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Article

The Political Economy of Fears and Concerns of Landslide Survivors: Thematic Analysis of Mental Well-Being of People Residing in Landslide Susceptible Areas of Kerala, India

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Abstract: Being forced to live in an area following a catastrophic landslide may adversely impact people's mental well-being. Unprivileged communities such as Adivasis, Dalits, plantation workers, and people with low incomes in Kerala's hilly districts are forced to live in landslide-affected areas despite their fear. This paper examines the fears and concerns of landslide survivors from the marginalized sections of society from a broader framework of the political economy of mental health. This approach aligns with the assertion made by the World Health Organisation that individual factors do not solely determine mental health but are intricately linked to broader social, political, and economic circumstances. Data were collected through in-depth interviews with fatal landslide survivors and key informants [1]. The study employed thematic data analysis from in-depth interviews of various fatal landslide survivors since 2018. The three major themes unveiled in the analysis are: 1. post-disaster fears, 2. The factors that triggered fear and concern and 3. Socio-economic marginality and mental health. The study asserts that individuals who are poor and unprivileged are highly susceptible to mental health issues associated with landslides.

Keywords: landslides; dalits; adivasis; unprivileged; disaster mental health; vulnerability

Introduction and Background

Every year, disasters strike people and communities in various parts of the world by jeopardizing their mental health and well-being [i]. The health dimensions of vulnerability include the physical, physiological, and mental health consequences of natural disasters on various social groups and geographic spaces [iii]. Understanding natural disasters' psychological and emotional consequences is far more arduous than assessing physical loss. Stereotypically, disasters are judged based on the economic, ecological, and human losses they cause. The anxieties and mental trauma caused by them are never regarded as significant repercussions of disaster [2]. Various studies have used various terms to designate the disaster-affected populations' social, psychological, and emotional health [iv]. The present study used "Mental well-being" as a phrase encompassing the wide range of fears and concerns developed in people after landslide disasters. The term "mental well-being" is used in this study in a holistic rather than clinical sense. Landslides and other natural hazards become disasters when they overwhelm a community's or society's capacity to manage available resources [v]. Both the material and nonmaterial loss associated with disasters may lead to mental well-being issues in people and communities, which may lead to permanent or temporary mental distress. Disasters result in property loss, infrastructure damage, resource destruction, and secondary psychological disturbances [vi]. Witnessing a natural disaster can profoundly impact individuals, leading to mental well-being issues [vii]. People affected by landslides can have numerous mental well-being issues like short-term and long-term fears, concerns, stress, and anxieties [viii]. The

present study investigates the fears and concerns of fatal landslide survivors who reside in landslide-susceptible areas of Kerala because of their poor socio-economic conditions.

Earthquakes can trigger landslides, most commonly by rainfall [ix]. They are ubiquitous along Kerala's west-sloping Western Ghats region, especially during the monsoon season [x]. Since 2018, the state of Kerala has experienced an unprecedented loss of life and property due to landslides brought on by torrential rainfall [xi]. 2018 alone recorded 433 deaths associated with floods and landslides in the state [xii]. Between 2018 and 2022, a series of landslides in Kerala led to the deaths of more than 276 people. The following are examples of highly devastating landslides that occurred in Kerala recently. The Karinchola landslide, which occurred in the Kozhikode district on June 14, 2018, resulted in the tragic death of 14 individuals [xiii].

