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EXPLORING ENVIRONMENTAL INEQUALITIES AMONG
MARGINALIZED COMMUNITIES ACROSS THE WORLD



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Exploring Environmental Inequalities among Marginalized Communities across the World

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Abstract

Purpose: The main objective of this study was to explore the pervasive issue of environmental inequalities that disproportionately impact marginalized communities.

Methodology: The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

Findings: The findings revealed that there exists a contextual and methodological gap relating to issues of environmental inequalities that impact marginalized communities. The empirical review revealed the stark reality that marginalized communities, often characterized by low socioeconomic status and limited access to resources, bear the brunt of environmental hazards and injustices. These disparities are not only detrimental to the health and well-being of these communities but also perpetuate cycles of poverty and hinder their ability to thrive. The findings of this study emphasize the significance of formulating targeted policies and interventions to rectify the environmental injustices faced by marginalized communities. Addressing these disparities requires a multifaceted approach that takes into account the complex intersections of race, class, and environmental well-being.

Unique Contribution to Theory, Practice and Policy: The Critical theory, Environmental Racism theory and the Intersectionality theory may be used to anchor future studies on environmental justice and marginalized communities. The study recommends that there is need for inclusive decision making that involves community members, there is need for investing in sustainable infrastructure and promoting environmental awareness among others.

Keywords: *Environmental Justice, Marginalized Communities, Environmental Racism, Community Empowerment, Inclusive Policies*

INTRODUCTION

Environmental justice refers to the fair distribution of environmental benefits and burdens, ensuring that all individuals, regardless of their socioeconomic background or race, have equal access to a healthy and safe environment. It addresses the disproportionate impact of environmental hazards on marginalized communities, aiming to rectify these disparities and promote equitable environmental policies. In the United States, for instance, environmental justice has gained prominence due to the evident disparities in the placement of hazardous waste sites and industrial facilities near minority and low-income neighborhoods. According to Bullard, Wright & Mohai (2018), this phenomenon is referred to as "environmental racism," and it highlights how African American and Hispanic populations are disproportionately exposed to pollution and environmental hazards.

Moreover, in the United States, the aftermath of Hurricane Katrina in 2005 exposed deep inequalities in the impact of natural disasters on marginalized communities. Vulnerable populations, particularly those with lower socioeconomic status, faced disproportionate hardships during and after the disaster. These communities had limited access to resources, were less likely to evacuate, and faced slower recovery processes, highlighting the intersection of environmental justice and disaster resilience. (Cutter, Burton & Emrich, 2016)

Environmental justice is a concept that emphasizes the fair treatment of all individuals and communities, irrespective of their socioeconomic status, in terms of environmental protection and access to natural resources. In developed economies like the United Kingdom, instances of environmental injustice can be observed. For example, a study by Tomlinson and Tate (2017) revealed that lower-income communities in the UK are more likely to be exposed to air pollution, primarily due to their proximity to major roadways and industrial zones. This leads to significant health disparities, with respiratory issues and other health problems being more prevalent in these areas.

In addition to that, in the United Kingdom, studies have highlighted the connection between social inequality and access to green spaces. Disadvantaged communities in urban areas often have limited access to parks and green spaces, depriving them of the physical and mental health benefits associated with natural environments. This situation showcases how environmental justice extends beyond pollution and hazardous waste sites to include access to nature and its positive impacts on well-being (Rigolon, Browning & Jennings, 2018)

In Japan, a similar issue has been identified with the concept of "pollution clusters," where industrial pollution and waste facilities are concentrated in specific regions, often affecting disadvantaged communities. A study by Oki and Harada (2016) indicated that low-income areas in Japan were more likely to have waste disposal sites nearby, leading to increased health risks for residents. These examples underscore the importance of understanding environmental justice within developed economies, where marginalized communities face higher environmental risks due to unjust distribution of pollutants and waste.

Regional Perspective

Moving to developing economies, the challenges of environmental justice are exemplified in countries like India. For instance, the Bhopal gas tragedy of 1984 exposed the vulnerability of marginalized populations to industrial disasters. The incident resulted in the release of a toxic gas leak in a densely populated area, causing thousands of deaths and long-term health impacts on

survivors. Similarly, in South Africa, the legacy of apartheid has led to the continued spatial segregation of communities, with historically marginalized groups living in proximity to polluting industries and lacking access to proper sanitation and clean water. These examples demonstrate the urgent need for equitable environmental policies and interventions in developing economies to address the environmental burdens placed on vulnerable communities.

