession whereby marginalized communities are eliminated through development projects that strip them on their political rights and transform them into bare life or mere biological existence (Banerjee, 2008). Banerjee also writes that "Necrocapitalist practices deny people access to resources that are essential to their health and life, destroy livelihoods and dispossess

communities" (p. 18). In the case of water insecurity in my two research sites, the poorer sections of society paid the price of inaccess to water via their body in terms of their health and well-being. Here, centering the voices of those whose voices are often decentered or overlooked in knowledge making processes serves as a catalyst for including and taking seriously the problems of dispossession and displacement and to enable change in these conditions.

Multiple Axes of Structural Violence

Research participant narratives highlighted the structural (realities conceptualized in terms of economic system/necrocapitalism, glocal organizational actors, cultural norms shaping health and access to water) and material (relation between human and non-human interactions such as water, land) ontologies that research participants residing in the two water insecure communities find themselves steeped in. The narratives demonstrate how structural violences conflates to adversely influence local health and health practices. Material realities such as poverty, fertile land availability for growing vegetables, land availability for vermicompost, lack of storage facilities, and food insecurity where defining factors in the research participants lives in the two research sites in North 24 Parganas and Purulia. The articulations around the overlaps between poverty, food, health, and health interventions challenged the dominant discourse that understands the structural issues in terms of an individual-level problem solving framework rooted in western thinking, which necessitates manufacturing interventions (such as prioritizing eating healthy foods to stay healthy, using clean water to maintain personal health and hygiene) for the local communities. These local stories indicate how structural violences of water insecurity are interlinked with poor health because without safe and continual water access points (for irrigation, bathing, and consumption purposes) there are struggles in procuring nutritious food and arranging for funds to meet medical expenses during medical emergencies.

Participant narratives from the two research sites demonstrate how inhumane coping mechanisms (such as dietary changes, staying clean) articulated by glocal organizational actors helps in the global management of violence by framing vulnerable populations as being responsible for the degradation of their own health (such as by not "choosing" to diversify their diets) and death rather than attending to the underlying structural inequities contributing to such disparities. This weaponization of individual-level responsibility erases the need for empathy and improving material conditions in the two underserved communities constituting the project's research site. In terms of necrocapitalism, prevailing economic systems recognize responsibility as an individual-level factor, and not the structural conditions/concerns (that constrain human agency) producing violence/death and death-like situations. Within the realm of health interventions designed by the glocal organizational actors, the people (research participants at the margins) and physical spaces (research sites) become sites for the materialization of necrocapitalism.

Challenging Necrocapitalism and the Dominant Epistemologies

Banerjee (2021) writes:

> Latin American scholars like Aníbal Quijano, María Lugones, Gloria Anzaldúa, Maldonado-Torres and Walter Mignolo among others pioneered scholarship with a decolonial epistemic perspective that takes into account diverse worldviews, particularly of subaltern racial and ethnic populations from the Global South, to produce alternate epistemologies that transcend the Western canon. (p. 289)

This means that in marginal spaces, the local perspective transcends the colonial canons by incorporating and engaging with rich and diverse worldviews and creating a pluralistic intellectual landscape. These perspectives specifically coming from subaltern spaces in the

Global South, where the legacy of colonialism affects the way knowledge is produced, often challenges non-western ways of knowing that perpetuate epistemic injustices (Banerjee, 2021). Through amplifying these voices from the margins, the CCA offers a framework to disrupt the hegemony and structural violence of dominant discourses around health and healing (Dutta, 2008). The localocentric articulations reveal that water insecurity at the two research sites are not only about inaccess to material resources but also a discursive and cultural issue (Mitra, 2016; Mermer et al, 2020). Across donor-structured exemplars – kitchen garden project, IEC sessions and water plant project - we see how local community members at the frontlines of struggle organize discourses against the deeply entrenched cultural, epistemic, structural, and glocal and state-sponsored violence. The localocentric articulations of health, health interventions and water underscore the different dimensions of the research participants' (residing in water insecure areas) critical move towards challenging and often rejecting various donor-driven developmental models and neoliberal pulls of commodification of water to be bought and sold in the marketplace, thus advocating for water as a human right.

Dutta and Pal (2020) write that the epistemologies and discourses from the Global South that are shaped by diverse historical, cultural, and political factors are antithetical to Western perspectives and hence the views from the Global South can inform democratic transformations. They mention that the local politics of the South embedded in the broader global context are crucial sites of knowledge. Contesting the traditional epistemologies broadens health meanings and possibilities (Dutta, 2008). Dutta (2008) writes:

> The global location of health is exemplified in the ways in which global policies impact local actions. The local context of healthcare exists within the realm of these global policies which determine the availability of resources in communities, the distribution of

> resources to communities, the regulations around healthcare that are set up, and the attitudes, values and behaviors that are promoted within communities. The health of local actors within local cultures is intrinsically tied to the framing of health at the global level and to the ways in which health is constituted globally (Dutta, 2008, p. 238).

My scholarly commitments for this dissertation are linked with documenting the localocentric stories, which show how narratives are situated at the global-local and more often than not counter and contradict international and local organizational actors and discourses. For my dissertation, the culturally infused narratives of water insecurity, health experiences and resources (such as nutritious food, health emergency funds) and the political economy of land (land ownership, agricultural productivity) collide with the dominant forces under necrocapitalist organizational accumulation of power over certain bodies, which perpetuates inequality. The system of organizational accumulation of power and capital creates dispensable bodies by marketing individual-level health solutions designed by global actors for communities embedded in deeper structures of poverty and inaccess.

The narratives presented in the dissertation help to understand how research participants communicate viable solutions by challenging institutional marginalization by inverting the universalized assumptions of health and the mainstream logics of behavior change communication. I write about this in my journal:

> The behavior changes health interventions in water insecure spaces call for an increased awareness around hand washing with clean water numerous times, using clean clothes to wipe hands, washing the utensils used for storing water with clean water etc. This dominant health logic is embedded in a worldview that assumes there is enough clean water to protect oneself from water borne diseases and doesn't do anything about the

> cultural and systemic reality of inaccess to safe water in the subaltern life. In other words, it assumes that though there is enough water, people choose not to use it to maintain a healthy life. The dominant logics are also situated in the binaries and logics of us [rationality] vs them [irrationality]. The local NGO and (their) international funding agencies could design more effective interventions by creating communicative platforms for listening to the voices at the peripheries (Dutta, 2013) to ensure the health interventions are more aligned with the cultural lives of the individuals residing in water insecure communities.