The Kavalappara landslide in Malappuram District claimed the lives of 59 more individuals. Likewise, the Puthumala landslide in Wayanad caused the fatalities of 17 individuals. Both of these landslides occurred on August 8, 2019. The Pettimudi landslide, which occurred on August 6, 2020, resulted in the unfortunate demise of 70 people and caused extensive damage to several residential areas in a tea plantation [xiv, xv, xvi]. Two landslides occurred on October 16, 2021, in Koottickal (Kottayam) and Kokkayar (Idukki), resulting in the unfortunate loss of thirteen lives [xvii]. Though climate change-related disasters are universal, people react differently to the psychological burden caused by the complexities of addressing climate change [xviii]. Disasters are not inherently natural occurrences. Instead, they are influenced by poverty and other socioeconomic conditions that render certain individuals more vulnerable to such hazards [xix]. Most individuals impacted by emergencies will undergo psychological distress, which for most people will improve over time [xx]. Age, gender, race-ethnicity, economic resources, education level, employment status, personality traits, coping abilities, emotional regulation, trauma history, mental health conditions, biological susceptibility, and social support are key risk factors for mental well-being issues during disasters [xxi, xxii]. People from all socioeconomic sections are vulnerable to natural hazards, but unprivileged communities are highly vulnerable [xxiii]. The unprivileged people are more likely than others to reside in regions vulnerable to the effects of disasters [xxiv]. Such vulnerable areas are more affordable and accessible to people with low incomes where there is a housing shortage [xxv].

The disproportionate vulnerability of the poor and underprivileged to disasters necessitates an analysis within a political-economic framework. Impoverished and marginalized individuals worldwide are compelled to reside in regions prone to disasters. This spatial location is not neutrally formed but is socially produced. People experiencing poverty are often pushed into disaster-prone areas due to the inequalities in wealth and privilege caused by political and economic forces and structures that have sway over the area. In Kerala, most landslide-susceptible areas are occupied by socially and economically disadvantaged communities [xxvi]. Extensive field investigations in the landslide-affected regions of Kerala revealed that the people who continue to reside in the landslide-susceptible areas after surviving fatal landslides are mainly from the disadvantaged sections of society like Adivasis, Dalits, and poor plantation workers. The political and economic systems that have been in place over the feudal period, colonial regime, post-independent, and neoliberal periods have contributed significantly in locating these communities in landslide-susceptible areas of the state. Poverty, discrimination, and marginal status play an important role in mental well-being issues among people during emergencies [xxvii, xxviii].

The Political Economy and Mental Health

Wealth in modern society tends to accumulate within a specific class, leading to the exclusion of others by the intrinsic injustice in the capitalist system. The issues stemming from the capitalist political economy persist beyond the societal division into classes. Disasters are both influenced by and contribute to poverty, and the processes that lead to increased poverty in relation to disaster risk are characterized by inequality [xxix]. The capitalist political economy results in the production and marginalization of low-income communities. They are ultimately spatially marginalized by the affluent class. This spatial marginalization exposes them to areas prone to landslides, leading to mental well-being issues following the impact of disasters. This mental state places individuals in a

position of greater social and economic marginalization. The poverty that heightens their susceptibility to disasters limits their ability to cope with and recover from the damages caused by disasters. The political economy of mental health examines the impact of political and economic structures, systems, and policies on mental health outcomes at the individual, community, and societal levels [xxx]. The main aim of this study is not to directly examine the impact of political and economic structures, systems, and policies on the mental well-being of individuals or societies.

Nevertheless, the objective is to examine how political and economic systems contribute to the increased susceptibility of marginalized populations to natural disasters such as landslides and how these disasters result in psychological distress among these populations. There is a reciprocal relationship between political economy and mental well-being. The class, caste, and gender of individuals exert a substantial influence on their mental well-being. Furthermore, a direct correlation exists between class, caste, and gender and a heightened susceptibility to landslides [xxxi, xxxii]. This study has classified the selected literature reviews into three distinct sections. The initial section centers on the relationship between socioeconomic marginalization and vulnerability to disasters, whereas the subsequent section investigates the link between socioeconomic marginality and mental well-being. The third section summarizes various recent studies examining the impact of natural disasters on mental well-being.

