

Approaches to Investigating Disaster Risk Reduction (DRR)

Santhosh Jothimani*¹

Faculty: Mara Alagic²

¹*School of Computing, College of Engineering*

²*School of Education, College of Applied studies*

Wide-ranging and uncertain threats from natural disasters to public health, energy networks, cybersecurity, and other interconnected facets of human activity make explicit the need for the development of resilience-driven strategies to protect against undesirable consequences of uncertain, unexpected, and dramatic disasters-related events. The National Academy of Sciences (NAS) defines disaster resilience as “the ability to plan and prepare for, absorb, recover from, and adapt to adverse events”. Disaster risk reduction (DRR) and resilience strategies have the potential to change how communities prepare for the potential disruptions of key services such as energy, water, transportation, healthcare, communication, and financial services. The objectives of DRR policies are often ill-defined and under-specified by policymakers and practitioners and it is almost impossible to assess how well the resources committed to these policies translate to improving DRR in at-risk communities. To address this problem, this research aims to contribute a framework for the better conceptualization and measurement of disaster risk reduction. This research also includes features within resilience thinking and a summary of the results obtained in the synthesis of articles on disaster resilience management. This research is part of the convergence project within the Disaster Resilience Analytics Center (DRAC).