Focusing on the limitation of simplistic binary thinking, Freire (1970) argues for a liberatory pedagogy that transcends subject/object, us/them, and active/passive dichotomies that perpetuate traditional education systems and oppressive power structures. Freire contends that these binaries are well-suited for serving the oppressor's purpose and interest as they stifle critical thinking, limit the potential for liberation and do not seek to live with others in solidarity. Most importantly, he adds that the linear monologic relations and the dehumanizing effects of power imbalances, dehumanizes both the oppressors and the oppressed and produces necrophily (not nourished by life or that which is mechanical and does not grow) instead of biophily (characterized by growth and able to develop full potential and engage in transformative actions). Thus, authentic liberation involving praxis (action and reflection) is the process of humanization where "People teach each other, mediated by the world" (p. 80). The CCA advocates that cultural participants actively participate in interpreting their lived experience and the social structure within which they experience their lives. As researchers/co-participant and the research participants engage in dialogue they create space for co-constructing health meanings that challenges the dominant universalized assumptions about health. For this project, a localocentric

lens helps to record how unique local cultures and structures intersect and are "articulated in the narrativised knowledges of participants who reside in these local spaces" (Basu et al., 2022, p. 135). The knowledge derived from working and collaborating with communities at the margins "unsettles institutionalized discourses and practices of social justice" (Pal & Nieto-Fernandez, 2023, p. 16) by speaking about and questioning state of things in a very important way. This researcher and community collaboration transcends the researcher (situated in Global North)-researched (Situated in Global South) binary and become a way of building a community to voice and fight injustice. Because as in 1963, Dr. Martin Luther King wrote in his letter while he was imprisoned for participating in a nonviolent protest against racial segregation in Alabama.: "Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly affects all indirectly. Never again can we afford to live with the narrow, provincial 'outside agitator' idea. Anyone who lives inside the United States can never be considered an outsider anywhere within its bounds." These powerful words around collective responsibility and shared humanity ring true to this day. In this day of increased globalization and the institutionalized transnational flow of capital, widening disparities, displacement, and dispossession of historically marginalized communities, and reinforcing imperial formations needs to be at the center of inquiry (Pal & Nieto-Fernandez, 2023). Issues of water insecurity/human rights abuses anywhere in the world is a global concern, researchers and practitioners are responsible for collectively engaging with this crisis which necessitating the coming together of researchers and research participants in this project of justice and questioning and fighting water disparity and power structures. The perspectives, knowledge/stories and experiences from the margins are invaluable in shaping effective and sustainable solutions that works for the community. Collaborations between researchers and

research participants can lead to a deeper understanding of the local context/lived realities, identify culturally appropriate interventions as communities advocate for their rights and demand change.

While power can be enabling or constraining (Thomas, 2020), in my dissertation, the various stakeholders operating in the water-insecure spaces, such as local communities, local NGOs, and international non-profits occupy different positions in the power hierarchy. In such a scenario, the localocentric narratives indicate how the current neoliberal health interventions designed by powerful actors can be transformed into collaborations of learning and co-constructing interventions via a culture-centered approach to creating knowledge that is "rooted in the ontologies, epistemologies, and values of the margins" (Dutta, 2014, p. 68). The coming together of localocentricity and necrocapitalism helps in understanding how access to safe water is organized in marginal spaces by dominant forces and how those forces are resisted. The competing and incommensurable values of natural resources (such as land, vegetable garden and water) of various stakeholders in the study show how "culture becomes political, a space where particular groups attempt to redefine social power by deploying alternate meanings of development, economy, nature, democracy and property rights" (Banerjee et al, 2023, p 269).

Practical Application

After I reached data saturation/completed my data collection, Water Aid suggested I file a report with them. Given the volume of data, it was not possible for me to translate all of the data during my fieldwork, in my attempt to give back and engage in the principle of reciprocity. I suggested we do the "filing of report" in two steps. I mentioned that I needed to code the data first before I could submit any kind of report on my fieldwork. After my discussion with one of the founder members of Water Aid, we decided to break down the reporting process. As a first step, I

submitted a document with my recommendations on NGO-community collaboration (see below) in the two research sites. As a final step in this reporting, I plan to submit my final report to Water Aid in December 2023 when I travel to India. This gives me sufficient time to process and reflect on the data and overall experience and share conclusions emerging from the stories around water and health-related challenges. The founder member of Water Aid mentioned that they will share my report with the funding agencies.

Report on NGO-community collaboration

In August 2022, I shared my initial thoughts regarding the NGO-community collaboration at the two research sites. I divided this document into two parts. In the first part I mentioned several things that went well during my visit to the research sites. In the second part, I mentioned a few areas where the NGO team might reflect on possible adjustments they could make (e.g., to increase audience participation and interest). For instance, for the Purulia team, I mentioned:

Thanks for the opportunity to observe the IEC presentations for meeting the water needs in safe water scarce areas, the plan of action for nutrition, and the community interaction with the help of the Purulia team. I would like to specially thank Mr. Tapan Kumar [anonymized] and Mr. Tapas Mahato [anonymized] for their extra help with recruiting participants for my project in Purulia 1.

I would like to share some of my thoughts regarding the presentations that were given (in July, 2022) in my presence by the Purulia team to the community members at the panchayat office located in four villages namely Bhandar Puara, Manera, Lagda, and Dimdiha.

There were several things that went well during my visit to Purulia 1 and there were a few areas where the team might reflect on possible adjustments they might make (e.g., to increase audience participation and interest). I understand that presentations in cross-class and cross-cultural

contexts are difficult, and that I was a part of only four presentations (the audience may have been more resistant to listening to suggestions than usual in these presentations) - so my observation is in the context of how things have gone in general with the presentations.

