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CLIMATE-INDUCED RELOCATION AND CULTURAL LOSS: PHENOMENOLOGICAL ACCOUNTS FROM COASTAL BADIN

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ABSTRACT

This paper reviews the role of SSM in participatory research through a local case study on vulnerable coast communities from Badin Pakistan that have been displaced after climate related environmental changes. These relocations are due to rising sea levels, coastal erosion and the salinization of arable land, driving local populations away and with them losing their cultural traditions. Applying a phenomenological approach, this study explores the lived experiences among these displaced people and shows how environmental degradation intersects with cultural loss. The objective of the study is to examine the impact of climate-induced displacement on communities and their social and cultural structure in coastal Badin. The authors used a mixed-methods data collection approach: 40 in-depth interviews with affected persons and a survey of 2,000 community members. One of the key conclusions is that displaced communities are not only dealing with economic difficulties, but most importantly they have been suffering the dismantling of their cultural identity. This research highlights that culturally informed policies will be crucial if we are to manage this not only with respect to the physical resettlement of these communities but also for managing their cultural futures. The research notes that climate related displacement is more than environmental in the making but deeply cultural and social, needing integrated policy approaches.

Keywords: climate-induced relocation, cultural loss, phenomenology, coastal Badin, displacement, cultural heritage, climate adaptation.

INTRODUCTION

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Climate Change induced displacement is viewed as an increasingly pressing problem in the 21st century. With the world witnessing an intensification of climate change there is a profound changing in environmental conditions over time with rising sea level, changing weather patterns, and widespread environmental degradation. These changes are contributing to the displacement of millions worldwide, causing them to flee their homes and resettle in other increasingly unfamiliar environments. By 2019, over 24 million persons had been displaced by climate-related events (IDMC, 2020), with forecasts that this number is likely to rise exponentially in future decades. In coastal zones in particular, all the effects of climate change are increasing and there is likely to be displacement due to extreme weather events, flooding, tidal erosion and sea-level rise. To natural resource dependent communities, such as fisherfolk and agricultural communities the loss of their livelihood increases the burden of relocation and further aggravating social-economic-cultural shadows.

The trend now evident in Pakistan, which has a vast 800-kilometer coastline along the Arabian Sea, is not unique to just this country. The coastal belt of Badin in South Eastern part of the country was already affected by climate change. In the last several decades, high intensity flood, land degradation and increasing salinity have led to destruction of agricultural and fishing space that for years formed the bedrock of their economy (Adeel et al., 2019). As a result, these environmental challenges have driven many residents mainly drawn from coastal fishing and agricultural communities to migrate to urban or less affected areas of the country. Yet this displacement is not simply spatial; it carries deep socio-cultural impacts as communities experience the death of their age-old lifestyles, social organizations and cultural activities (Hassan, 2021). Mobilization in Badin hence offers useful insights into how these communities respond to de-culturing and what could be better design of climate adaptation policies. The importance and broader significance of this research is in adding to the recently expanding literature on climate change adaptation, displacement, culture and sustainability. Although the environmental and economic effects of displacement upon residents are better studied, cultural impacts have been insufficiently studied by

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comparison (Gero et al., 2018). The migration generated by the climate, despite frequently being portrayed as an environmental or economic problem, is mostly a social and cultural one. The disappearance of land, occupation and social networks also spells the erosion of customs, traditions and self. As Baldwin (2020) explains, it is important to explore the “human side” of climate displacement in order to understand how people live these dramatic changes, and what this means for cultural heritage. This study attempts to bridge that gap by zooming in on the phenomenological experience of affected communities in Badin and how climate change-induced displacement disrupts not only their economy and physical environment but also their social and cultural quotidian.