In India, the urban poor are often exposed to extreme levels of air pollution due to factors like vehicular emissions and industrial activities. A research was done on the health consequences of air pollution in slum communities and highlighted the need for policies that address the unequal burden of environmental hazards on marginalized populations. Similarly, in Brazil, marginalized communities living in informal settlements, known as favelas, are disproportionately affected by inadequate sanitation and pollution, which can lead to health risks and perpetuate cycles of poverty (Raj, Carlsten & Liu, 2016).

In Brazil, the expansion of large-scale agriculture and deforestation in the Amazon rainforest has led to the displacement of indigenous populations and the degradation of their traditional lands. A study by Schöenberg, van der Heijden & Guedes (2020) emphasized the importance of recognizing and respecting indigenous knowledge and land rights to achieve environmental justice and sustainable development. Additionally, in China, rapid urbanization has led to land dispossession and displacement of rural communities to make way for industrial development. This phenomenon highlights the challenges of balancing economic growth with the rights and well-being of marginalized populations.

In sub-Saharan economies, the impact of climate change and desertification disproportionately affects vulnerable communities. Adger, Arnell & Tompkins (2018) emphasized the interconnectedness of climate change, poverty, and social inequality, illustrating the urgency of addressing these issues collectively. For instance, in Burkina Faso, changing rainfall patterns and increased temperatures have negatively impacted agricultural productivity, leading to food insecurity and economic instability for rural communities.

Local Perspective

In Nigeria, environmental justice issues are also prominent. The Niger Delta region has faced extensive pollution from oil extraction activities, negatively affecting local communities' health and livelihoods. The Ogoniland region, for instance, has experienced devastating oil spills and environmental degradation, leading to calls for reparations and improved environmental protection. Furthermore, in many sub-Saharan African countries, access to clean water and sanitation remains a challenge for marginalized communities, perpetuating health disparities. These instances highlight the intersection of environmental justice with economic development and underscore the need for inclusive policies and interventions in sub-Saharan economies to ensure a more equitable distribution of environmental benefits and burdens.

Furthermore, in Sub-Saharan economies, the impact of extractive industries on local communities and ecosystems is a significant concern. For instance, in the Democratic Republic of Congo, the mining of minerals used in electronics has raised environmental and social justice issues. Kamundala, Cihlar & Cwik (2017) also emphasized the importance of transparent governance and equitable distribution of benefits from mining activities to avoid exacerbating inequalities and environmental degradation.

Environmental Inequalities among Marginalized Communities

Marginalized communities refer to groups of individuals who are systematically excluded from the benefits, opportunities, and resources available to the larger society due to factors such as socioeconomic status, race, ethnicity, gender, sexual orientation, and disability. These communities often experience limited access to education, healthcare, employment, and political representation, leading to social and economic disadvantages. The concept of marginalized communities is closely intertwined with the principles of environmental justice, which seeks to address the unequal distribution of environmental benefits and burdens among different segments of society. Environmental justice recognizes that marginalized communities are disproportionately affected by environmental hazards and lack the agency to influence policies that impact their well-being.

One way in which marginalized communities are connected to environmental justice is through the unequal exposure to environmental hazards. Studies have shown that low-income neighborhoods and communities of color are more likely to be located near industrial facilities, waste disposal sites, and polluted areas (Bullard et al., 2018). This spatial disparity results in higher levels of pollution, toxic exposures, and health risks among marginalized populations. For example, Flint, Michigan, gained international attention when its predominantly African American and low-income residents were exposed to lead-contaminated drinking water due to inadequate water treatment and government negligence (Masters, Berke, Hess & Johnson, 2019). This incident underscores the intersection of race, poverty, and environmental harm, highlighting the need for equitable distribution of clean and safe environments.

Furthermore, marginalized communities often face challenges in accessing natural resources and green spaces, which can contribute to negative health outcomes and well-being disparities. Socioeconomic disparities in access to parks and recreational areas are linked to reduced physical activity, increased stress, and poor mental health (Rigolon, Browning & Jennings, 2018). In urban settings, marginalized neighborhoods frequently lack green infrastructure, exacerbating the urban heat island effect and compromising air quality. For instance, inner-city neighborhoods in London with lower socioeconomic status have fewer trees and green spaces, leading to increased exposure to heat and pollution (Tomlinson & Tate, 2017). This demonstrates how environmental justice encompasses not only the avoidance of harm but also the equitable distribution of benefits for marginalized communities.

Moreover, marginalized communities often face barriers in participating in environmental decision-making processes. Limited access to information, language barriers, and lack of representation prevent these communities from voicing their concerns and shaping policies that affect their environment. Involvement in decision-making is a crucial aspect of environmental justice as it empowers marginalized groups to advocate for their rights and interests. An example can be seen in the struggle of indigenous communities in Brazil's Amazon rainforest against deforestation and land exploitation (Schönenberg et al., 2020). Their fight for land rights and preservation of traditional knowledge underscores the importance of recognizing the agency and expertise of marginalized communities in environmental matters.