In terms of things that went well: The Purulia team were adapting well based on the resources available/unavailable. For instance, during one of the presentations, the team continued to disseminate health information despite a power cut. This might communicate two things. First, this might communicate respecting the audience member's time rather than canceling the event and keeping the presentation on another day. Second, the team's ability to continue the process of health information dissemination (despite unfavorable conditions) might be important to the attending audience.

Also, the team used local Bengali terms for cross-cultural reference. My sense is that local community members (residing in communities affected by unsafe water for consumption) who take out time to attend these meetings would find the team more credible as the team use local terms (such as *kagji* to refer to lemons, *biri* dal to refer to split black gram/*builir dal*). Also, this approach has the potential to increase health information retention by making the content of the team's presentation sound more familiar to the local community.

Terms of possible areas to reflect on:

1. Audience interaction: One key question is how the team can get the audience involved more. Several possible things the team might consider:
    a. Talk to the audience/community members before presentation: ask the audience/participants questions like how they are, how is their day going, how are their children etc. If the local community members attending these meetings get

into the habit of talking before a presentation, they often feel more comfortable doing so during presentations too and a productive dialogue might emerge.

b. Ask more open-ended questions: rather than only asking: Are there any people from a specific village, the team could ask - in what ways does the data make sense to the person from that specific village? The latter question can't be answered in 2-3 words, and it may not have just one plausible answer. Regarding interviewing the panchayat pradhan who already has pre-existing wealth of knowledge of local lived realities try to engage in open-ended interviews. For instance, questions like how many people were in *gram sabha*, did they discuss water in those meetings, do they work around grey water management, are they open to adopting the aforementioned water management scheme are all interesting questions. The team might also ask the why questions that might get them interested in the things that they are trying to propose.

c. De-jargon: While presenting health information to the local community members it might be better to explain to them what you mean by terms such as home management, rainwater harvesting etc. They may have struggled to apply terms they aren't familiar with using while speaking in their language. But they are used to doing *ghorer kaj*, so you might be able to build an example from that context which they can engage with more deeply.

d. Credibility: A good practice to avoid mispronouncing names of the places that local community members are well-acquainted with is to ask them how to pronounce the name of a specific place. Doing this before your presentation might

be a helpful practice to avoid mispronunciations. This might also highlight the team's willingness to learn from the local community members.

Also, before presenting the team might consider preparing/writing a script to time the presentations so that it does not extend beyond the time limit. Moreover, on the days of presentation it might be a good idea to communicate with the Panchayat Office beforehand which room would be conducive for the presentation. This might save some more time.

e. Q&A: Regarding the Q&A sessions, when participants actively ask questions, it communicates that they are interested in knowing more about your work. One might not have a ready-made answer during these sessions. I suggest the team write down the important questions that the team get from the community (such as Why *gramin porikolpona*? Why do the locals need water-based technology?) and brainstorm within the group on how to productively engage with these important questions that the community asks.

f. Documentation: The team did a commendable job taking photographs of these presentations. My last suggestion would be to video recording these presentations so that the team can share them with a larger audience or colleagues to seek their valuable feedback. This might generate a conversation around ways to improve the communication processes with the local community who are at the heart of the problem.

The team has a solid foundation to build on and I hope my observations are generative and help to improve the program in some way. Let me know if you have questions. Thanks for reading and sharing a part of your work with me.

For the North 24 Parganas team, I mentioned:

I am thankful for the opportunity to do my fieldwork in Chatra, and I would like to specially thank the Water Aid's Chatra project team members for sharing their knowledge with me and their help with recruiting participants for my project in North 24 Parganas. Some of my initial observations are listed below:

1. NGO Expertise: It is evident that the Chatra project team is very knowledgeable about the area that they are working in. The maps, the historical timeline, the quantitative data around diets, caste, income etc. that they shared with me are a testament to their expertise in the area.
2. Local Expertise: During my fieldwork in N 24 Parganas, I observed how individuals residing in toxin-affected communities are willing to share their stories around health struggles, water, food, income etc. While sharing their daily challenges and joys, they showed/shared artwork of their children, shared food recipes, gifted me vegetables, shared information methods of preserving seeds for pushti bagan, show sites and artifacts that are important to them and talked about the problems they face during monsoon seasons with regards to water, income, food and shelter. They articulated the important role storytelling plays in generating compassion for people affected by issues around water and in mobilizing solutions for water insecure areas. Since people have expert knowledge of their own lives and circumstances, these stories might be important to document to gain a broader understanding of the problems most people face in Adivasi Para and Parui Para. The stories might be helpful in creating more effective interventions

or create more effective solutions by including people's experiences, information, and ideas to better solve their problems.

3. Nutrition Support: Most participants spoke about not needing to go to the local market for vegetables anymore since the pushti bagan helps them to take care of their nutritional needs. They mentioned how the pushti bagan helps them to share what they grow with others in the community who might not have the space to have a garden. Participants also mentioned that during monsoons, most often they do not have work because of flooding and their home gets submerged in water, it is during this time that it becomes difficult for them to take care of their health, drinking water, and eating. The experiences during monsoon that they communicated might be helpful in creating support system around food that eases their plight during times when they tend to need the support most.
4. Documenting Structural Needs: The community members residing in arsenic-affected communities communicated how their health is an amalgamation of various factors. They articulated how broken roofs; lack of proper health facilities nearby, lack of clean water for bathing hinders health and quality of life. They shared that they are often affected by fever, vomiting, and diarrhea. It might be helpful to document the things they need and discuss them with international partners working in this space and help to see health more holistically.
5. Within the kitchen garden project, the interviewees indicated one specific area that can be strengthened within the existing health project. They indicated how improving access to knowledge around selling vermicompost would be helpful in creating additional income and taking care of themselves. After my interviews, often the interviewees would ask important questions relating to market mechanisms and how to increase what they are

currently producing in their gardens. Noting down these questions and sharing them with your international partners might help to craft solutions that work better.

I had a productive time learning from the research participants what structural assistance they need to live healthy. I hope my observations are generative and help to improve the program and the lives of the people in some way. Let me know if you have questions. Thanks for reading and sharing a part of your work with me.

