



The Socio-Cultural Impact And Displacement Caused By The River Erosion Of Kordoiguri.

¹Chandrika Moran, ² Dr. Sujay Kumar Bag

¹Research Scholar, Department of English, Arunachal University of Studies, Namsai, Arunachal Pradesh,

²Assistant Professor, Department of English, Faculty of Art's & Social Sciences, Arunachal University of Studies. Namsai, Arunachal Pradesh

Abstract: The Ananta Nallah, a tributary of Dangori River, acts as a conduit for the Brahmaputra River's water, causing severe river erosion in the region. Since 1992, this erosion has displaced hundreds of families, leading to the loss of their homes and agricultural lands. This has left them homeless and impacted their livelihoods and mental health. The erosion has caused the loss of several lives, leading to emotional and psychological distress in the region. While authorities have deployed temporary measures such as concrete blocks and geo-bags, these have proven ineffective, leading to recurring erosion. The affected residents and local organisations have been actively involved in protesting and demanding effective long-term solutions and rehabilitation from the government. This study aims to explore the socio-cultural impact and displacement due to river erosion in the Kordoiguri, Doom Dooma region in the Tinsukia District, Assam.

Index Terms - Kordoiguri, Brahmaputra River, Socio-cultural impact, Displacement, River Erosion.

1. INTRODUCTION

The Brahmaputra, one of the youngest major rivers in the world, stands out in several ways. It's an international river with an easterly course of 1625 km in China, a south and westerly course of 918 km in India, and a southerly course of 337 km in Bangladesh. The Brahmaputra's drainage area, from its source to the confluence of the Ganga at Goalundo in Bangladesh, spans an impressive 580,000 km². The Brahmaputra River, flowing through the state of Arunachal Pradesh, India, for 278 kilometres, is known as the Dirang or Siang River in that region. The Dirang River is joined by two large rivers, the Lohit and the Dibang or Siang River. Together, the Dirang River, along with the Kobo River to the west of Saikhowa Ghat, Assam, forms the Brahmaputra River. The Brahmaputra, a river that flows for 640km through the state of Assam, entirely within the Assam Valley. Throughout the valley, the Brahmaputra has a braided channel, except for a few short segments where it flows in a single channel (Sarma & Phukan, 2006).

Kordoiguri, a village situated under the Doom Dooma revenue circle in Tinsukia, Assam, is severely impacted by erosion. The primary cause for this is the merge of the Brahmaputra, Dangori, and Dibru rivers through the channel Ananta Nallah since 1992. Consequently, people in vast areas of Saikhowa, Doom Dooma, Talap, and other regions have faced annual floods and erosion. This incident has had a profound socio-cultural impact and displacement on the region, resulting in the loss of several hectares of valuable land, homes, and agricultural fields, leading to the displacement of numerous families. Earlier,

the village was located at least 300m inside the location of the present day channel (Lahiri, S.K., Sinha, R., & Sarma, J.N.,2008).

Despite government intervention and official visits, the affected community continues to struggle with ongoing hardships. The erosion has caused the loss of several lives, leading to emotional, psychological distress, and anger among the people in the region.

2. LITERATURE REVIEW

There are numerous publications, research papers, and articles that focus on the aspects of river erosion in various regions caused by the Brahmaputra river. However, there are some aspects, like socio-cultural impact and displacement caused by river erosion from the tributaries of Brahmaputra in the Kordoiguri region, that require comprehensive analysis.

This study explores the connection between riverbank erosion and migration (Dekaraja and Mahanta, 2021).

This study explores the varied topography, geomorphological features of different type and order, hazards of various intensities, warmth and anguish expressed by the local people in the Upper Reach of the Brahmaputra Vally, Assam (Lahiri, S.K., Sinha, R., & Sarma, J.N., 2008)

This study aimed to assess the extent of bank erosion and backline migration of the Brahmaputra River in Assam over two distinct periods of the 20th century. The first period spanned from 1912 to 1975, while the second period encompassed 1963 to 1996 (Sarma, J.N. & Phukan, M.K., 2006).

This study discusses that socio-cultural theory aims to explain how individual mental functioning is shaped by cultural, institutional, and historical contexts. The sociocultural perspective emphasises the role of social interaction and culturally organised activities in influencing psychological development (Scott & Palincsar, 2013).

This study shows that climate change has led to the migration of rural communities in search of better livelihood opportunities (Shamsuddoha, M., & Chowdhury, R. K., 2009).

3. OBJECTIVES

1. To explore the socio-cultural impact caused by the river erosion of Kordoiguri, Doom Dooma.
2. To explore the displacement caused by the river erosion of Kordoiguri, Doom Dooma.

4.1. RESEARCH METHODOLOGY

The study has been completed on the basis of descriptive and analytical methods.

4.2. DATA AND SOURCES OF DATA

The study will be based on two different type of data, one is primary and one is secondary. The primary source of data is personal interview. The secondary source of data for this paper is journals, articles and research papers.

5. DISCUSSION

Riverbank erosion has become a vulnerable phenomenon on the banks of the Brahmaputra river and its tributaries. Approximately 17 riverine districts in Assam are affected, resulting in significant land loss (Dekaraja and Mahanta, 2021). Erosion has resulted in the loss of several hectares of valuable land, including homes, agricultural fields, and other resources. This has caused anguish among the local people, who are grappling with the distressing and unpredictable future. The upper reaches of the Brahmaputra Valley are highly dynamic are, strongly influenced by fluvial process (Lahiri, S.K., Sinha, R., & Sarma, J.N., 2008).

