

# **SOCIAL CAPITAL, PLACE ATTACHMENT AND FLOOD RISK PERCEPTION: A STUDY OF KOSI RIVER BASIN IN BIHAR**

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## ABSTRACT

Flood is a perennial problem in the state of Bihar, in general, and in the Kosi river basin, in particular. The Kosi river is the main cause of floods in Kosi region. River Kosi is known as the 'Sorrow of Bihar' inflicting a devastating impact on the people residing in the region. The provincial and central government has taken several measures over time to reduce the casualties and vulnerability of people caused by Kosi floods. Most of these measures were structural-based solutions such as the building of dams, embankments, and floodwalls. However, these structural measures have failed to control the flood problems in the Kosi river basin. Despite all past and current engineering solutions to control floods and increase flood safety, the plight remained unchanged and the suffering continues on account of massive human and physical loss.

Against this backdrop, the present study aims to examine the influence of sociodemographic characteristics, social capital, and place attachment on flood risk perception. Furthermore, a modest attempt is also made to capture the ground reality of flood control and management in Kosi Basin by eliciting the responses, views, beliefs, and perceptions of the affected communities and representatives of flood control institutions. The scope of the study is confined to the Supaul district of Bihar. The study employed a mixed-method approach to achieve its research objectives. A cross-sectional survey was conducted in the flood-affected areas of Supaul, Bihar. Simultaneously, in-depth personal interviews were conducted with the officials engaged in flood control in the Kosi region and community members of Supaul district. Multiple regression analysis was performed to analyze survey data and thematic analysis was carried out to analyze interview data. The findings show that perceived flood risk is distributed quite unequally along occupation, length of residence, gender, and caste of respondents. Importantly, the study also found a positive exchange between social capital, place attachment, and flood risk perception. Specifically, the components of social capital and place attachment have emerged as strong determinants of flood risk perception. Nevertheless, place attachment predominated social capital in terms of the degree of influence. This exhibits the dominance of place-specific factors over social-relational factors. Embracing the social, psychological, and place-specific approach to studying flood risk perception could be instrumental in developing integrated flood risk reduction strategies which could ultimately contribute significantly to the endeavour of protecting human and physical loss owing to natural disasters like floods.