Field Report

Moving forward, for the field report, I plan to have five sections including significance of the research, theoretical frameworks, methods, results, and study contribution. In this field report, I will summarize and dejargon my dissertation in a way to make it more accessible to a non-academic audience. In case I miss going to India in December, I plan to have a recorded Teams presentation so that I can also learn from the non-academic audience their thoughts and receive valuable feedback on this project.

I plan to suggest that local global organizational actors need to interrogate their own worldviews, engage in reflexivity, and adopt an empathic approach while working with marginalized communities. The local stories highlighting the paradoxes between structural issues and the health interventions directed towards individual-level behavior change opens up space for a critical investigation of the potential assumptions and biases that the health interventions are embedded in.

Conclusion

In conclusion, my dissertation illustrates how communities living on the margins of water-insecurity in rural West Bengal research sites, communicate about their health challenges/experiences, potential solutions to these challenges, and navigate the remedial health

interventions they receive from local-global organizational actors. My dissertation also investigates how local global organizational actors organize and manage access to safe water for the water-insecure low-income rural research sites in West Bengal. The localocentric narratives presented in this dissertation project illustrate the innate capacity of the research participants at the margins of water insecurity in questioning organizational accumulation of power and profit and systemic creation of death worlds. Participant narratives also indicate the need to build structures of communication between the individuals residing in water insecure communities and the global local organizational actors for a two-way flow of information fostering collaboration via dialogue and listening for contextually appropriate interventions. In addition, data from my ethnographic fieldwork highlights the multiple dimensions of water insecurity and important policy and practice questions specifically for practitioners and policymakers. I write this dissertation from a place of hope for justice for the health and human rights abuses by critiquing issues of power, privilege, and inequality.

During my fieldwork, many of my research participants not only shared their stories but also shared with me physical gifts/produces from their small patch of kitchen garden and thanked me for writing their stories. The various acts of gifting embedded in their generosity will be deeply connected to my memory of my research participants' everydayness, labor, joys and struggles around water insecurity, food insecurity and income challenges as I reflect, reciprocate back, and continue to learn, work and write with them. Stories matter. The voices of those facing water insecurity must be foregrounded so that local global organizational actors who serve them take them seriously and galvanize meaningful change.

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APPENDIX A: LETTER OF SUPPORT FROM LOCAL NGO (WATER AID)

Date: 3rd April 2021

To Whom It May Concern

Sub: Letter of Support for Research Recruitment and Participation

I am writing this letter to express support for Ms. Parameswari Mukherjee's research project, whereby she plans to collect data for her research in partnership with us. Ms. Mukherjee is currently a PhD student in the Department of Communication at University of South Florida, Tampa, United States. The data collected by her will be used for the completion of her PhD dissertation, supervised by Dr. Ambar Basu, PhD, Professor at the Department of Communication, University of South Florida.

Her research interest is in the area of arsenic contamination of groundwater in West Bengal and health risks associated with the same. The study will focus on the participatory risk communication procedures and strategy for alleviating the health problems faced by the community. I am ready to provide technical support to Ms. Mukherjee while logistic assistance in recruitment of research participants and support in interacting with key stakeholders and community members will be extended by the Organisation. The community interactions would adhere to the ethical principles of social research particularly in safeguarding privacy.

With regards

APPENDIX B:

INTERVIEW PROTOCOL (FOCUS GROUP DISCUSSION WITH COMMUNITY HEALTH WORKERS/CHWs AND NGO EMPLOYEES)

1. Please tell me something about you and your family.
2. How long have you been working as an NGO employee/CHW? Please tell me a little bit about your work/job.
3. How does a typical work week look for you?
4. What are the communities you work with? How do you build trust with the communities you work with?
5. What are some of the challenges you face while at work? How do you address these challenges?
6. Could you please tell me in detail the kind of issues you face from the local communities specifically when you work with them on behavior change health programs?
7. Why do you think you face these issues from the community members?
8. What do you do when you face these issues from the community?
9. Based on your experience, what kind of risk communication works? What does not?
10. In what way do you find your work meaningful? Can you share any specific positive and negative experiences?
11. What resources do you think the communities that you work with lack? Why do you think the communities lack these resources you mentioned in your answer? How can this lack be addressed?
12. What would your suggestions be to the funding agencies who design health programs?
13. Is there anything you would like to add or want me to know about your experience?
14. Do you have questions?
15. I will share your story at conferences so that people know about the problems you shared. As a student, is there anything you feel I can do?

APPENDIX C: INTERVIEW PROTOCOL FOR IN-DEPTH AND GROUP INTERVIEWS WITH LOCAL COMMUNITY MEMBERS RESIDING IN WATER INSECURE AREAS

1. How long have you been living here?
2. Please tell me something about you and your family.
3. According to you what are some of the problems you face in your daily life? How do you address them?
4. When and how did you come to know that you are affected by groundwater pollution and other types of water issues?
5. What does water mean to you?
6. What are the health concerns you face? How do you address them?
7. What do you do to stay healthy? What do you eat in a day?
8. Do you think you have enough resources such as nutritious food and safe drinking water to stay healthy? If not, what do you think is lacking?
9. What would be some of the large-scale policy changes you would want to see around the issues you face?
10. Tell me with as much detail as possible about how a typical day/week looks for you?
11. Have they ever been a part of the kitchen garden project/water plant project/IEC session before? If yes, how many times?
12. Help me understand what this kitchen garden project/water plant project/IEC session mean to you. What is your motivation for participating in this project?
13. Can you share any specific positive and negative experience about this project?
14. What are your expectations from such participation?
15. What are some of the changes that you would want to make to this project?
16. Do you feel supported enough? What would your suggestions be to those who work with the community?
17. Is there anything you would like to add or want me to know about your experience?
18. Do you have questions?
19. I will share your story at conferences so that people know about the problems you shared. As a student, is there anything you feel I can do?

APPENDIX D: IRB APPROVAL

UNIVERSITY of SOUTH FLORIDA

EXEMPT DETERMINATION

February 7, 2022

Parameswari Mukherjee
4202 East Fowler Avenue
Department of Communication, university of south Florida
Tampa, FL 33620

Dear Mrs. Parameswari Mukherjee:

On 2/4/2022, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY003789
Review Type:	Exempt (2)
Title:	Local Understanding of Water Contamination in West Bengal, India
Funding:	None
Protocol:	Protocol_STUDY_3789_IRB.docx;

The IRB determined that this protocol meets the criteria for exemption from IRB review.