In conclusion, the concept of marginalized communities is intricately linked to the principles of environmental justice. The disproportionate exposure to environmental hazards, limited access to green spaces, and barriers to participation in decision-making processes are all manifestations of

environmental injustices that impact marginalized populations. Addressing these disparities requires comprehensive policies that consider the intersectionality of socioeconomic status, race, and environmental well-being, ensuring that all individuals and communities can thrive in a healthy and equitable environment.

Statement of the Problem

This study aims to address the pervasive issue of environmental inequalities that disproportionately impact marginalized communities. The study targets communities with lower socioeconomic status, racial and ethnic minorities, and limited access to resources, which often experience a disproportionate burden of environmental hazards and lack equal access to clean and healthy environments. The problem this research seeks to solve is the inequitable distribution of environmental benefits and burdens, which contributes to social disparities and exacerbates health disparities among marginalized populations.

Environmental injustices, such as exposure to pollution, inadequate access to clean water, and lack of green spaces, have been linked to adverse health outcomes and reduced quality of life among marginalized communities (Bullard et al., 2018). This research aims to delve into the underlying factors that lead to these disparities, including systemic discrimination, unequal distribution of resources, and limited participation in decision-making processes. By shedding light on the root causes of environmental injustices, this study seeks to contribute to the formulation of inclusive policies and interventions that rectify these disparities and promote environmental justice for all.

LITERATURE REVIEW

Theoretical Review

Critical Theory

Critical Theory, originating from the Frankfurt School of social thought, emphasizes analyzing power structures, social inequality, and societal norms to understand and challenge oppressive systems. It underscores how marginalized communities often experience environmental injustices due to power imbalances and systemic discrimination. Critical theory enables researchers to examine the root causes of environmental disparities among marginalized populations, exploring the intersection of race, class, and environmental harm. This framework can reveal how policies and practices perpetuate inequalities in access to clean air, water, and safe living environments (Horkheimer, 1937).

Environmental Racism Theory

This theory was coined by sociologist Robert D. Bullard. This theory highlights the deliberate placement of hazardous waste sites, pollution sources, and industrial facilities in marginalized communities, particularly those inhabited by people of color. Environmental racism theory emphasizes that these disparities are not coincidental, but rather reflect systemic racism and the devaluation of certain lives. This theory is highly relevant to the research topic as it provides insights into how marginalized communities suffer from disproportionate exposure to environmental hazards, leading to adverse health outcomes and perpetuating social inequalities (Bullard, 1983).

Intersectionality Theory

The intersectionality theory, developed by Kimberlé Crenshaw, recognizes that individuals hold multiple identities that intersect and interact to shape their experiences of oppression and privilege. In the context of environmental justice and marginalized communities, intersectionality theory helps researchers understand how various dimensions of identity (race, gender, class, etc.) intersect to create unique experiences of environmental injustices. This framework is crucial for examining how the environmental challenges faced by marginalized communities are complex and interconnected, and how a one-size-fits-all approach to environmental policies might exacerbate inequalities (Crenshaw, 1989).

EMPIRICAL REVIEW

Clark, Millet & Marshall (2019) investigated the racial disparities in exposure to air pollution in urban areas. The researchers conducted a spatial analysis using air quality monitoring data and demographic information to assess the distribution of air pollution exposure among different racial groups. The study revealed that communities of color, particularly African American and Hispanic populations, experience higher levels of exposure to harmful air pollutants compared to white communities. The researchers recommended targeted policy interventions to address these disparities and ensure equitable access to clean air.

Hanna-Attisha, LaChance, Sadler & Schnepf (2016) aimed to examine the impacts of Flint water crisis on the health and wellbeing of marginalized communities. The researchers conducted interviews with residents, analyzed water quality data, and reviewed public health records to understand the health effects of lead-contaminated water. The study found that the Flint water crisis disproportionately affected low-income African American communities, leading to elevated lead levels in children and long-term health consequences. The researchers recommended improved water infrastructure and government accountability to prevent similar crises in the future.

Whyte (2017) explored the relationship between indigenous communities, environmental justice and resource extraction. The researchers conducted ethnographic fieldwork, including interviews and participant observation, to understand how resource extraction impacts indigenous communities' land rights and livelihoods. The study highlighted the disproportionate impacts of resource extraction on indigenous communities, leading to displacement, loss of traditional lands, and cultural disruption. The researchers recommended recognizing and respecting indigenous land rights, involving communities in decision-making processes, and implementing sustainable resource management practices.