One of the critical issues in further understanding climate-induced displacement is how it plays out with respect to cultural identity. The sounds of the displaced Displacement is disorienting on both an individual and a societal level. They may experience difficulty in trying to settle into new environments or settings that have not been shaped by their own previous lifestyles, which can bring about feelings of separation, grief and exposure (Baldwin 2020). And also, with the displacement many of these communities face not just losing that physical space but the cultures, and traditions that is associated with those spaces. In the Badin district, for instance, shifting fishing communities result not only in lost fishing sites but also traditional fisherfolk knowledge and cultural events and celebrations associated with the coastal milieu go missing (Nawaz 2020). This emphasizes the importance of studies of climate-induced migration which do not only focus on physical aspects, but also address the intangible by no means less important loss of cultural heritage.

This article aims to shed light on the interplay among climate-induced displacement and cultural loss. Thinking with and through the phenomenological experiences of people in Badin, the research seeks to provide us with greater understanding about how displaced individuals and communities make sense of & experience their disposessions; their loss of cultural practices and identities as well as social structures. Because this approach reflects the personal and subjective aspects of

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displacement, which are often absent from broader policy debates, Dalhousie contends that it is essential. Learning how people and regions process these cultural losses is central to crafting more comprehensive climate adaptation policies that move beyond purely physical relocations to include mechanisms for preserving culture and building social ties.

To summarize, this work will help understand the socio-culturally relevant aspects of climate-induced displacement in coastal Badin. Although the physical and economic costs of displacement have been widely studied, this analysis emphasizes its cultural dimensions which are not often taken into account. Through investigation of how displaced communities encounter a loss of culture, this study seeks to guide policy recommendations which acknowledge the keeping and development of cultural traditions as an essential component for carbon-conscious adaptation. This focus on responding to the cultural as well as material needs of displaced peoples is vital for building more resilient and sustainable communities to withstand increasing climate change..

LITERATURE REVIEW

Climate-induced mobility has become an area of increasing research interest, with academic work examining its environmental, economic and social impacts. The literature on this issue has snowballed over the last few decades as researchers have acknowledged that climate change affects migration patterns in various ways. So much of the early displacement research focused on what were essentially triggers in the environment — sea-level rise, extreme weather events, land degradation — that force people to leave their homes. These have mostly focused on the economic impacts of climate change such as loss of or damage to livelihoods (notably in agricultural and coastal communities) (Hassan et al., 2020). Forced migrants are often confronted with economic hardships, such as unemployment, a decrease in income and the missing of basic social services - including healthcare and formal education they need to be fit.

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Yet, whereas environmental and economic aspects of climate change related displacement have been subjected to in-depth review, there is an emerging payment of attention towards understanding the cultural and social effects that migratory process may produce (Gero et al., 2018). Climate displacement is not just an environmental and economic matter, but also one of culture and society, with deep impacts on identity, social relations and cultural practices. As noted by Gero et al., 2018) from forced migration experience such as the destruction of traditional ways of life, loss of community networks and cultural practices are still understudied in academic literature. In particular, whereas most climate adaptation policies emphasize economic regeneration and resettlement, the conservation of culture and community have rarely been factored into such policies.

In the coastal areas, where both inheritance links that connect material and immaterial life such as fishing or farming, help to displace communities of their natural mechanisms and the port ways of life. When ways of life that are deeply entrenched in the land and the natural environment are disrupted, this has severe consequences for cultural identity and social organization. Indeed, Baldwin (2020) and others have signaled the loss of a way of life also brings with it the destruction of community solidarity as displaced people become relocated to new contexts where their 'old ways' may no longer apply or be relevant.

A variety of methodological techniques have been used to investigate the impacts of forced climate-related displacement. Some studies integrated the mixed-method research design to use both qualitative and quantitative data, in order to have a fuller picture of proven reactions. For example, Smith et al. (2017) combined interviews and participatory observation to analyses social implications of displacement in coastal communities. Their work emphasized the loss of social capital as people were forced away from one another along more distant directions. Through participatory observation, the authors were able to develop a deeper understanding of how climate displacement impacts community life and cultural experiences.

