

Corresponding Author:

Muhammed Sulfikkar Ahamed
Resilience Innovation Knowledge Academy, India India
muhammed@rikaindia.com

Author(s):

Vipul Kumar Nakum¹, Saki Isetani², Ranit Chatterjee³ and Rajib Shaw⁴

¹Resilience Innovation Knowledge Academy, India, Vipul@Rikaindia.Com, IND

²Faculty Of Environment And Information Studies, Keio University, Japan, T18513si@Sfc.Keio.Ac.Jp, JPN

³Graduate School Of Informatics, Kyoto University, Japan, Ranit@Rikaindia.Com, JPN

⁴Graduate School Of Media And Governance, Keio University, Japan, Rajib@Rikaindia.Com, JPN

The paper examines the school infrastructures in the city of Gandhinagar, India to promote risk-informed school selection. Schools form a major critical facility as they perform educative functions, and double up as emergency shelters in case of a hazard event. The Asia Pacific Report of 2019 suggests that investments in the educational sector can empower students, and is a key entry point for breaking the link between poverty and disasters in the long term. Lessons from past calamities such as the Gujarat Earthquake of 2001, 2011 East Japan Earthquake, and Tsunami point out the need to give equal weightage to risk-informed school selection along with school curricula to safeguard the life of school students and prevent disruption in school education. Based on this, the study established an assessment tool, 'Risk-Informed School Evaluation (RISE) tool' for school evaluation involving concepts such as on disaster resilience, school safety and so on. Based on the existent schools in the Indian city of Gandhinagar, Gujarat, which was one of the affected regions in 2001 earthquake, the study proposes indicators for evaluation based on academic value, physical conditions, natural conditions, and non-structural resilience. Stratified random sampling technique is used covering public, private and, semi-private school administrations, to determine the representative sample size from the total schools in the Gandhinagar City. The selected schools are assessed through primary data collection to generate a comprehensive dataset. The compiled dataset is analyzed to generate a quantitative composite risk map and further cohort analyses on the various dimensions of school resilience to enhance the risk reduction measures. The analysis reflects the school conditions based on resilience, and highlight areas, that are essential for improving the school safety, and thereby supporting the school selection decision. The study promotes interventions in the conventional school selection process, to empower the Right to Education without disruptions, and progress towards sustainability through proactive risk reduction measures, evidence based policy-making.

Key Words: *Disaster Risk Management; Critical Infrastructures; School Safety; Hazards ;Risk Mapping*

Sharing Disaster Experience, Research and Innovation: A multi-hazard approach for risk management after Covid-19