Approved study documents can be found under the 'Documents' tab in the main study workspace.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not

UNIVERSITY of SOUTH FLORIDA

apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Sincerely,

Tatyana Harris
IRB Research Compliance Administrator

APPENDIX E: UNIVERSITY OF SOUTH FLORIDA DISSERTATION COMPLETION FELLOWSHIP

UNIVERSITY OF SOUTH FLORIDA
DISSERTATION COMPLETION FELLOWSHIP
AGREEMENT FORM

The Dissertation Completion Fellowship stipend is $8,000 for one semester. Your Oasis account will reflect a deposit of $8,000 after Drop/Add ends the first week of classes. We encourage our students to sign up for eDeposit in Oasis because it is faster and safer. Additionally, your tuition (up to 9 hours for the semester), student fees, and health insurance premiums will be paid by the University. The student fee portion is reimbursed approximately two or three weeks following the conclusion of the Drop/Add period. Please note that you are responsible for any outstanding charges on your account after the award disbursements are applied. Also, the award will affect your eligibility for loans offered through the USF Office of Financial Aid.

Please read the following carefully and provide the information requested below. The form should be uploaded to the online Fellowship Agreement Submission Form by **Monday, November 7, 2022**. Failure to return the signed Agreement Form by the deadline will result in forfeiture of the award.

I understand that accepting this grant carries the following stipulations:

- Fellowship recipients must receive the Graduate Dean's or designee's permission to drop below 9 credit hours in the Fall or Spring semester and 6 credit hours in the Summer semester. Students can be held responsible for the repayment of the fellowship stipend and tuition charges if students fall below the required credit hours.
- As this award is designed specifically for students where other forms of University support are non-existent, the awardee must notify the Office of Graduate Studies if they are receiving any additional funding. Lack of reporting additional funding will result in the immediate termination of this fellowship.
- Outside employment is discouraged as this Fellowship is designed to allow the student to focus on completing their dissertation.
- The Office of Graduate Studies must be informed of any change in enrollment status.
- This award will need to be considered as income for tax purposes. See more information on the IRS website.

OFFICE OF GRADUATE STUDIES
University of South Florida • 4202 East Fowler Avenue, ALN226 • Tampa, Florida 33620-7900
(813) 974-2846 • FAX (813) 974-5762 • www.grad.usf.edu

UNIVERSITY OF SOUTH FLORIDA
DISSERTATION COMPLETION FELLOWSHIP
AGREEMENT FORM

☐ I accept the Dissertation Completion Fellowship and I have read, understood, and will comply with all of the above stipulations. I understand that failure to comply could result in forfeiture of the award and possible pro-rated repayment of the stipend.

☐ I am unable to accept the Dissertation Completion Fellowship award.

Name (please print) UID number

Signature Date

Graduate Program

Email Address

Daytime Phone Cell (optional)

Mailing Address

City/State/ZIP

You must return this agreement to the Office of Graduate Studies by **Monday, November 7, 2022**. Failure to do so will result in the loss of this fellowship opportunity.

Upload completed form to https://forms.office.com/r/FXpCkG2RjR

Raised Stipend for Spring Dissertation Completion Fellowship

Karissa Valine-Plaza on behalf of Ruth Bahr

To: Ruth Bahr

Tue 11/1/2022 3:45 PM

Good afternoon,

I am happy to announce that we are raising the Dissertation Completion Fellowship stipend from $8000 to $9000, effective Spring 2023. This increase will be represented in your Spring 2023 distribution to your OASIS account during drop/add week.

I hope that you are able to make significant progress on your dissertation this Spring.

Best,
Ruth Bahr

Ruth Huntley Bahr, PhD
Dean and Professor

Office of Graduate Studies
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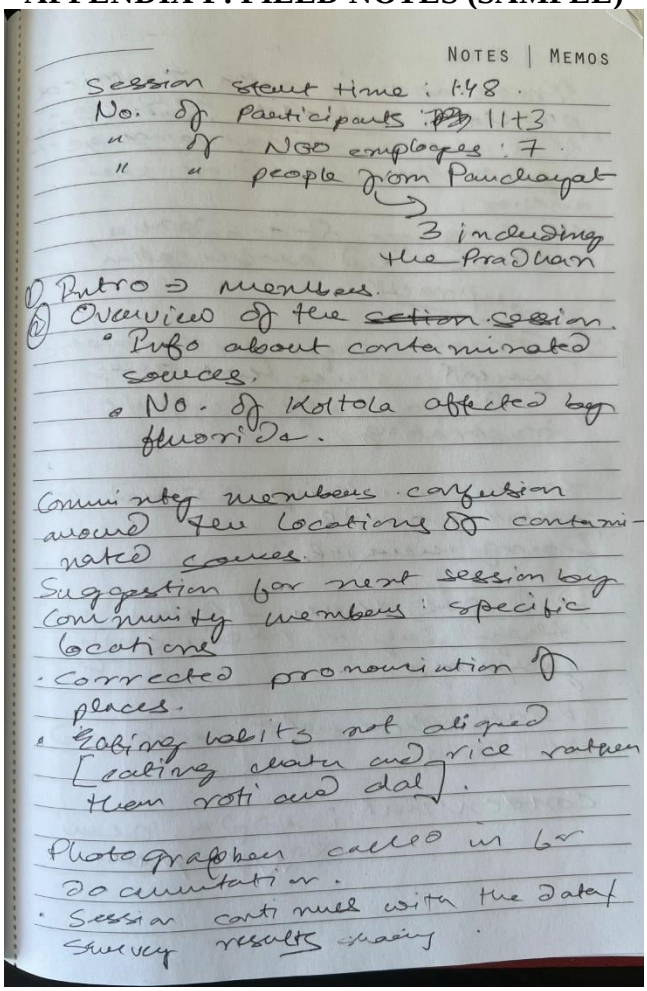
UNIVERSITY of SOUTH FLORIDA

