

CONSULTANCY SERVICES FOR

DISASTER RISK REDUCTION

Globally, there has been a marked increase in the frequency and intensity of disasters; both natural as well as man-made. With every new disaster, the loss to life and property is increasing. Countless efforts are being made by multitude of agencies like World Bank, UNISDR, UNDP, ADB and country governments, to reduce the impact of disasters.

The biggest challenge is how to mainstream all these efforts so that disaster risk reduction becomes part of each and every activity that is conducted, from governments to every household.

SOLUTIONS FOR MAINSTREAMING DISASTER RISK REDUCTION

RMSI provides solutions across the entire spectrum of disaster risk management cycle encompassing multi-hazard risk assessment and its applications for mitigation, preparedness, response and recovery. RMSI has developed an innovative framework of 'Decision support system for disaster risk reduction' that utilizes the outcomes of multi-hazard risk assessment to support activities performed for mitigation, preparedness, response and recovery. This framework has been successfully implemented in several nations of the world and has proven to be an impactful tool for mainstreaming disaster risk reduction.

RMSI is one of the few disaster consulting companies with experience of working with both developed and the least developed nations, including crisis affected nations. Our expertise lies in working with countries where data does not exist or is of varying quality. Over the last two decades, we have worked extensively with state and federal governments and multilateral funding agencies such as the World Bank, UNDP, UNISDR, ADB, FAO amongst others.

Solutions

Multi-hazard Risk Assessment

Multi-hazard risk assessment includes hazard model development, exposure development, vulnerability assessment and estimation of structural, social and economic impact of hazards such as earthquakes, tsunamis, cyclone and surge, floods, droughts, landslides, volcanoes, fire, hazardous material release, terrorism, etc. RMSI adopts a participatory approach to risk assessment, thereby encouraging the local government agencies to participate in the risk assessment process. Our offerings include:

- Stakeholder needs assessment
- Development of probabilistic and/or deterministic hazard model
- Exposure and vulnerability assessment of buildings, infrastructure and demographics
- Estimation of structural, social and economic risk
- Development of risk atlas

- Development of risk assessment software platforms
- Institutional capacity building
- Providing inputs for national/state level policy development for mainstreaming DRR

Exposure Data Development

RMSI's strong knowledge and resource base of GIS provides the necessary basis for this service. RMSI applies an amalgamation of survey, GIS and remote sensing techniques for the development of exposure data. RMSI offers exposure development for the following:

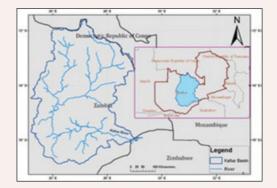
- Demographics
- Buildings & infrastructure
- Agriculture
- Livestock

SUCCESS STORIES

Natural Hazards Probabilistic Risk Analysis and National Strategy Development, Morocco

The World Bank commissioned RMSI to undertake this study to assist the Government of Morocco in determining the risk arising from natural hazards (flood, earthquake, tsunami, drought, and landslide) and use the outcomes to support the development of a national strategy for DRR.

RMSI assessed the risks and vulnerability associated with these hazards by developing probabilistic risk assessment models based on stochastic event sets of different severities and frequencies. These models were used to estimate the economic impact of these hazards on various types of exposure. The models were further used to aid the benefit cost analysis of various mitigation options to support the development of the National Disaster Risk Management and Financing Strategy (NDRMFS).

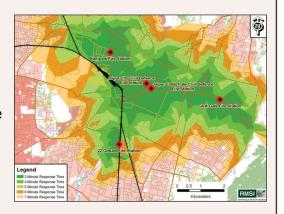


Fire Hazard and Risk Analysis, India

The objective of this study was to identify the gaps in the existing fire services of the country and provide recommendations for filling those gaps.

As a part of the study, RMSI team carried out fire hazard assessment associated with earthquake, wind, climate and created an integrated district level fire hazard ranking. Other key activities included development of an inventory of pan India fire infrastructure and review of response time standards. Using the district wise hazard ranking, fire infrastructure and new response standards, RMSI conducted a detailed assessment of gaps in fire service infrastructure, resources, manpower and training.

On the basis of the gap analysis, a comprehensive investment and financial plan was created for strengthening the fire services in India. A Web GIS based Fire Decision Support System (FDSS) was also developed. This system can be used by the fire services department to conduct any gap assessment in the future.



SUCCESS STORIES



Mitigation Strategies

Mitigation services include identification of suitable mitigation options, performing their benefit cost analysis, and using that as a basis for development of DRR strategy at regional, national and sub-national levels.

- Feasibility studies
- Future land use planning
- Structural interventions
- Water harvesting options
- Early warning systems
- Development of design criteria
- Benefit cost analysis
- Development of national/sub-national strategy

Response & Recovery

Response and recovery related services involve assessing the impact of a disaster event and using that as a basis to guide response and situation reporting. RMSI offerings include:

- Quick situation assessment
- Ground truthing
- PDNA (Post Disaster Needs Assessment)

- Evacuation planning
- Shelter needs assessment
- Development of Decision Support System (DSS)
- Pre and post disaster advisory

Catastrophic Risk Financing

RMSI applies its CAT modeling framework to support the activities under CAT risk financing in the following areas:

- Ex-Ante funding
- Insurance pools
- Parametric insurance
- Insurance impact scenario

Institutional Training and Capacity Building

RMSI domain experts provide training in the following:

- Risk assessment
- Application of risk assessment for mitigation, preparedness, response and recovery
- Use of GIS for DRR
- Use of risk assessment software

Key Differentiators

- Solutions for the entire spectrum of the disaster management cycle
- One of the very few disaster consulting companies with experience of working with both developed and the least developed nations, including crisis affected nations
- We understand the local nuances and have extensive experience of working with countries where the base data does not
 exist or is of varying quality
- All expertise required for providing integrated DRR solutions under one roof comprising domain specialists, GIS & remote sensing and IT experts
- Innovative framework of 'Decision support system for disaster risk reduction'
- Dedicated pool of internationally reputed domain consultants

About RMSI

Over 3500+ professionals work with us

Technology Partnerships - Esri, Oracle, Microsoft, GE, BEA Systems

Quality Certifications - CMMi level 5, ISO 27001, ISO 9001:2015, ISO 14001:2004, OHSAS 18001:2007

Strategically located three development centres in India, and five global subsidiaries in U.S, Canada, U.K, U.A.E, & Australia

Track record of having implemented some of the largest geospatial projects across the world