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Another noteworthy work in this area is of Moser and Ekstrom (2010), who used a phenomenological approach to explore the lived experience of climate migrants on small Pacific Islands. In giving attention to personal narratives, this methodology shed light on how displacement is connected with identity and cultural change in all this complexity. Their results reinforced the significance of considering response to the experience of displacement, notably of cultural traditions social systems and community linkages. Of particular relevance when examining the emotional and psychological effects of climate-induced displacement is the phenomenological approach, which focuses on how people experience, interpret meaning, and give sense to their situations.

In addition, a number of studies have combined such tools as Geospatial Information Systems (GIS) and remote sensing data to map displacement flows and evaluate environmental threats leading to migration (Khan & Khan, 2018). These instruments have also been useful to grasp the spatial dimension of migration induced by climate and environmental forcing. But this type of tools usually lacks the social and cultural perspective, which are equally important for a proper analysis of climate change effects on vulnerable communities.

The existing body of literature on climate-induced displacement focuses primarily on the powerful economic and environmental implications that it has for affected populations. Displaced populations generally suffer from serious economic deprivations such as loss of vocation, income inequality and limited access to basic services (Adeel et al., 2019). Such circumstances—combined with political constraints of displaced communities being non-recognized, lack of infrastructure and negligible government support — further undermine the resilience of these people.

Nevertheless, a major challenge in the literature is that there has been relatively little consideration of the cultural impact of climate displacement in communities whose culture is deeply connected to its environment. Although adaptation strategies acknowledge the cultural heritage of displaced communities (Brown 2017), there is limited research on the connection between culture and experience for displaced

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people. Displacement may cause the erosion of traditional cultural practices, knowledge systems and community organization that are inextricably tied to land and environment. For example, in coastland like Badin, where fishery and agriculture are two of key economic activities — as well as part of the local heritage that includes knowledge about the sustainable use of resources which has been passed on from generations to generations — displacing people may have resulted in destroying traditional knowledge.

Furthermore, there is dearth of research on cultural implications of climate displacement in South Asia which hosts a large number of internally displaced population due to climate change. Coastal communities in South Asian countries have an extreme dependence on agriculture, fisheries and environmental resources. They are having to increasingly engage with rapidly changing environments thanks to climate change - causing many of them to leave traditions and cultural identities behind. Adeel et al. (2019) point out that we need further studies on the cultural implications of displacement for South Asia's rural and coastal communities.

This study seeks to fill this gap in the literature regarding the cultural implications of climate migration, particularly in South Asia. Looking at the phenomenological experiences of displaced communities in Badin, Pakistan, this article attempts to address the ways these communities encounter and understand cultural loss from climate change. The coping mechanisms and resilience strategies used by displaced population to prevent cultural identity loss will also be investigated.

Unlike many of the earlier research efforts focusing on the monetized and that which centers around environmental aspects of displacement, our study aims to contribute to a greater understanding about the cultural impacts of climate induced migration. Through foregrounding the individual and collective stories of the displaced, it will contribute to understandings of how climate-related mobility affects cultural norms, social relationships, and community cohesion. Finally, the objective of this research is to adding to the literature on adaptation to climate change by making clearer that how

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much preservation of cultural identity and community institutions are essential contributors for adoption practices.

Research Question: What is the effect of climate induced displacement in coastal district Badin on cultural identity and heritage of displaced communities?

Objectives:

To ascertain the social and cultural consequences of climate change-induced mobility in Badin.

To investigate the contribution of cultural practices in facilitating displaced people to adapt.

To evaluate coping mechanisms and resilience strategies of these communities against loss of culture.

Significance:

Knowledge of displacement-induced cultural loss is imperative for devising climate adapted strategies that consider the physical and cultural aspects of migration. This analysis can contribute to the wider debate on environmental migration and especially that relating to the cultural dimensions of coastal displacement

METHODOLOGY

This research design incorporates mixed methods, combining surveys with interviews in order to gain a fuller understanding of climate-induced displacement and its cultural significance. The mixed-methods design enables rich, contextual data that provides both breadth and depth in understanding the multi-dimensional effects of displacement on affected populations in Badin, Pakistan. Through the integration of quantitative and qualitative data covering statistics on displacement patterns and scales, lived experience narratives, as well as shifts in cultural norms among displaced populations, this method focuses on a comprehensive understanding of the phenomenon. Similar mixed-methods designs have been used effectively in displacement due to environmental degradation, such as the study by Laczko and Agha arm (2014) using surveys and interviews to explore the effects of climate-induced mobility on local communities.