Research indicates that disasters in underdeveloped regions significantly disproportionately impact impoverished populations, as these areas are more vulnerable to hazards than other countries [xxxiii, xxxiv, xxxv]. Traditional disaster studies focus on the immediate loss caused by disasters, disregarding the significant connections between vulnerability and development. Over the last three decades, extensive research has shown that disasters typically have a more severe impact on individuals with lower socioeconomic status [xxxvi]. Underprivileged populations are more susceptible to disasters, experience prolonged recovery periods, and are more prone to long-term repercussions. The disproportionate vulnerability of individuals to landslides can be ascribed to their poverty level, as evidenced by the nature of their means of subsistence, limited access to information, and the substandard quality of their dwellings and surroundings [xxxvii]. Individuals with low socioeconomic status are more likely to reside in homes that are more susceptible to the effects of disasters compared to those with higher socioeconomic status. Their disaster experience may result in increased material losses, reduced protection from disasters, and potentially more severe damage or destruction to their homes [xxxviii]. They also note that disasters are more likely to make low-income individuals homeless. A study conducted by Akter & Mallick [xxxix] on the relationship between poverty, vulnerability, and resilience among the populations in Bangladesh affected by cyclones demonstrates compelling evidence that individuals living in poverty are more susceptible to tropical cyclones than those not in poverty. The cyclone in question had adverse effects on the community, specifically regarding financial resources, job opportunities, and clean water and sanitation availability.

Disasters impose a substantial burden of mental health conditions on both individuals and the affected community [xl, xli] state in their review paper on natural disasters and mental health in Asia that the field of disaster mental health is a recent advancement in Asia. The growing prominence of the domine after the 1990s will be a valuable resource for tackling and alleviating mental health problems resulting from natural and manmade disasters in Asia. Natural disasters can cause harm or death to many people, leading to service interruptions, breakdowns in social networks, and loss of communal resources. They also pose severe threats to our psychological well-being, leading to immediate and prolonged psychological distress [40]. A cross-sectional study using the 2014 China Family Panel Survey conducted by Zhang and Dai [xlii]. reveals that natural disasters have a notable adverse impact on the mental well-being of middle-aged and elderly individuals in rural China. A recent study conducted by Kabunga *et al.* [xliii] in Uganda investigates the influence of landslides on the psychological well-being of survivors, with a specific emphasis on Post Traumatic Stress Disorder (PTSD). The presence of PTSD in the area showed a strong correlation with poverty, gender, widowhood, lack of counseling, and limited social support. Another study by Burrows *et al.* [xliv] examined the effects of landslide displacement on the mental health and well-being of individuals

residing in Banjarnegara, Indonesia. The study found that the mental well-being of the displaced individuals was closely linked to their livelihoods, connection to land, and community.

Various forms of marginalization, such as caste, class, race, and gender, have a substantial impact on the mental well-being of individuals. A Community study conducted by Hollingshead and Redlich^[xlv] highlights the significant impact of social class on the occurrence of mental illness within a population. Specifically, the "lowest" social class exhibits a disproportionately elevated representation of psychiatric patients relative to its share in the overall population. Social class influences not only mental well-being but also the outcome of treatment. According to the systematic review by Barnett *et al.*^[xlv], social class notably influences individuals' mental health treatment outcomes. The study found that "lower" social class individuals had unfavorable treatment outcomes. Income inequality is correlated with a multitude of adverse health consequences^[xlvii]. Several mental health studies have investigated and exposed a significant connection between income inequality and mental well-being issues^[xlviii, xlix, l, li]. The combination of limited economic and social capital and mental health issues can lead to the social exclusion of individuals^[lii] which in turn can exacerbate their mental, economic, and social well-being.

The data gathered from taluk-level revenue offices indicates that there have been 276 fatalities due to landslides in Kerala since 2018. During this period, the Dalits, Adivasis, and people experiencing poverty were disproportionately susceptible to landslides. Landslides and other natural disasters significantly impact individuals living in poverty^[liii]. The 2017 Kerala State Planning Board report indicates that only 11.3 percent of Kerala's population lives below the poverty line. Unfortunately, 49.6 percent of those killed in landslides were living below the poverty line. According to the initial investigation, approximately 45.9% of individuals who perished in the landslides resided in homes with asbestos or tarpaulin roofs. Just 11.6% of the population had an annual household income exceeding one lakh rupees. Individuals from lower-income families are at a higher risk of developing a mental disorder in adulthood compared to those from higher-income families^[liv]. Poverty increases people's susceptibility to landslides and subsequent mental health problems.