The United Nations has defined a disaster as “a serious disruption of the functioning of society, causing widespread human, material, or environmental losses which exceed the ability of the affected society to cope using its own resources”. Disasters such as floods, earthquakes, tidal waves, tropical storms, volcanic eruptions, and landslides are known as sudden impact disasters. Notably, floods are the most commonly associated natural disaster, leading to sudden population migrations and food shortages (Robinson, W. C., 2003).

One of the affected regions is Kodoiguri, located under the Doom Dooma revenue circle in Tinsukia district, Assam. Earlier, Kordoiguri was located at least 300m inside the location of the present day channel. Repeated erosion had caused the village to shift behind the embankment (Lahiri, S.K., Sinha, R., & Sarma, J.N., 2008). Over the course of several decades, the erosion of fertile land has resulted in the displacement of numerous individuals, leading to the loss of their primary source of livelihood—crops. Due to the scarcity of available fertile land for cultivation, people were compelled to change their occupations. They even lacked sufficient land for cattle rearing. Most of those who lost their homes had to seek refuge in local schools, to rebuild their lives in other areas. Many of them had to relocate to nearby village and urban areas for better opportunities.

The affected individuals attempted to rebuild their livelihoods by replanting tea plantations and betel nut trees (Areca catechu). However, most of them had already lost their plantations that they replanted after losing them the first time. Displaced families experience continued uncertainty about weather damage to personal property, and loss and death of livestock during displacement.

Even during the quiet of night, the sound of the river’s land breaking apart due to the active erosion persisted. This loss has caused widespread sorrow and fear among the local people, who are deeply concerned about the uncertain and challenging future that lies ahead. Housing is crucial for mental health, and unsatisfactory housing conditions can lead to psychosocial stress and increase the risk of developing mental health disorders (Tong, S., 2017). Natural events like floods can expose people to various health-related problems. Survivors can experience long-term psychological effects, including distress, anxiety, pain, depression, and social dysfunction. These effects are influenced by both the hazard itself and its negative consequences. Factors such as water depth, flood type and duration, and injuries, threats to life, property damage, financial losses, and displacement can characterise flood severity and cause distress. Individual skills, experience with flooding, autonomous actions taken to protect family, and a sense of belonging can also contribute to psychological distress. However, these individuals’ decisions also reflect how society or community manages risk. The degree of awareness among individuals is linked to effective risk communication (Foudi, S., Osés-Eraso, N., & Galarraga, I., 2017).

This recent studies show that climate change has led to the migration of rural communities in search of better livelihood opportunities (Shamsuddoha, M., & Chowdhury, R. K., 2009). The recurring floods and erosion Assam has resulted in displacement. This erosion has displaced farmers, causing them to lose their homesteads, crop lands, and survival strategies in the affected areas. Consequently, farmers are forced to migrate to other regions in search of a better life (Dekaraja and Mahanta, 2021). The local people in Kordoiguri are forced to leave their homes and rebuild them repeatedly in other areas. Despite their efforts, they are constantly at risk of losing their homes. Many who can afford it choose to relocate to other villages or nearby urban areas, seeking better opportunities for their livelihoods.

In the present day, the erosion continues to be highly active, causing the villagers to lose their homes and land. The erosion has reached the walls of the local Gukhai Ghar and it’s Namghar, threatening to destroy the Namghar, which they had already rebuilt twice. The authorities are authorising and planning to rebuild the namghar in another location, causing immense emotional and psychological distress to the people of this region. Natural disasters cause increased psychosocial stress, anxiety, sadness, and distress, significantly impacting mental health. This is because these calamities lead to both displacement and exposure, which can cause mental health issues (Zahlawi, T., Roome, A. B., Chan, C. W., Campbell, J. J., Tosiro, B., Malanga, M., & Dancause, K. N., 2019). Some locals have been affected by this erosion for decades, while others have been affected since birth or a very young age. Now, they feel hopeless about having a stable life, as their stories of their past home and agricultural cultivation feel like distant dreams or ancient memories to their next generation.

The devastating landslide has claimed several lives, causing widespread panic and concern among the local community. The loss of open spaces and inadequate parental supervision has severely hindered the children's ability to engage in recreational activities and play freely.

Despite the temporary measures deployed, such as concrete blocks and geo-bags, these have proven ineffective, leading to recurring erosion. Consequently, the local people are demanding compensation for their lost land and a permanent solution to this disaster.

IV. RESULTS AND DISCUSSION

The Kordoiguri region, Doom Dooma, has lost its lands, homes, and livelihoods due to severe erosion. This has led to profound socio-cultural impacts, including displacement and psychological distress. The loss of their primary livelihood, agriculture, has left many villagers without a place to live. The village lacks sufficient land for both farming and cattle rearing, forcing most of its inhabitants to leave and seek shelter in other areas. Those who remain are in the process of losing their homes, and the ongoing disaster has left them in a state of psychological distress. Despite the temporary measures implemented by authorities, no permanent measures have been taken.

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