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The source data used in this research was acquired from the coastal areas of Badin, Pakistan that is subject to severe environmental changes i.e., sea level rise, saline environment and extreme climate. A questionnaire was administered to 2,000 inhabitants (both displaced and non-displaced community members) aimed at providing a general picture for the socio-economic effects of environment-triggered displacement. The survey was designed to measure the incidence of displacement and barriers faced by displaced individuals, as well as perceived effects on culture. Forty key informant interviews were also conducted, including community members in displacement, local leaders, cultural practitioners and other stakeholders. Such interviews further enabled the personal narratives of displacement, loss of culture, and coping strategies of daily life among these communities to be more fully explored.

The hires for the qualitative interviews were based on purposeful sampling so that different types of perspectives can be included. This was to ensure that we would capture the diverse experiences of participants in both displaced and non-displaced communities, across age-groups, gender and cultural groups. To promote equal representation of various socioeconomic statuses, a stratified random sampling approach was used for this survey. Analysis stratified by age, gender, wealth and migration status resulted in more subtle insights into how groups are affected by climate adaptation and displacement.

Quantitative and qualitative interviews were conducted, using structured questions for the quantitative component, and open-ended items in the qualitative interviews. The survey was structured and included closed-ended questions aimed at establishing the prevalence of displacement, economic impact, and impact on cultural practices. The qualitative interviews were guided by semi-structured questions that invited participants to share their experiences, feelings and understandings of cultural loss while living in displacement. For the qualitative data, thematic analysis was conducted with an interest in identifying emerging themes concerning cultural adjustment, identity and coping. Quantitative data The demographic profile of the respondents was summarized using descriptive statistic; inferential statistics were

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used to explore significant associations between displacement and socio-cultural variables.

The qualitative data will be thematically analyzed using a structured approach to identify common themes related to culture and loss, social adaptation, and coping in displaced communities. This will help us to gain a rich insight into how people perceive and live culture change in the context of displacement. The quantitative aspects, in contrast, will be subjected to statistical analysis to identify general trends in terms of patterns of displacement and its economic effects as well as determinants of success or failure of adaptation measures. Using the two methods in conjunction will allow triangulation of findings and provide a more thorough understanding of CCID in Badin.

Ethical aspects played important role in the research process. Consent All subjects gave informed consent to participate in the study and understand that the experiment is their right. Confidentiality of the responses was maintained, and all identifying personal data were sanitised to safeguard the privacy of participants. Furthermore, ethical considerations were adhered to prevent any abuse or misuse of a population in vulnerable circumstances. The research also used triangulation to compare the findings from the surveys, interviews and some literature. This method serves to improving the reliability of results and a deeper understanding about climate-induced displacement cultural loss and adaptation measures.

RESULTS AND EVALUATION

The findings of the survey paint a grim picture of problems faced by the internally displaced in Badin with respect to employment and income generation. More than 60% of the displaced members experienced severe problems in finding a steady job at their new place of residence. This was very difficult for many, particularly those with a history of fishing or farming who found it impossible to find work which replicated their former way of life. Even more, fishing communities experienced challenges in adjusting the changes from rural to urban job opportunities as their expertise mainly corresponding to their rural coast locale opportunities (Adeel et al., 2019). So people

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had to settle for low-skilled, underpaid work that could not guarantee decent living standard.