Significance of the Study

Various studies have explored the impact of social and economic marginalization on individuals' mental well-being. These marginalized communities have a well-documented disproportionate vulnerability to disasters. There is a significant gap in the literature addressing the mental health challenges experienced by marginalized communities affected by natural disasters. This study explores how political economy affects the mental well-being of impoverished individuals residing in landslide-prone areas.

Research Questions

The researcher conducted several field visits and personal interviews with landslide survivors in fatal landslide locations in Kerala as part of an academic project on spatial (in)justice and landslide vulnerability. Interviews revealed that most landslide survivors in the state experience various fears and stress due to the incidents. These realizations raised some serious questions of academic and social importance. This paper addresses those questions based on the firsthand accounts of individuals who lived through the landslides. The research questions are,

- 1) What are the fears and concerns of landslide survivors, and what specific incidents triggered these fears and concerns?
- 2) Why do the people who survived the landslide continue to live there despite their fear?

Objectives

This qualitative study aimed to understand the fears and concerns of landslide survivors who continue to live in the landslide-affected areas of Kerala.

Methodology

Data Collection

Participants for the interview were selected based on their socio-economic vulnerability and the extent of damage caused by the disaster. Ten participants, all over 18 years old, who had survived deadly landslides in Kerala since 2018, were chosen as respondents. Five fatal landslides in different districts of the state were examined to select the participants: Puthumala (Wayanad), Karinjola (Kozhikode), Kavalappara (Malappuram), Pettimudi (Idukki), and Rokaya (Kottayam). Two participants were purposefully chosen from each location, and they were residents who remained in areas prone to landslides despite being deemed uninhabitable by the government. Five of the ten respondents were tea workers from the Dalit community, three were Adivasis (tribals), and two were from other backward communities (OBC). Additionally, four key informant interviews were conducted as part of this study. The group consists of a Revenue officer from Kokkayar, a medical officer who treated Puthumala landslide survivors, an elected representative living in the Kavalappara landslide area, and an Idukki District Disaster Management Authority official. The researcher conducted semi-structured in-depth qualitative interviews at five fatal landslide locations across the state. The interviewees were survivors who still reside in the areas affected by landslides. The study used pseudonyms to guarantee the confidentiality and anonymity of the interviewees. All of the conversations were recorded with the interviewee's permission. A direct transcription of each interview was made afterward. The researcher personally carried out the entire research project for this paper, which involved data collection, analysis, and manuscript preparation to guarantee accuracy and thoroughness.

Ethics

This research is conducted in response to a rise in deadly landslides in Kerala since 2018. Ethical clearance to conduct the field study was obtained from the International Institute for Population Sciences, Mumbai (Ref.No.IIPS/ACAD/RMP/IO-532/2022). Permission was acquired from district collectors before collecting data from landslide locations. (Ref. No. DCIDK/389/2022-DM5) Participants signed consent forms in both the local and English languages before the interview. COVID protocols were adhered to throughout the field visits and interviews conducted in 2022.

Data Analysis

The data were analyzed using theoretical thematic analysis principles to code the data according to specific research questions. Data obtained from personal interviews were initially analyzed thematically using NVIVO 12 software. Subsequent manual analysis was also conducted to validate the software analysis, and any required corrections were made. Six approaches suggested by Braun and Clark [iv] were applied to analyze the data. Interviews were carried out in Malayalam (local language). It is translated into English while transcription. The transcript was familiarised through repeated readings (Stage 1: familiarisation). Transcripts were marked down into chunks of data based on their content, which is significant in terms of the research question. The chunks of data were labeled with codes (Stage 2: Generating initial codes). Codes were organized into three broader themes based on the similarity of the content of the codes. Themes are identified in this study at a latent or interpretative level [vi], which allows the researcher to look beyond the semantic content of the data. Data that reflect the same theme were grouped (Stage 3: Searching for themes). The themes were further scrutinized to ensure they precisely reflected the dataset (Stage 4: reviewing themes). The themes were named and given precise working definitions to define their content. (Stage 5: Defining and naming themes). Finally, quotes representing each theme have been chosen from the data to include in the manuscript (Stage 6: Producing the Report).