APPENDIX F: FIELD NOTES (SAMPLE)



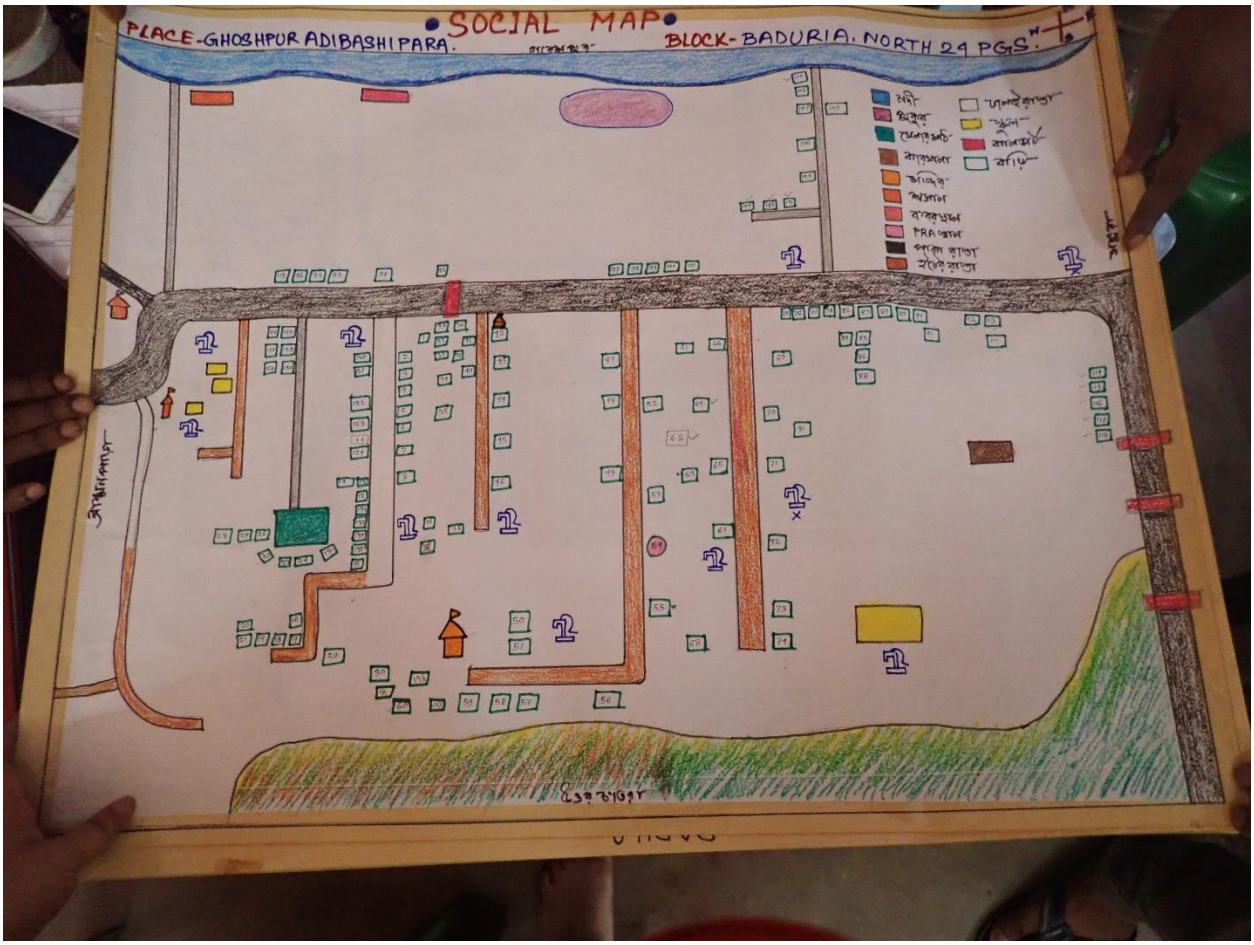
NOTES | MEMOS

Session start time : 1:48 .
No. of Participants : 11+3
" of NGO employees : 7 .
" " people from Panchayat
↳ 3 including the Pradhan

1) Intro ⇒ members.
2) Overview of the ~~section~~ session.
   - Info about contaminated sources.
   - No. of Kaltola affected by fluorides.

Community members confusion around few locations of contaminated sources.
Suggestion for next session by community members : specific locations
- Corrected pronunciation of places.
- Eating habits not aligned [eating dhaka and rice rather than roti and dal].

Photographers called in for documentation.
- Session continued with the data/ survey results sharing.



There were a lot of maps (including timeline maps, income maps, food habits maps etc.) that the NGO employees in North 24 Parganas shared with me. The map above helps to understand the locations of safe water sources and the important landmarks that are situated nearby.

A handwashing station installed in one of the village council offices in Purulia. Participants often also mentioned drinking water from this source.

APPENDIX G: JOURNAL (SAMPLE)

7/12

Today, Anju, who has been living in Dimdiha (water-insecure area) for around 5 years and works as a landless farmer and a part-time sewing worker, indicated how access to jobs and stable income due to water unavaiability is a major concern for her and directly impacts her family's health. Anju offered a way to think about the interconnectedness of water, work and health that are absent from larger institutional frameworks and arrangements in the context of her community's water insecurity. She expressed her concerns around how the health intervention emphasis is only on drinking water when water scarcity in her locality has multi-faceted challenges and far-reaching consequences for livelihoods and overall well-being. Anju also asked me, "Do you have these kinds of problems with water where you stay?" which prompted reflection, making me more aware of the self-other dichotomy and my insider-outsider status. Many of these research participants were eager to share their stories (which indicated their trust and openness towards me) and this eagerness helped me to gain new insights around the fluidity of being an insider. My Bengali identity allowed access to the community, facilitated a level of connection, whereas difference in my class identity made me an outsider to the research participants residing in water insecure areas. Acknowledging these insider-outsider dynamics is crucial for me because it teaches me to be more aware of my biases, privileges, and limitations. It is essential to approach the research process with humility, empathy, and