A central issue in the quantitative data collection was loss of 'old' means of living, primarily related to fishing and farming. A 'Alexander 74% of the uprooted population reported a sharp drop in income after moving. This economic devastation is compounded by a deeper sense of loss for many that not only lost their jobs, but the land and resources that had supported generations of their families. Respondents also expressed feelings of disempowerment and frustration that they could not maintain their customary ways (Hassan, 2021). This underscores the larger social and economic impact of displacement, as people are stripped not only of their possessions but of their own identity and community.

The qualitative interviews brought out some of the more private and personal aspects of climate-induced displacement. The interviewees both recounted and felt a tremendous sense of loss – beyond their living possessions, to the way in which they lived and their personal identity. The loss of traditional generational fishing methods was mentioned by many. With the loss of marine resources because of coastal erosion and salinization of freshwater sources, many people felt threatened by a disconnection from their roots that were based on their coast – home to the ocean (Brown, 2017). Other participants feared that younger generations were starting to use urban dialects and forget their ancestral languages.

Cultural feasts and socializing, which were once central to community connectedness, became significantly disrupted as a result of displacement. A weak decline of social cohesion was also echoed by several informants who indicated that moving to the city has weakened community bonding. Displaced persons struggled to secure the amount of social support and engagement that they had been accustomed to enjoying when in their home settings, resulting in feelings of being disconnected and lacking a sense of belonging (Baldwin, 2020). The resulting loss of cultural practices together with economic insecurity made for a twin sense of being shut out — both physically, and culturally.

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Taken together, both qualitative and quantitative findings point to the urgent need of policies which respond not only to the economic but also cultural impacts of climate displacement. Adaptation plans tend to zoom in on supplying economic aid, but the results indicate that these interventions should be broader. The importance of maintaining cultural heritage in any adaptation strategy is key to building community resilience and identity. Both survey and interview data show that SFDP beneficiaries are not just losing their means of livelihood but also their continuity of cultural practice and social coherence.

To mitigate these, policies should focus on providing opportunities for displaced populations to pursue cultural preservation activities, such as reintroducing traditional practices, the creation of native language programs and support for cultural festivals. Furthermore, the process of assimilating displaced people into urban economies needs to be complemented with initiatives that assist in reprogramming their skills so as not lose sight of who they are over what they have become. As suggested by Adger et al. (2015) attests, efficient adaptation will have to include not only the needs in material but also the protection of cultural heritage to guarantee durable resistance and social integration.

In the end, these results underscore the importance of a more holistic approach to climate adaptation that recognizes and seeks to tackle the interconnectedness of displacement, erosion of culture and loss in income. This multi-pronged strategy would help communities survive the effects of climate change and to thrive through retaining their cultural identities and social infrastructure in the face of adversity.

DISCUSSION

The results of the current study bring into focus the fact that climate-induced displacement in Badin is a complex phenomenon that goes well beyond just moving people from one place to another. Despite the attention given to physical displacement in climate adaptation discourses, this research shows that cultural and social dimensions are just as important and should be more fully considered. Displacement of communities, especially ones relying on coast-based resources such as fishing and

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agriculture will lead to livelihood loss since the traditional forms of fishing are closely associated with land use and sea. Thus, these people are not only economically disempowered but also critically destabilized in their social matrix to the detriment of a cultural collapse.

The results indicate that customary practices (eg, fishing methods and farming) are not simply means of production but part of the culture of the displaced persons. For the vast majority of communities in Badin, these livelihoods are entwined with social and cultural organisation practices- they form a central part of identity. The loss of these resources results in disconnection from traditional practices and estrangement. Moreover, the crumbling of the traditional communities once enshrined in these life-ways has corroded community cohesion and 'the safety support blanket' (Baldwin, 2020). For many dislocated persons, this means an alienation not just from their environment but also from those roots of culture and friends.

And as the urbanization is mostly joined with poverty, it has eroded traditional social structures and community roles. Displaced people are required to adjust their social and economic position, but such adaptation takes place in an environment where culture is not so much the context as a liability. As noted by Adger et al. (2015), impoverishment of social relationships resulting from displacement typically enhances the rapid dissolution of cultural heritage making it difficult for communities to re-establish their social networks and cultural practices in new domiciles. This underscores the importance of developing policies that recognize those complex socio-cultural dimensions of climate-induced migration and address cultural heritage as an integral part of adaptation efforts.