Results

The thematic analysis resulted in 297 individual coded statements from which three primary outcomes were identified as themes: post-disaster fears, The factors that triggered fear and concern,

and socioeconomic marginality and fears. Among the 297 individual coded statements, 34 responses were repeated numerous times and appeared significant in determining the themes (Table 1).

Table 1. 1 Major themes and behavioural responses under each theme.

Themes	Component (Behavioural and Emotional Responses)
Fears and Concerns	Fear
	Sleeplessness (Insomnia)
	Mental stress
	Getting Panic
	Persisting shock
	Scared
	Mentally exhausted
	Sadness
	Indelible memories
	Distress
Causes of fear	Physical trauma
	Witnessing disaster
	Heavy rain & Future Possibility of landslide
	Scene of dead bodies
	Loss of near and dears
	Loss of house
	Loss of property
	Loss of savings
	No place to go
	Helplessness
	Govt reports- future possibility of landslides
	Loss of livelihood
Reasons for continuing in the same place	Poverty
	Low income
	Lack of govt support
	Lack of own house
	Lack of own land
	High rent
	Low wage
	Job location
	To look after the family
	Poor rehabilitation

Theme1. Post-Disaster Fears

So far, significant focus has been given to analyzing the effects of fear related to disasters [lvii,lviii]. The mental well-being of individuals is critical to the efficient functioning of any community [lix]. Mental well-being Issues concerning disasters include distress, grief, anxiety, depression, and post-traumatic stress disorder (PTSD) [lx]. Excessive fear, insomnia, depression, severe stress following the traumatic experience, and long-term feelings of grief and sadness are among the significant mental effects of the disaster identified in this study. These psychological effects significantly negatively impact both individual and community life. The people who continue to live in these areas are in constant fear of future landslides [lxi,lxii]. Anxiety during rainfall is the most common psychological

impact of landslides on landslide survivors in susceptible areas. All respondents expressed some level of apprehension about rain, especially at night.

“It is scary when it rains, and we are still struggling to recover from the shock. After the incident, I was taking sleeping pills for nearly six months, I can't sleep on rainy nights. I am really scared to live here” (40-year female from Karinchola, Kozhikode).

“I've never seen such a terrifying sight in my life—not even in a movie—and the horror still lingers. When it starts to rain or the windows close violently in the wind, I begin to panic. We want out of here, but how? And where will we go? (45-year Male Adivasi from Kavalappara, Malappuram).

“You can't understand anxiety unless you've experienced it at its worst. My anxiety was about death, but during those days, dying seemed easier than living with anxiety for an hour or a day”. (33-year-old Landslide survivor from Kavalappara).

“Approximately 20 to 25% of those who survived the landslide in the area have Post Traumatic Stress Disorder (PTSD), with the majority being children. Many people who suffer from these mental illnesses are unaware that they have a problem that requires medical attention. Those who sought treatment reported mental health issues such as anxiety, depression, and difficulty sleeping for 12 to 18 months”. (Doctor who treated the landslide survivors in Wayanad)

Theme 2. The Factors That Triggered Fear and Concern

After disasters, elevated levels of behavioural disorders and fear can occur due to the loss of family or community members, resources, daily routine, control over possession, social network disruption, and destruction of community structures or traditional support systems [lxiii, lxiv]. During life-threatening situations, the loss of a loved one, or loss of financial means, individuals display specific attitudes and behaviours [lxv]. Many participants express concerns about potential future disasters, loss of loved ones, exposure to terrifying situations and physical harm from the disaster, losing homes and possessions, and feeling helpless as the primary sources of fear and worry following the landslide. The primary concern was the potential for future landslides in the region.

