



## Multi-Hazard Risk Impact Assessment of Private Industries for Future Planning & Mitigation

### *Manage your business risk effectively against natural hazards to make better decisions*

Do you fear economic losses and business interruptions due to extreme flooding in your industrial establishment? Or is your asset in a landslide-prone area? Or have historical events in your manufacturing plant resulted in high insurance renewal premiums?

Almost all industries are affected by climate change, and disasters have a propensity to impact the infrastructure and cause huge losses. There have been innumerable instances of devastation and losses in industries near river banks, and businesses are not fully prepared to cope with the physical and financial impacts. With extreme weather events likely to become even more frequent and intense due to rising temperatures, it is becoming critical for businesses to cater to these assessments before establishing new or existing setups.

With three decades of experience in disaster risk assessment, RMSI has developed a proprietary framework to help private industries access better data and understand their risk profiles to enable them in risk-based decision-making. This framework provides strategic insights to your business by offering the following:

#### Reducing business interruption due to extreme events:

Accessing risk associated with events such as floods, cyclones, and landslides

Understanding the potential impact which will lead to economic losses, including structural losses and losses due to business interruption

Suggest mitigation measures to safeguard your operations against future events

#### Building a risk-resilient design for greenfield projects:

Setting up a new Industry? Get the risk associated with the selected location and crucial insights on design elements to safeguard your project from the risk associated with potential natural hazards

Reduce downtime during natural calamities

Reduce your insurance premium for natural catastrophes

#### Getting better insurance pricing:

You should pay basis the risk you are carrying. Get the analytics for the right policy price

Reduce the cost if the perception of the risk was found to be higher

Opt for the right insurance coverage so that your asset is fully covered in case of a natural disaster

### To make your strategic location disaster resilient, RMSI follows a three-pronged approach:

#### STUDY

- Location plays a critical role in deciding whether an asset will get impacted or not
- Study your current location and structure to understand the key parameters driving the risk at your location. For instance: What is the location of your backup generator? Is your server room in the basement? Is your façade made of glass?

#### ASSESSMENT

- RMSI uses its proprietary scientific models for flood, cyclone, earthquake, tsunami, and landslide to conduct a risk assessment of your location and assess factors that may lead to potential losses during a hazardous event.
- Our models pan out location-specific scenarios and various future-based predictions, allowing us to anticipate the locations that can be impacted by 2050 or 2100. Basis the forecasts, our team of experts provides crucial mitigation planning inputs.

## DECISION

- Providing industries with crucial construction inputs to design your infrastructure sustainably
- In the case of brownfield projects - recommendations to make changes or enhancements in present infrastructure to mitigate risk
- In the case of greenfield projects - inputs for fresh development and infrastructure planning so that you can develop disaster-resilient infrastructure in your strategic location

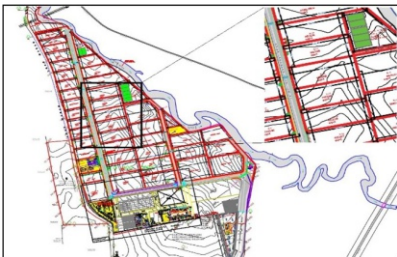
## Why Do Top Organizations Choose RMSI?

- Three decades of geospatial experience
- Work experience with large multilateral like the World Bank and the Government of India
- High-resolution stochastic proprietary models for all key perils in India
- Only organization that analyzes risk for (re)insurance companies and brokers
- Relevant compliance standards and taxonomies
- World-class customer support

## Success Stories

### Impact Assessment due to climate-induced hazards & mitigation planning for a Pisciculture company based in Gao tang Island, China

The client wanted to understand the maximum height of storm surges and likely extreme events and assess the flood risk from the torrential rains. Therefore, RMSI experts were commissioned to evaluate the impact of climate-induced hazards (flood and severe typhoons) and suggested mitigation measures basis the findings.



### Flood Inundation Modeling for an Aquaculture Plant, Gujarat (India)

Due to Surat's high flood risk, the client wanted to understand the flood inundation depth and mitigation measures before building an aquaculture facility. Basis a comprehensive review of survey data of plots, industrial areas, and stormwater drainage systems, RMSI experts created flood inundation maps and recommended mitigation strategies using the hydrological and hydraulic models.

## RMSI Proprietary Model

### Indian Sub-continent EarthquakeRisk™

The most up-to-date high-resolution model that covers the entire Indian sub-continent comprising India, Pakistan, Nepal, Bhutan, Bangladesh, and Sri Lanka

### India FloodRisk™

First countrywide flood risk model providing comprehensive flood risk assessment for the entire country covering 19,000+ pincodes. First countrywide flood risk model providing comprehensive flood risk assessment for the entire country covering 19,000+ pincodes

### India Cyclone Hazard Model

A dynamic cyclone model for the scientific computation of surge heights generating hazard maps upto 1km resolution for any cyclone – historical or incoming