The implications of this study suggest that climate adaptation policy should not stop at material and economic accommodations between relocating and host populations. The study highlights the need to take cultural preservation measures into account in these policies. One possible policy recommendation would be to promote the preservation of TK systems, including the passing down of traditional fishing methods, agronomic practices and craftsmanship. These cultural practices have economic, as

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well as social and identity value for the displaced communities. Incorporating cultural preservation into climate adaptation initiatives can work to counterbalance the displacement effects and enable displaced individuals to feel a sense of continuity and belonging, which is critical for their mental (Brown, 2017) and emotional health.

Recommendations should also support community-based resilience. Populations on the move require spaces where they can build new connections that enable them to maintain and transform their cultural practices in changing circumstances. Community-based resilience interventions might entail organization of cultural groups, development of community centers, projects that provide displaced persons with opportunities to reconnect with their heritage through artwork, language and shared culture events. These efforts can also contribute to development of social inclusion and decreasing the degree of isolation commonly associated with displacement (Gero et al., 2018). Because when you make sure that displaced populations continue to connected to their culture while navigating economic change, it can lead to long-term resilience and social cohesion.

While this analysis yields useful knowledge about the effects of climate displaced on cultural erosion in Badin, it has a number of weaknesses. The study is geographically constrained to Badin, potentially limiting the generalizability of findings with respect to diverse experiences of displaced populations in other coastal areas within Pakistan and beyond. Experiences of forced displacement are highly contingent upon context; therefore, cultural effects may differ by locale and community. To generalize the results from one geographical area to another, that have been experiencing similar effect in terms of climate change induced displacement may be an advantage for future research extending beyond this region (Moser & Ekstrom, 2010).

Second, the study is not free of bias, as it depends largely on self-reported information from interviews and surveys. Participants may have provided socially desirable responses, experienced recall bias, or been otherwise swayed by the limitations of qualitative research. To address this shortcoming, enrichment by triangulation with ethnographic observations or historical records could be considered empirically in

subsequent work. Furthermore, longitudinal approaches would allow one to monitor how the consequences of displacement in cultural identity evolve over time. People working with communities could use this finer understanding of how people adapt to displacement and the relative mitigation of cultural loss through adaptation strategies.

CONCLUSION

Climate forced migration in coastal Badin has far-reaching and complex implications which are not only economic in nature. People in this region who have been displaced, often with a primary reliance on coastal resources such as fishing and agriculture, are not only experiencing economic loss but also the erosion of their culture and identity. The results of this research illustrate the complex interplay between environmental displacement and cultural loss, indicating that resettlement disrupts longstanding customs, social organizations, and community solidarity. The impact of these displacement-related changes and the associated loss of traditional livelihood such as fishing practices and farming methods, both central to economic status and social identity in many communities, further add to the psychological and cultural cost. “When they lose their homes and the surroundings that connected to their culture, it’s very hard for people who are refugees and migrants who come into new cities, in new cultures,” he says.

This research emphasizes the importance of climate adaptation policies based not only on economic and environmental strategies, but also on cultural aspects. And while jobs and commodities have been the center of attention in climate adaptation, it is evident that a strategy going forward must be more holistic, not least including cultural practices and social networks. Rebuilding actions should not limit to just relocation and job opportunities; but they should also facilitate cultural conservation in the form of community-based programs that promote the practice, language, and festivals. Culturally sensitive adaptation measures, as has been suggested by Baldwin (2020), can assist the affected communities to perceive their identity, enhance resilience and increase social cohesion.

Finally, this paper encourages a more integrated approach to climate adaptation that considers the coexistence of economic, cultural and social resilience. Policymakers must incorporate cultural preservation into their plans so that displaced communities can restore both their material well-being and their cultural heritage and sense of community.

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