“My father died about a month before this incident; I never cried when he died, but I cried colossally that day when I realised my house, vehicle, and all of my earnings had been lost in the landslide” (45-year-old plantation worker from Puthumala, Wayanad).

“As a Scheduled Tribe (ST) promoter, I was obligated to be present at the landslide site to identify the deceased. Some had only legs, some had hands, and some other bodies without heads, I can't forget those visuals. They were all people that I cared about. Even today, I can't sleep when it rains at night, and I feel that they are standing out there in the rain outside my house” (36-year Adivasi Woman from Kavalappara, Nilambur).

“I was really shattered on those days; I didn't know where to go, what to do, or how to live. I had only one pair of trousers and boots that were given to me by a forest officer; I felt completely lost, and it took me months to return to normalcy”. (47-year-old survivor from Pettimudi, Idukki).

According to the psychiatrist who treated the landslide survivors in Idukki “The majority of those who received treatment had more than one triggers for fear and concern. The most common psychological reactions among survivors were guilt, anxiety, and depression. The traumatic experience of witnessing and experiencing landslides, as well as the loss of loved ones and property, the uncertainty of being homeless, and the fear of future landslides, exacerbated their fear and concern”.

Theme 3. Socio-Economic Marginality and Mental Well-Being

The Government of Kerala and the Department of Geology declared the fatal landslide locations uninhabitable. Despite their fear of future disasters, the most disadvantaged sections of society, such as plantation workers and Adivasis, remained in the landslide-affected areas. People who are more disadvantaged and poorer are more likely to suffer adverse effects from disasters on their physical and mental health [lxvi]. Socio-economic marginality and disaster vulnerability have a reciprocal relationship. Marginality increases people's vulnerability to disasters, potentially exacerbating the

poverty and discrimination experienced by marginalized communities [lxvii]. Both of these factors can contribute to mental health issues in those affected. All those interviewed for this study were from socially and economically marginalized sections, and they did not have enough savings to buy land or houses outside of the vulnerable areas. As a result, they were forced to live in disaster-prone areas with fear and anxiety. Socio-economic backwardness is identified as the significant factor that compelled the respondents to reside in the landslide susceptible locations despite their fear of future disasters.

"I used to travel 16 km every day from my rented house to work here. My house rent was around 5000 rupees per month, travel expenses were around 1500 rupees, and I had only 8000 rupees monthly salary. It was unaffordable for me to stay away from here. I had no choice but to return to the *layam* (tea worker's housing lanes) and live here in fear" (56-year-old plantation worker from Puthumala, Wayanad).

"In Kavalapara, all castes coexisted, but when it came to resettlement, only we Adivasis were left out. All others have been rehabilitated for more than a year" (60-year-old Adivasi from Kavalappara Malappuram).

"I returned here for the sake of my children, I need to pay their school fees, raise them properly, and get them married, and I need to earn as much as I did before. We, plantation workers, have no home or land as own, and know no other occupation, so we must live and die here only. We don't have any other options" (52-year female plantation worker from Pettimudi).

"Although the Geology Department has demarcated the Puthumala landslide area as uninhabitable, many plantation worker families continue to live there. They are either not included in the government's resettlement programmes or lack the financial means to relocate on their own" (Revenue Officer, Meppadi village office).

"Those who continue to live in landslide-affected areas are compelled to do so either because of their poor economic situation or because their livelihood is associated with the disaster-affected area" (DDMA official from Idukki district).

Because of their poor economic conditions, the majority of Tea workers and Adivasis continue to live in landslide-prone areas despite their fear of future disaster.