APPENDIX H: OPEN CODING CATEGORIES

1. Health and economic issues
2. Sense of Community
3. Water availability issues
4. Seasonal water scarcity
5. Knowledge of toxins/ inaccess to information around contamination
6. Food and Health
7. Water contamination and skin problems
8. Common health problems
9. Water quality and health
10. Health and workplace
11. Access to health resources
12. Challenging dominant discourse
13. Community participation
14. Community responsibility and information dissemination
15. Structural factors associated with access to safe water
16. Negative morality of the community members
17. Problem identification
18. Multistakeholder collaborations
19. Water management schemes
20. Caste makeup
21. Seasonal problem with kitchen garden
22. Building trusts
23. Trust and misinformation
24. NGO work and health
25. Problems with interventions designed by powerful actors
26. Access to information
27. NGO work week
28. Problems with multistakeholder collaborations/structural issues with multistakeholder collaboration
29. Information and behavior change
30. Investing in water systems
31. Resisting top-down health programs
32. Hard to grow and maintain garden
33. Land availability and kitchen garnden
34. Separation of water sources
35. Access to farming resources
36. Challenging dominant discourse of health
37. Job precarity and health behaviors and experiences
38. Garden as a teacher/meanings of garden
39. Depravation of resources

40. Housing conditions and health
41. Resisting behavior change health interventions
42. People leaving health information dissemination sessions
43. What type of water is important
44. What type of contamination is present
45. Health struggles
46. Health emergencies
47. Seed storage issues
48. Vermicompost storage issues
49. Issues with Government Schemes

CLOSED CODING CATEGORIES

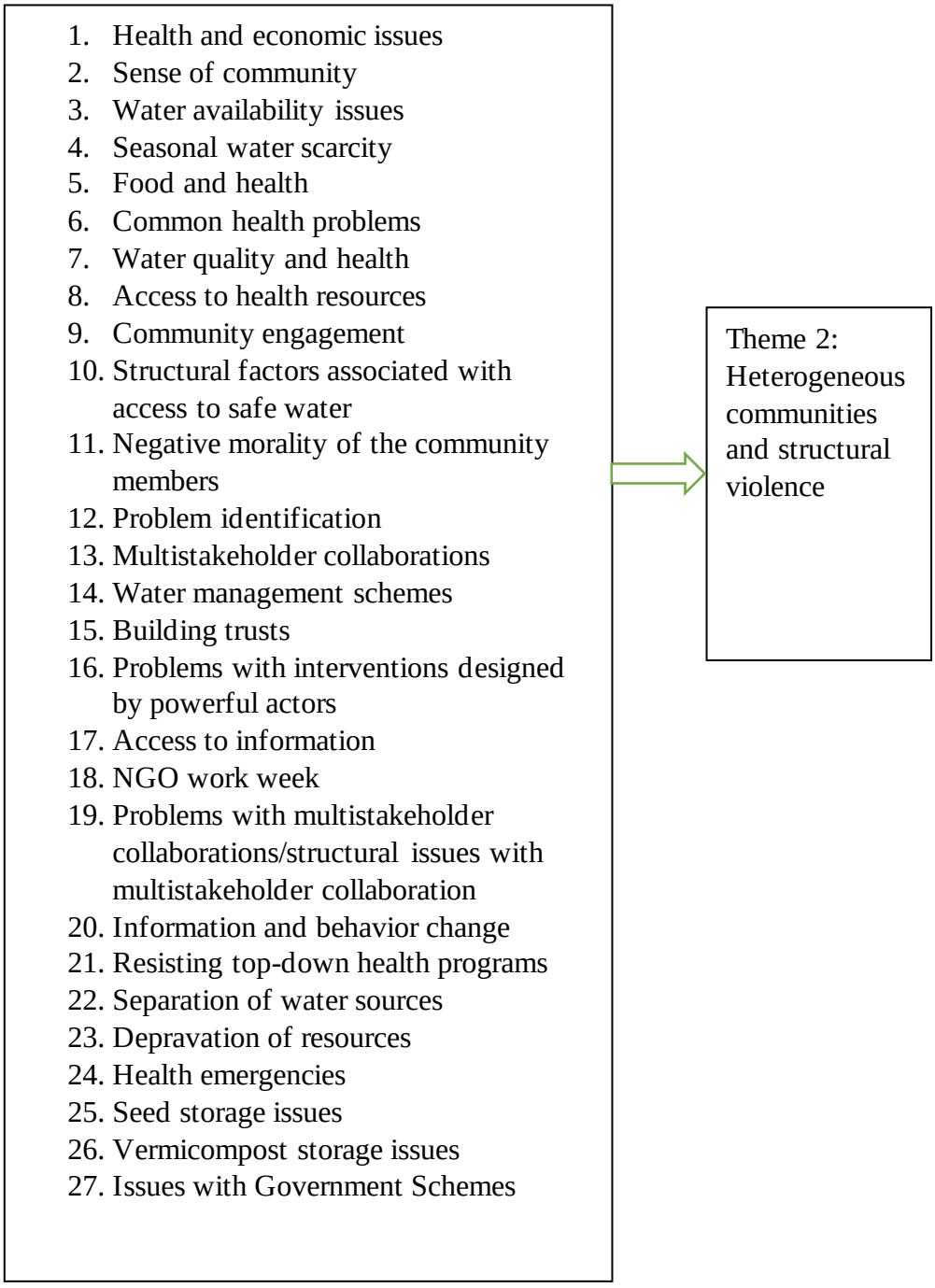
1. Dispossessed Spaces and Displacement at the Margins
    a. Caste as an Inherent Part of Dispossession and Displacement
2. Heterogeneous Communities and Structural Violence
    a. Commonality of Violence of Local-Global Health Interventions Reproducing Health Inequities
3. Challenging the Dominant Ideas around Community Responsibility
    a. Challenging the Monolithic Frames of Community Responsibility
    b. Agency and Disengagement
4. Talking Back to Glocal Organizational Actors
    a. Talking Back to Dominant Health Interventions
    b. Divergent Values on Water and Land
5. Localocentric Solutions
    a. Individual-level Solutions
    b. Community-level Solutions
    b. Structural-level Solutions