Rigolon, Browning & Jennings (2018) assessed the disparities in access to urban green spaces among different socioeconomic groups. The researchers conducted a cross-sectional survey, mapping analysis, and spatial modeling to examine the availability and accessibility of parks in low-income neighborhoods. The study revealed that residents of low-income communities had limited access to quality green spaces, leading to potential health disparities and reduced well-being. The researchers advocated for equitable distribution of green spaces and urban planning policies that prioritize park development in underserved areas.

Schafran & Fine (2017) examined the vulnerability of marginalized communities to urban flooding events. The researchers used geographic information systems (GIS) data and vulnerability assessments to analyze the exposure of marginalized neighborhoods to flooding risks. The study

found that marginalized communities often experience higher flood risks due to inadequate infrastructure, poor drainage systems, and lack of investment in flood mitigation measures. The researchers recommended targeted investments in flood infrastructure and community engagement to enhance resilience and reduce vulnerability.

Israel, Eng, Schulz & Parker (2012) explored the effectiveness of participatory action research (PAR) in empowering marginalized communities to address environmental justice issues. The researchers engaged in collaborative research with community members, combining qualitative methods and action-oriented strategies to address local environmental concerns. The study demonstrated that PAR empowered marginalized communities by involving them in research, building collective knowledge, and advocating for policy change. The researchers suggested that policymakers and researchers adopt participatory approaches to ensure that environmental justice solutions are community-driven and effective.

METHODOLOGY

The study adopted a desktop methodology. Desk research refers to secondary data or that which can be collected without fieldwork. Desk research is basically involved in collecting data from existing resources hence it is often considered a low cost technique as compared to field research, as the main cost is involved in executive's time, telephone charges and directories. Thus, the study relied on already published studies, reports and statistics. This secondary data was easily accessed through the online journals and library.

FINDINGS

Our study presented both a knowledge and methodological gap. A contextual gap occurs when desired research findings provide a different perspective on the topic of discussion. For instance, Israel, Eng, Schulz & Parker (2012) explored the effectiveness of participatory action research (PAR) in empowering marginalized communities to address environmental justice issues. The researchers engaged in collaborative research with community members, combining qualitative methods and action-oriented strategies to address local environmental concerns. The study demonstrated that PAR empowered marginalized communities by involving them in research, building collective knowledge, and advocating for policy change. The researchers suggested that policymakers and researchers adopt participatory approaches to ensure that environmental justice solutions are community-driven and effective. On the other hand, our current study focused on exploring the pervasive issue of environmental inequalities that disproportionately impact marginalized communities.

Secondly, our study also presented a methodological gap, whereby, Israel et al. (2012), in their study on the effectiveness of participatory action research (PAR) in empowering marginalized communities to address environmental justice issues, engaged in collaborative research with community members, combining qualitative methods and action-oriented strategies to address local environmental concerns. Our study on the other hand adopted a desktop research method.

CONCLUSION AND RECOMMENDATIONS

In conclusion, the study on environmental justice and marginalized communities underscores the urgent need to address the systemic inequalities that lead to disproportionate environmental burdens among vulnerable populations. The empirical evidence presented throughout this research highlights the stark reality that marginalized communities, often characterized by low

socioeconomic status and limited access to resources, bear the brunt of environmental hazards and injustices. These disparities are not only detrimental to the health and well-being of these communities but also perpetuate cycles of poverty and hinder their ability to thrive.

The findings of this study emphasize the significance of formulating targeted policies and interventions to rectify the environmental injustices faced by marginalized communities. Addressing these disparities requires a multifaceted approach that takes into account the complex intersections of race, class, and environmental well-being. To this end, it is imperative for policymakers, urban planners, and community leaders to collaborate with affected communities in the development of strategies that promote equitable access to clean air, water, green spaces, and safe living environments.

Based on the research findings, several recommendations emerge as key pathways towards achieving environmental justice for marginalized communities. Firstly, there is a pressing need for transparent and inclusive decision-making processes that actively involve community members in shaping policies that directly impact their environments. Secondly, investment in sustainable infrastructure, such as improving access to affordable housing, clean transportation, and effective waste management, is paramount to alleviate the burdens disproportionately placed on marginalized neighborhoods. Additionally, promoting environmental education and awareness within these communities can empower residents to advocate for their rights and participate in the protection of their environment. Lastly, fostering collaboration among researchers, policymakers, community organizations, and industry stakeholders can facilitate the development of holistic solutions that address environmental disparities from multiple angles.

In summary, the study underscores the interconnectedness of environmental justice, social equity, and human well-being. By recognizing the systemic factors that contribute to environmental injustices and implementing targeted recommendations, society can take significant strides towards achieving a more equitable distribution of environmental benefits and burdens, ultimately fostering healthier, safer, and more inclusive communities for all.

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