Discussion

Studies have shown that people's mental well-being suffers when they are exposed to disasters [lxviii]. All the participants interviewed in the study stated that they experienced fear and concerns in residing in landslide-prone areas. They all cited the rainy season as the most fearful because rainfall is the most significant causative factor of landslides in Kerala. Most of the respondents are sleepless and getting panic during heavy rains, especially at night. Disasters can trigger stressful crises that result in issues with mental well-being and even medical problems [lxix]. Undiagnosed mental health issues can make a person more prone to physical illness. It also hurts their social and personal lives, as well as their ability to cope with the losses caused by the disaster. The location where people feel safe and secure is usually at home. When disasters cause the loss of homes, properties, and other precious possessions, the survivors feel insecure and helpless [?]. The most significant source of mental suffering and fear among the respondents was the loss of possessions, the loss of family and community members, as well as the mental and physical trauma brought on by the disaster. These factors are also cited in earlier research on this genre as the primary source of mental health problems among disaster survivors [bx, 2].

One of the most significant things that came to notice during the study was that people with low incomes, plantation workers and the Adivasis and Dalits are the most vulnerable to landslides. As their resilience capacity is low, they continue to live in landslide-prone areas without considering the warnings given by government authorities. Poor people are more vulnerable to natural disasters and lose a greater proportion of their wealth when exposed to them [23, lxxi]. All the respondents claimed they were compelled to stay in the disaster-affected houses because of their poor economic conditions. Their helplessness made them reside in the disaster-prone area in the middle of fear and anxiety. Only people with low incomes choose to live in homes frequently exposed to natural risks,

even if both poor and nonpoor may choose to reside in areas occasionally afflicted by natural disasters [70]. Due to the lack of assistance from social, political, and economic institutions, poor people tend to struggle more to cope and recover [lxxii].

The socioeconomic marginality of the communities is not neutrally formed. However, they resulted from long political and economic processes that had sway over the area. Studies on the working and living conditions of tea plantation labour show that the conditions have been poor since the inception of the industry during the colonial era up to the present day [lxxiii]. The colonial capitalists were interested in family migration to the plantation as workers to ensure the reproduction of cheap labour, rather than individual migration. Plantation labourers nationwide are trapped in a coercive legal system, leaving uprooted migrant workers no option but to endure a life of poverty and oppression, subjected to atrocities, exploitation, and denial [lxxiv]. The story of the Dalits and Adivasis has no difference. Dalits in India are facing extreme inequalities. The country's political and economic system has played a significant role in marginalizing Dalits from economic progress and advancement [lxxv]. The concept of the 'tribal' and 'tribal area' was introduced during the colonial period. The post-colonial State continued to use these categories to provide special benefits and affirmative action. Since gaining independence, Scheduled Tribes (Adivasis) have experienced high levels of poverty, deprivation, and other negative development indicators, particularly in the two decades following the implementation of neoliberal economic policies [lxxvi]. There exists a reciprocal connection between poverty and disaster vulnerability. The historical effects of caste apartheid and the exploitative labour practices in the plantation economy have resulted in the social and economic marginalization of Dalits, Adivasis, and plantation workers in the State. This socioeconomic marginalization has caused the spatial marginalization of these communities into resource-poor and disaster-vulnerable spaces. This has heightened the vulnerability to disasters such as landslides and resulted in psychological, physical, and material damages, ultimately exacerbating their social, economic, and spatial marginalization.

Limitations

The first limitation of this study is the small number of participants. Purposive sampling limits the generalisability of the results. The use of open-ended questions in the study resulted in a lack of numerical data of a rigorous scientific nature. The period of the interviews after the disaster in different locations was varied, resulting in differences in the intensity of fears and concerns of respondents. Despite these limitations, this study provides a deeper understanding of the fears and concerns of people who continue to live in landslide-susceptible locations of Kerala, which still need to be addressed by previous research studies.

Conclusions

The socio-economic marginality of disaster survivors resulting from the broader political economy significantly impacts their mental well-being. Mental well-being is rarely regarded as an essential element in disaster vulnerability studies. Undiagnosed mental health issues caused by disaster fears and concerns can have a significant impact on the coping capacity of disaster survivors. Therefore, consideration of the disaster survivors' socio-economic conditions and their impact on their mental well-being from a political-economic perspective is also critical in efforts to enable a community to be resilient.

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