Table 2.
List of Open Codes Collapsed to form Themes
Closed Codes

1. Health and economic issues
2. Water availability issues
3. Seasonal water scarcity
4. Knowledge of toxins/ inaccess to information around contamination
5. Food and health
6. Water contamination and skin problems
7. Common health problems
8. Water quality and health
9. Health and workplace
10. Access to health resources
11. Structural factors associated with access to safe water
12. Caste makeup
13. Seasonal problem with kitchen garden
14. Problems with interventions designed by powerful actors
15. Hard to grow and maintain garden
16. Land availability and kitchen garden
17. Separation of water sources
18. What type of water is important
19. Access to farming resources
20. Job precarity, health behaviors and health experiences
21. Depravation of resources
22. Housing conditions and health
23. Health Emergencies

Theme 1: Dispossessed spaces and displacement at the margins

List of Open Codes Collapsed to form Theme# 2
Closed Code



List of Open Codes Collapsed to form Theme# 3
Closed Code

1. Health and economic issues
2. Sense of community
3. Water availability issues
4. Seasonal water scarcity
5. Knowledge of toxins/ inaccess to information around contamination
6. Food and health
7. Water contamination and skin problems
8. Common health problems
9. Water quality and health
10. Separation of water sources
11. Access to health resources
12. Challenging dominant discourse
13. Community engagement
14. Community responsibility and information dissemination
15. Structural factors associated with access to safe water
16. Multistakeholder collaborations
17. Access to information
18. Information and behavior change
19. Resisting top-down health programs
20. Hard to grow and maintain garden
21. Land availability and kitchen garden
22. Challenging dominant discourse of health
23. Housing conditions and health
24. Resisting behavior change health interventions
25. People leaving health information dissemination sessions
26. Health struggles
27. Health emergencies

Theme 3: Challenging the dominant ideas around community engagement

List of Open Codes Collapsed to form Theme# 4
Closed Code

1. Health and economic issues
2. Water availability issues
3. Challenging dominant discourses of health
4. Negative morality of the community members
5. Multistakeholder collaborations
6. Problems with interventions designed by powerful actors
7. Hard to grow and maintain garden
8. Separation of water sources
9. Garden as teacher,/meanings of garden
10. Resisting behavior change communication
11. People leaving health information dissemination sessions
12. What type of water is important
13. What type of contamination is present

Theme 4: Talking back to glocal organizational actors

List of Open Codes Collapsed to form Theme#5
Closed Code

1. Health and economic issues
2. Sense of community
3. Food and health
4. Community engagement
5. Problem identification
6. Water management schemes
7. Problems with interventions designed by powerful actors
8. Land availability and kitchen garden
9. Investing in water systems
10. Access to farming resources
11. Job precarity and health behaviors and experience
12. Depravation of resources
13. Health struggles
14. Health emergencies

Theme 5: Local Solutions

Amongst the 49 open codes, there are some excerpts under a few codes that I did not use in this dissertation project because those excerpts are not aligned with the three RQs guiding this study. For instance, for the code "NGO work and health", the NGO employees shared their stories around working and falling sick during working with the communities around extreme weather conditions (such as flooding, extreme summer heat). I didn't use those quotes because they did not relate to the RQs.

Table 3. Example of Open Code Data Points/Narratives Organized into Themes

Open codes	Sample data	Closed Codes/Five Themes
Open Code: Water availability issues Open Code: Water availability issues	Narrative 1 Community member residing in a water insecure area: On a daily basis we go out at 8 am to fetch water because that is the time the tap has running water supply. So, we tell others waiting in the line to not fetch more than one bucket at one time so that everyone in the locality gets their fair share. Sometimes there is a commotion when people would take out three-four buckets of water for their needs at one go. Narrative 2 Community member residing in a water insecure area: For cleaning purposes, I use the tap water nearby. But for drinking water I have to go near Mahato's house. It is around a 20 min one-way walk. There is so much land near our house it would be a lot easier for our people if a tap was installed here. The current water point is so far that I try to have only one trip. Sometimes if we need more drinking water and I am busy I would send my son or daughter. My father is old and is unable to walk so he is	Dispossessed spaces and displacement at the margins Summary: Under this theme there are excerpts that highlight research participants articulating how they are dispossessed and displaced in multiple ways in context of safe and continual water sources, neighborhood due to flooding, home due to flood and draught, work because of extreme weather conditions, safe emergency shelters, information/health resources around water security, dispossessed from health interventions due to land unownership etc.). The excerpts under this theme also highlight how water insecurity is a caste-based social structure affecting those who are traditionally marginalized.

	unable to help us with drawing drinking water. During the monsoon, we sometimes have to vacate this house. You won't be able to come or stay here, didi. The school becomes our shelter for days. This has become normal for us. When we return, the flood water destroys the pushti bagan [nutritional garden]. You also do not know if your house is still there.	
Open Code: Problems with interventions	Narrative 3 Atmaram [participating in the kitchen garden project]: As a part of the kitchen garden program, I received raw materials for vermicompost production. It is a difficult, time-consuming and complicated process. Also, you need space for the production process. Initially I thought I would not be able to participate in this program because I was not sure where I would have the space for the vermicompost pit. But I decided on having the pit in my backyard. Now I have so much vermicompost. I am having difficulty selling vermicompost and getting an adequate price. It is not possible for me to travel to distant markets to sell vermicompost. So, I am dependent on the local market. I also do not know where I need to go to find assistance to sell the vermicompost and earn a profit. If I am not able to sell	Heterogeneous communities and structural violence Summary: Under this theme there are excerpts that highlight how the subaltern communities are not a monolith with variances in family structure, different minoritized caste, religious and income/class backgrounds but the nature of infrastructural/systemic violence they experience (such as inaccess to safe and continual water in their homes and neighborhoods, health program implementation) is similar.

Open Code: Problems with interventions	them in the market, where will I store them? Narrative 4 Community member residing in water insecure area in North 24 Parganas: We got only one free cylinder. You will have to shell out around Rs 600 [approx. $7] per month to refill those cylinders. Our household income is Rs 5000 [approx. $ 61] per month. How can you afford to refill? Even though you know you cough all the time and know you are exposed to arsenic through burning cow dung for cooking, what can you do?	