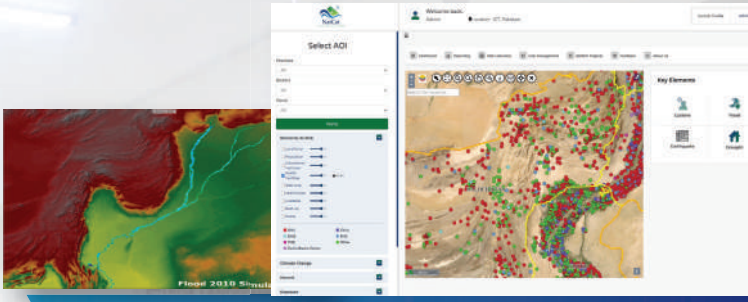
Natural Catastrophes Model (NatCat)

NatCat's Real-time Insights



RESHAPING DISASTER PREPAREDNESS

HAZARD MAPPING

Identifying and spatially representing areas that are susceptible to specific natural hazards, such as earthquake zones, floodplains, or wildfire risks areas.

LOSS ESTIMATION

Quantifying the potential economic and insured losses resulting from natural catastrophes, often using advanced modeling techniques and historical data to access risk.

RESILIENCE PLANNING

Assisting in development of strategies and policies aimed at enhancing the ability of communities and systems to prepare for, respond to, and recover from natural catastrophes, reducing vulnerability and promoting adaptive capacity.

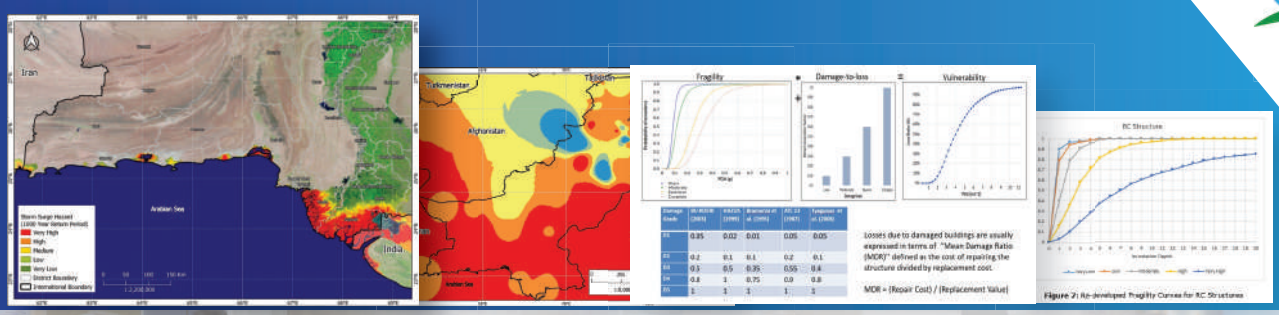
MITIGATION MEASURES

Supports in actions taken to reduce the likelihood or severtity of natural catastrophes, such as land-use planning, bulding codes, structural rainforcements, ecosystem restoration, and early warning systems.

RECOVERY

For restoring and rebuilding communities, infrastructure, and ecosystems in the aftermath of natural catastrophes.

The risk modelling work can derive disaster risk maps and quantitative national and sub-national information on the expected levels of loss for hazard events of varying types, intensities, and return periods.



NATCAT

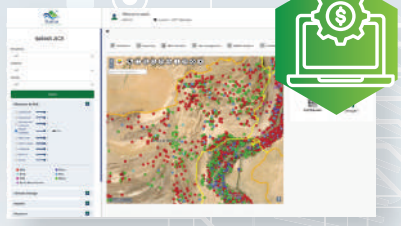
NatCat's

Natural Catastrophes Model (NatCat)

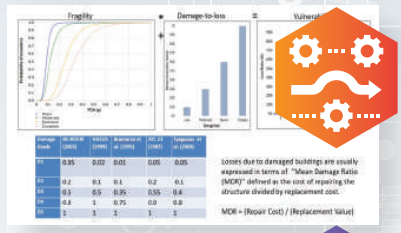
RESHAPING DISASTER PREPAREDNESS

Real-time Insights

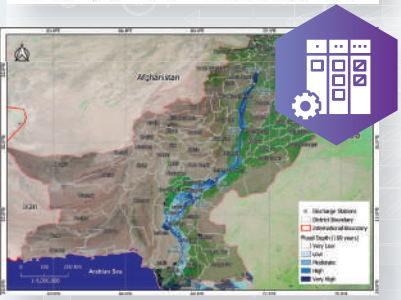
Under National Disaster Risk Management Fund (NDRMF) Project, a data centre has been established (Costing around $7 million for hardware and software) in the National University of Science and Technology (NUST) which is hosing country-wise geo-referenced database and a National Catestrophe (NatCat) modeling – a quantitative risk modelling analytical tool for the primary natural hazards including; floods, earthquake, drought, urban flooding, flash flooding, heatwave, and tsunami.



The risk modelling work can derive disaster risk maps and quantitative national and sub-national information on the expected levels of loss for hazard events of varying types, intensities, and return periods. The NatCat modeling can be used for



(i) designing of appropriate disaster risk financing tools, including insurance mechanisms for fiscal risk transfer to strengthen the country's disaster risk management and



(ii) prioritization of subprojects included in the National Flood Protection Plan IV (NFPP-IV) for financing, and

(iii) disaster risk assessment of development projects to include engineering measures for mitigating impacts of potential natural disasters in the project area including the impacts of climate change. The system is being integrated with country's Intelligent Project Automation System (IPAS) which is used by Line Departments for online submission of Projects through (PC-1), and review and appraisal of these Projects by the Central Development Working Party of the Planning Commission. This will ensure inherently mainstream disaster risk reduction measures in the development planning at national level.